

Dell Command | Monitor

Version 10.2 Reference Guide



Notes, cautions, and warnings

 | **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 | **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 | **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Introduction for Dell Command | Monitor 10.2

The Dell Command | Monitor software enables remote management application programs to access information, monitor the status, or change the state of the system, such as shutting it down remotely. Dell Command | Monitor exposes, through standard interfaces, key system parameters that enable administrators to manage, inventory, monitor the system health of, and gather information about deployed client systems. Dell Command | Monitor is designed for Dell Enterprise client systems, Dell IoT Gateway systems, and for Dell Embedded PCs. For more information on supported Dell systems see Release notes available at dell.com/dellclientcommandssuitemanuals.

NOTE: Dell Command | Monitor was formerly Dell OpenManage Client Instrumentation (OMCI). After the OMCI version 8.2.1, OMCI is rebranded as Dell Command | Monitor.

NOTE: All classes or properties that are listed in the reference guide may not be supported on all Dell systems.

Dell Command | Monitor 10.2 Namespaces

Namespaces are standards-based with implementation of multiple profiles as defined by the Distributed Management Task Force (DMTF). The following namespaces are available in Dell Command | Monitor:

- **root\dcim\sysman** - The CIM schema for this namespace is 2.17 and provides all the functionality of Dell Command | Monitor for Windows. Dell Command | Monitor for Windows, uses DASH-compliant namespace conventions. A DASH-compliant implementation uses a CIM-based data model for representing managed resources and services.
- **root/dcim/sysman** - The CIM schema for this namespace is 2.32.0 and provides all the functionality of Dell Command | Monitor for Linux.

Profiles for Dell Command | Monitor 10.2

Dell Command | Monitor running on Microsoft Windows operating system uses industry standard profiles to represent the management data provided. These profiles are implemented either as defined or sometimes have Dell-specific extensions.

The following is a list of profiles that are implemented for Dell Command | Monitor for Windows:

Non-extended profiles:

- **Base Metrics**—The Base Metrics Profile is a component profile that defines the minimum object model that is needed to provide dynamic metrics that are associated to existing managed elements and related associations.
- **Battery**—The Battery Profile extends the management capabilities of referencing profiles by adding the capability to represent batteries for manageability. The battery as a logical device is modeled as referencing the battery physical package for physical asset information, the sensor for sensor-reading information, and the profile registration for the schema implementation version information.
- **BIOS Management**—The BIOS Management Profile extends the management capabilities of referencing profiles by adding the capability to represent and configure BIOS settings, such as a Network Controller or IDE Controller. The individual BIOS settings' relationship with a respective device is also described.
- **Boot Control**—The Boot Control Profile describes the classes, associations, properties, and methods that are used to manage the boot control configurations of a physical or virtual computer system.
- **CPU**—The CPU Profile extends the management capability of referencing profiles by adding the capability to represent CPUs or processors in a managed system. CPU cache memory and associations with CPU physical aspects, and profile implementation version information, are modeled in this profile.
- **Fan**—The Fan Profile extends the management capabilities of referencing profiles by adding the capability to represent fans for manageability and describe fans in a redundant configuration. The fan as a logical device is modeled as referencing the fan physical package for physical asset information, a sensor for sensor reading information.
- **Indications**—The Indications Profile defines the CIM elements that are used to subscribe for indications of unsolicited events, to advertise the possible indications, and to represent indications used to report events in a managed system.
- **IP Interface**—The IP Interface Profile extends the management capability of referencing profiles by adding the capability to represent an IP interface of a managed system.
- **Operating system Status**—The operating system Status Profile extends the management capabilities of referencing profiles by adding the capability to perform basic management of operating systems installed on a system.
- **PCI Device**—The PCI Device Profile extends the management capabilities of referencing profiles by adding the capability to represent PCI devices for manageability, including PCI, PCI-X, PCI Express, bridge, and switch devices.
- **Physical Asset**—The Physical Asset Profile extends the management capability of the referencing profiles by adding the capability to describe the physical aspects of logical elements that the implementation is instantiating.
- **Power State Management**—The Power State Management Profile describes the classes, associations, properties, and methods that are used to manage the power of a computer system.
- **Profile Registration**—The Profile Registration extends the management capability of the referencing profiles by adding the capability to describe the registration and versioning of CIM profiles that are implemented by CIM-based system and component management instrumentations.
- **RecordLog**—The Record Log Profile is an autonomous profile that provides the management capabilities to represent logs of a managed system element.
- **Sensors**—The Sensors Profile extends the management capabilities of referencing profiles by adding the capability to represent sensors.
- **Software Inventory**—The Software Inventory Profile describes the CIM schema elements that are required to provide an inventory of installed BIOS, firmware, drivers, and related software in a managed system.
- **Device Tray**—The Device Tray Profile is a component profile for modeling a device tray of a modular system.
- **Software Update**—The Software Update Profile describes the classes, associations, properties, and methods used to support the installation and update of BIOS, firmware, drivers, and related software on a managed element within a managed system.
- **Base Desktop and Mobile**—The Base Desktop and Mobile Profile is an autonomous profile that defines the classes that are used to describe monolithic desktop or mobile computer hardware and related software. The scope of this profile is limited to monolithic desktop or mobile computer hardware and related software that are directly realized in physical components.

Extended profiles:

- Asset Profile
- Ethernet Port Profile
- Event Configuration
- Serial Port
- Service processor Profile
- System Memory
- USB
- Docking Station
- Human Computer Interaction
- Display Controller

For more information about Profiles, see the website - dmtof.org/standards/profiles.

Classes for Dell Command | Monitor 10.2

Classes and properties are defined by the CIM schema. The profiles identify mandatory classes and properties to implement the profile.

For more information about CIM schema, classes and properties, see to the website - dmf.org/standards/cim

Dell Command | Monitor 10.2 classes and properties

Dell Command | Monitor provides information for a namespace through different classes.

Topics:

- [Classes supported for systems running Linux](#)
- [Classes supported for systems running Windows](#)

Classes supported for systems running Linux

For systems running Linux operating system, only the following classes are currently supported:

- [DCIM_AlertIndication](#)
- [DCIM_AssetOwnerInformation](#)
- [DCIM_BIOSElement](#)
- [DCIM_BIOSEnumeration](#)
- [DCIM_BIOSPassword](#)
- [DCIM_BIOSService](#)
- [DCIM_Card](#)
- [DCIM_Chassis](#)
- [DCIM_ComputerSystem](#)
- [DCIM_ControllerView](#)
- [DCIM_Docked](#)
- [DCIM_Fan](#)
- [DCIM_LogEntry](#)
- [DCIM_Memory](#)
- [DCIM_Location](#)
- [DCIM_NumericSensor](#)
- [DCIM_PhysicalDiskView](#)
- [DCIM_Processor](#)
- [DCIM_VirtualDiskView](#)

Classes supported for systems running Windows

The namespace to access the Dell Command | Monitor DMTF profiles is `root\dcim\sysman`.

The following tables describe the classes and properties associated with each class.

DCIM_AlertIndication

Table 1. AlertIndication

Property	Description	Supported Operating System(s)
AlertingElementFormat	<p>The format of the AlertingManagedElement property is interpretable based on the value of this property.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — The format is unknown or not meaningfully interpretable by a CIM client application. 1 = Other — The format is defined by the value of the OtherAlertingElementFormat property. 2 = CIMObjectPath — The format is a CIMObjectPath, with format NamespacePath:ClassName.Prop1 = Value1, Prop2=Value2, . . . specifying an instance in the CIM Schema. 	Microsoft Windows, Linux
AlertingManagedElement	<p>The identifying information of the entity (that is, the instance) for which this Indication is generated. The property contains the path of an instance, encoded as a string parameter — if the instance is modeled in the CIM Schema. If it is not a CIM instance, the property contains some identifying string that names the entity for which the Alert is generated. The path or identifying string is formatted per the AlertingElementFormat property.</p>	Microsoft Windows, Linux
AlertType	<p>Primary classification of the Indication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 = Other — The Indication's OtherAlertType property conveys its classification. Use of Other in an enumeration is a standard CIM convention. It means that the current Indication does not fit into the categories described by this enumeration. 2 = Communications Alert — An Indication of this type is principally associated with the procedures and/or processes required to convey information from one point to another. 3 = Quality of Service Alert — An Indication of this type is principally associated with a degradation or errors in the performance or function of an entity. 4 = Processing Error — An Indication of this type is principally associated with a software or processing fault. 5 = Device Alert — An Indication of this type is principally associated with an equipment or hardware fault. 6 = Environmental Alert — An Indication of this type is principally associated with a condition relating to an enclosure in which the hardware resides, or other environmental considerations. 7 = Model Change — The Indication addresses changes in the Information Model. For example, it may embed a Lifecycle Indication to convey the specific model change being alerted. 	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
EventID	<ul style="list-style-type: none"> 8 = Security Alert — An Indication of this type is associated with security violations, detection of viruses, and similar issues. <p>An instrumentation or provider-specific value that describes the underlying real-world event represented by the Indication. Two Indications with the same, non NULL EventID value are considered, by the creating entity, to represent the same event. The comparison of two EventID values is only defined for Alert Indications with identical, non NULL values of SystemCreateClassName, SystemName, and ProviderName.</p>	Microsoft Windows, Linux
IndicationIdentifier	<p>An identifier for the Indication. This property is similar to a key value in that it can be used for identification, when correlating Indications (see the CorrelatedIndications array). Its value SHOULD be unique as long as correlations are reported, but MAY be reused or left NULL if no future Indications will reference it in their CorrelatedIndications array. To ensure uniqueness, the value of IndicationIdentifier should be constructed using the following preferred algorithm:</p> <p><OrgID>:<LocalID></p> <p>Where <OrgID> and <LocalID>are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the IndicationIdentifier or that is a recognized ID that is assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness must not contain a colon (:). When using this algorithm, the first colon to appear in IndicationIdentifier must appear between <OrgID>and <LocalID> is chosen by the business entity and should not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity should assure that the resulting IndicationIdentifier is not reused across any IndicationIdentifiers that are produced by this or other providers for the NameSpace of this instance.</p>	Microsoft Windows
IndicationTime	<p>The time and date of creation of the Indication. The property may be set to NULL if the entity creating the Indication is not capable of determining this information.</p> <p>i NOTE: IndicationTime may be the same for two Indications that are generated in rapid succession.</p>	Microsoft Windows
Message	<p>The formatted message. This message is constructed by combining some or all of the dynamic elements specified in the MessageArguments property with the static elements uniquely identified by the MessageID in a message registry or other catalog associated with the OwningEntity.</p>	Microsoft Windows

Property	Description	Supported Operating System(s)
MessageArguments	An array containing the dynamic content of the message.	Microsoft Windows, Linux
MessageID	A string that uniquely identifies, within the scope of the OwningEntity, the format of the Message.	Microsoft Windows
OtherAlertingElementFormat	A string defining Other values for AlertingElementFormat. This value MUST be set to a non NULL value when AlertingElementFormat is set to a value of 1 (Other). For all other values of AlertingElementFormat, the value of this string must be set to NULL.	Microsoft Windows, Linux
OtherAlertType	A string describing the Alert type — used when the AlertType property is set to 1, Other State Change .	Microsoft Windows, Linux
OtherSeverity	Holds the value of the user-defined severity value when PerceivedSeverity is 1 (Other).	Microsoft Windows, Linux
OwningEntity	A string that uniquely identifies the entity that owns the definition of the format of the Message described in this instance. OwningEntity MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity or standards body defining the format.	Microsoft Windows, Linux
PerceivedSeverity	<p>An enumerated value that describes the severity of the Alert Indication from the notifier's point of view:</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 and 0 — Information and Unknown (respectively) follow common usage. Literally, the AlertIndication is purely informational or its severity is unknown. • 1 = Other — By CIM convention, is used to indicate that the Severity's value can be found in the OtherSeverity property. • 3 = Degraded/Warning — Is used when it is appropriate to let the user decide if action is needed. • 4 = Minor — Is used to indicate that action is needed, but the situation is not serious now. • 5 = Major — Is used to indicate that action is needed NOW. • 6 = Critical — Is used to indicate that action is needed NOW and the scope is broad (perhaps an imminent outage to a critical resource results). • 7 = Fatal/Non recoverable — Is used to indicate that an error occurred, but it is too late to take remedial action. 	Microsoft Windows, Linux
ProbableCause	<p>An enumerated value that describes the probable cause of the situation that resulted in the AlertIndication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Adapter/Card Error • 3 = Application Subsystem Failure 	Microsoft Windows, Linux

- 4 = Bandwidth Reduced
- 5 = Connection Establishment Error
- 6 = Communications Protocol Error
- 7 = Communications Subsystem Failure
- 8 = Configuration/Customization Error
- 9 = Congestion
- 10 = Corrupt Data
- 11 = CPU Cycles Limit Exceeded
- 12 = Dataset/Modem Error
- 13 = Degraded Signal
- 14 = DTE-DCE Interface Error
- 15 = Enclosure Door Open
- 16 = Equipment Malfunction
- 17 = Excessive Vibration
- 18 = File Format Error
- 19 = Fire Detected
- 20 = Flood Detected
- 21 = Framing Error
- 22 = HVAC Problem
- 23 = Humidity Unacceptable
- 24 = I/O Device Error
- 25 = Input Device Error
- 26 = LAN Error
- 27 = Non-Toxic Leak Detected
- 28 = Local Node Transmission Error
- 29 = Loss of Frame
- 30 = Loss of Signal
- 31 = Material Supply Exhausted
- 32 = Multiplexer Problem
- 33 = Out of Memory
- 34 = Output Device Error
- 35 = Performance Degraded
- 36 = Power Problem
- 37 = Pressure Unacceptable
- 38 = Processor Problem (Internal Machine Error)
- 39 = Pump Failure
- 40 = Queue Size Exceeded
- 41 = Receive Failure
- 42 = Receiver Failure
- 43 = Remote Node Transmission Error
- 44 = Resource at or Nearing Capacity
- 45 = Response Time Excessive
- 46 = Retransmission Rate Excessive
- 47 = Software Error
- 48 = Software Program Abnormally Terminated
- 49 = Software Program Error (Incorrect Results)
- 50 = Storage Capacity Problem
- 51 = Temperature Unacceptable
- 52 = Threshold Crossed
- 53 = Timing Problem

- 54 = Toxic Leak Detected
- 55 = Transmit Failure
- 56 = Transmitter Failure
- 57 = Underlying Resource Unavailable
- 58 = Version MisMatch
- 59 = Previous Alert Cleared
- 60 = Login Attempts Failed
- 61 = Software Virus Detected
- 62 = Hardware Security Breached
- 63 = Denial of Service Detected
- 64 = Security Credential MisMatch
- 65 = Unauthorized Access
- 66 = Alarm Received
- 67 = Loss of Pointer
- 68 = Payload Mismatch
- 69 = Transmission Error
- 70 = Excessive Error Rate
- 71 = Trace Problem
- 72 = Element Unavailable
- 73 = Element Missing
- 74 = Loss of Multi Frame
- 75 = Broadcast Channel Failure
- 76 = Invalid Message Received
- 77 = Routing Failure
- 78 = Backplane Failure
- 79 = Identifier Duplication
- 80 = Protection Path Failure
- 81 = Sync Loss or Mismatch
- 82 = Terminal Problem
- 83 = Real Time Clock Failure
- 84 = Antenna Failure
- 85 = Battery Charging Failure
- 86 = Disk Failure
- 87 = Frequency Hopping Failure
- 88 = Loss of Redundancy
- 89 = Power Supply Failure
- 90 = Signal Quality Problem
- 91 = Battery Discharging
- 92 = Battery Failure
- 93 = Commercial Power Problem
- 94 = Fan Failure
- 95 = Engine Failure
- 96 = Sensor Failure
- 97 = Fuse Failure
- 98 = Generator Failure
- 99 = Low Battery
- 100 = Low Fuel
- 101 = Low Water
- 102 = Explosive Gas
- 103 = High Winds

Property	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> · 104 = Ice Buildup · 105 = Smoke · 106 = Memory Mismatch · 107 = Out of CPU Cycles · 108 = Software Environment Problem · 109 = Software Download Failure · 110 = Element Reinitialized · 111 = Timeout · 112 = Logging Problems · 113 = Leak Detected · 114 = Protection Mechanism Failure · 115 = Protecting Resource Failure · 116 = Database Inconsistency · 117 = Authentication Failure · 118 = Breach of Confidentiality · 119 = Cable Tamper · 120 = Delayed Information · 121 = Duplicate Information · 122 = Information Missing · 123 = Information Modification · 124 = Information Out of Sequence · 125 = Key Expired · 126 = Non-Repudiation Failure · 127 = Out of Hours Activity · 128 = Out of Service · 129 = Procedural Error · 130 = Unexpected Information 	
ProviderName	The name of the Provider generating this Indication.	Microsoft Windows, Linux
SystemCreationClassName	The scoping of the creation class name of the system for the provider, generating this indication.	Microsoft Windows, Linux
SystemName	The scoping name of the system for the provider, generating this indication.	Microsoft Windows, Linux
Trending	<p>Provides information on trending — trending up, down, or no change.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Not Applicable · 2 = Trending Up · 3 = Trending Down · 4 = No Change 	Microsoft Windows, Linux

DCIM_BaseMetricDefinition

Table 2. BaseMetricDefinition

Property	Description
Caption	The Caption property is a short textual description (one- line string) of the object.
Description	The Description property provides a textual description of the object.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
Accuracy	Indicates the accuracy of the values reported for this metric.
AccuracyUnits	The accuracy is expressed as the value of theAccuracy property in the units specified by the AccuracyUnits property.
BreakdownDimensions	Defines one or more strings that can be used to refine (break down) queries against the BaseMetricValues along a certain dimension. An example is a transaction name, allowing the break down of the total value for all transactions into a set of values, one for each transaction name. Other examples might be application system or user group name. The strings are free format and should be meaningful to the end users of the metric data. The strings indicate which break down dimensions are supported for this metric definition, by the underlying instrumentation.
Calculable	<p>An enumerated value that describes the characteristics of the metric, for purposes of performing calculations.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 1 = Non-calculable• 2 = Summable• 3 = Non-summable
ChangeType	<p>ChangeType indicates how the metric value changes, in the form of typical combinations of finer grain attributes such as direction change, minimum and maximum values, and wrapping semantics.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 2 = N/A• 3 = Counter• 4 = Gauge• 5..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved

Property	Description
DataType	<p data-bbox="692 218 1469 268">The data type of the metric. These types represent the datatypes defined for CIM.</p> <p data-bbox="692 300 887 327">Possible values are:</p> <ul data-bbox="692 352 858 821" style="list-style-type: none"> <li data-bbox="692 352 858 380">· 1 = boolean <li data-bbox="692 386 858 413">· 2 = char16 <li data-bbox="692 420 858 447">· 3 = datetime <li data-bbox="692 453 858 480">· 4 = real32 <li data-bbox="692 487 858 514">· 5 = real64 <li data-bbox="692 520 858 548">· 6 = sint16 <li data-bbox="692 554 858 581">· 7 = sint32 <li data-bbox="692 588 858 615">· 8 = sint64 <li data-bbox="692 621 858 648">· 9 = sint8 <li data-bbox="692 655 858 682">· 10 = string <li data-bbox="692 688 858 716">· 11 = uint16 <li data-bbox="692 722 858 749">· 12 = uint32 <li data-bbox="692 756 858 783">· 13 = uint64 <li data-bbox="692 789 858 816">· 14 = uint8
GatheringType	<p data-bbox="692 856 1469 932">GatheringType indicates how the metric values are gathered by the underlying instrumentation. This allows the client application to choose the right metric for the purpose.</p> <p data-bbox="692 963 887 991">Possible values are:</p> <ul data-bbox="692 1016 1070 1209" style="list-style-type: none"> <li data-bbox="692 1016 868 1043">· 0 = Unknown <li data-bbox="692 1050 879 1077">· 2 = OnChange <li data-bbox="692 1083 852 1110">· 3 = Periodic <li data-bbox="692 1117 884 1144">· 4 = OnRequest <li data-bbox="692 1150 1007 1178">· 5..32767 = DMTF Reserved <li data-bbox="692 1184 1070 1211">· 32768..65535 = Vendor Reserved
Id	A string that uniquely identifies the metric definition. The use of OSF UUID/ GUIDs is recommended.
IsContinuous	True
Name	The name of the metric. This name does not have to be unique, but should be descriptive and may contain blanks.
ProgrammaticUnits	Identifies the specific units of a value. The value of this property shall be a legal value of the Programmatic Units qualifier as defined in Appendix C.1 of DSP0004 V2.4 or later.
SampleInterval	If metric values are collected at regular intervals, the SampleInterval property indicates the length of the interval. If non-null, the value of the SampleInterval shall be expressed in interval notation. A value of NULL shall indicate the SampleInterval is unknown. A value of 99990101000000.000000+000 shall indicate the sampling interval is irregular.
TimeScope	<p data-bbox="692 1701 1398 1728">TimeScope indicates the time scope to which the metric value applies.</p> <p data-bbox="692 1751 887 1778">Possible values are:</p> <ul data-bbox="692 1803 868 1892" style="list-style-type: none"> <li data-bbox="692 1803 868 1831">· 0 = Unknown <li data-bbox="692 1837 823 1864">· 2 = Point <li data-bbox="692 1871 847 1898">· 3 = Interval

Property	Description
	<ul style="list-style-type: none"> 4 = StartupInterval 5..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
Units	Identifies the specific units of a value. Examples are Bytes, Packets, Jobs, Files, Milliseconds, and Amps.

DCIM_Card

Table 3. Card

Property	Description
CanBeFRUed	Boolean that indicates whether this PhysicalElement can be FRUed (TRUE) or not (FALSE).
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
HostingBoard	Boolean indicating that this Card is a Motherboard or, more generically, a baseboard in a Chassis.
Manufacturer	The name of the organization responsible for producing the PhysicalElement. This organization may be the entity from whom the Element is purchased, but it is not necessarily true. The latter information is contained in the Vendor property of CIM_Product.
Model	The name by which the PhysicalElement is known.
PackageType	<p>Enumeration defining the type of the PhysicalPackage.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates that the package type is not known. 1 = Other — The package type does not correspond to an existing enumerated value. The value is specified using the OtherPackageType property. 2 = Rack 3 = Chassis/Frame 4 = Cross Connect/Backplane 5 = Container/Frame Slot 6 = Power Supply

Property

Description

- 7 = Fan
- 8 = Sensor
- 9 = Module/Card
- 10 = Port/Connector
- 11 = Battery
- 12 = Processor
- 13 = Memory
- 14 = Power Source/Generator
- 15 = Storage Media Package (e.g., Disk or Tape Drive)
- 16 = Blade
- 17 = Blade Expansion

NOTE: This enumeration expands on the list in the Entity MIB (the attribute, `entPhysicalClass`). The numeric values are consistent with CIM's enum numbering guidelines, but are slightly different than the MIB's values.

The values **Rack** through **Port/Connector** are defined per the Entity-MIB (where the semantics of rack are equivalent to the MIB's **stack** value). The other values (for battery, processor, memory, power source/generator and storage media package) are self-explanatory. A value of **Blade** should be used when the `PhysicalPackage` contains the operational hardware aspects of a `ComputerSystem`, without the supporting mechanicals such as power and cooling. For example, a Blade Server includes processor(s) and memory, and relies on the containing chassis to supply power and cooling. In many respects, a Blade can be considered a **Module/Card**. However, it is tracked differently by inventory systems and differs in terms of service philosophy. For example, a Blade is intended to be hot-plugged into a hosting enclosure without requiring additional cabling, and does not require a cover to be removed from the enclosure for installation. Similarly, a **Blade Expansion** has characteristics of a **Blade** and a **Module/Card**. However, it is distinct from both due to inventory tracking and service philosophy, and because of its hardware dependence on a Blade. A Blade Expansion must be attached to a Blade prior to inserting the resultant assembly into an enclosure.

PartNumber

The part number assigned by the organization that is responsible for producing or manufacturing the `PhysicalElement`.

SKU

The stock-keeping unit number for this `PhysicalElement`.

Tag

An arbitrary string that uniquely identifies the `PhysicalElement` and serves as the key of the `Element`. The `Tag` property can contain information such as asset tag or serial number data. The key for `PhysicalElement` is placed very high in the object hierarchy to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on. For example, a hotswappable or removable component can be taken from its containing (scoping) `Package` and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for `PhysicalElement` is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.

DCIM_Chassis

Table 4. Chassis

Property	Description
BreachDescription	A free-form string providing more information if the SecurityBreach property indicates that a breach or some other security-related event occurred.
CanBeFRUed	Boolean that indicates whether this PhysicalElement can be FRUed (TRUE) or not (FALSE).
ChassisPackageType	Indicates the physical form factor for the type of Chassis. Possible values are: <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = SMBIOS Reserved• 3 = Desktop• 4 = Low Profile Desktop• 5 = Pizza Box• 6 = Mini Tower• 7 = Tower• 8 = Portable• 9 = LapTop• 10 = Notebook• 11 = Hand Held• 12 = Docking Station• 13 = All in One• 14 = Sub Notebook• 15 = Space-Saving• 16 = Lunch Box• 17 = Main System Chassis• 18 = Expansion Chassis• 19 = SubChassis• 20 = Bus Expansion Chassis• 21 = Peripheral Chassis• 22 = Storage Chassis• 23 = SMBIOS Reseved• 24 = Sealed-Case PC• 25 = SMBIOS Reserved• 26 = CompactPCI• 27 = AdvancedTCA• 28 = Blade Enclosure• 29 = SMBIOS Reserved• 30 = Tablet• 31 = Convertible• 32 = Detachable• 33 = IoT Gateway• .. = DMTF Reserved

Property	Description
	<ul style="list-style-type: none"> 0x8000..0xFFFF = Vendor Reserved <p>This property may have a value when the PackageType property contains the value 3 Chassis Frame. A value of 28 Blade Enclosure indicates that the Chassis is designed to contain one or more PhysicalPackage(s) of PackageType 16 Blade or PackageType 17 Blade Expansion.</p>
ChassisTypeDescription	A string providing more information on the ChassisPackageType.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
LockPresent	Boolean indicating whether the Frame is protected with a lock.
Manufacturer	The name of the organization responsible for producing the PhysicalElement. This organization may be the entity from whom the Element is purchased, but this is not necessarily true. The latter information is contained in the Vendor property of CIM_Product.
Model	The name by which the PhysicalElement is generally known.
Name	The Name property defines the label by which the object is known. When sub-classed, the Name property can be overridden to be a Key property.
PackageType	<p>Enumeration defining the type of the PhysicalPackage.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates that the package type is not known. 1 = Other — The package type does not correspond to an existing enumerated value. The value is specified using the OtherPackageType property. 2 = Rack 3 = Chassis/Frame 4 = Cross Connect/Backplane 5 = Container/Frame Slot 6 = Power Supply 7 = Fan 8 = Sensor 9 = Module/Card 10 = Port/Connector 11 = Battery 12 = Processor

Property

Description

- 13 = Memory
- 14 = Power Source/Generator
- 15 = Storage Media Package (example, Disk or Tape Drive)
- 16 = Blade
- 17 = Blade Expansion

NOTE: This enumeration expands on the list in the Entity MIB (the attribute, `entPhysicalClass`). The numeric values are consistent with CIM's enum numbering guidelines, but are slightly different than the MIB's values.

The values **Rack** through **Port/Connector** are defined per the Entity-MIB (where the semantics of rack are equivalent to the MIB's **stack** value).

The other values (for battery, processor, memory, power source/generator and storage media package) are self-explanatory. A value of **Blade** should be used when the `PhysicalPackage` contains the operational hardware aspects of a `ComputerSystem`, without the supporting mechanicals such as power and cooling. For example, a Blade Server includes processor(s) and memory, and relies on the containing chassis to supply power and cooling.

In many respects, a Blade can be considered a **Module/Card**. However, it is tracked differently by inventory systems and differs in terms of service philosophy. For example, a Blade is intended to be hot-plugged into a hosting enclosure without requiring additional cabling, and does not require a cover to be removed from the enclosure for installation. Similarly, a **Blade Expansion** has characteristics of a **Blade** and a **Module/Card**. However, it is distinct from both due to inventory tracking and service philosophy, and because of its hardware dependence on a Blade. A Blade Expansion must be attached to a Blade prior to inserting the resultant assembly into an enclosure.

PartNumber

The part number assigned by the organization that is responsible for producing or manufacturing the `PhysicalElement`.

PropertyOwnershipTag

Property Ownership Tag of a system.

SecurityBreach

An enumerated, integer-valued property indicating whether a physical breach of the `Frame` was attempted but unsuccessful (value = **4**) or attempted and successful (value = **5**).

Possible values are:

- 1 = Other
- 2 = Unknown
- 3 = No Breach
- 4 = Breach Attempted
- 5 = Breach Successful

SKU

The stock-keeping unit number for this `PhysicalElement`.

Serial Number

Manufacturer-allocated number is used to identify the physical element.

Version

Indicates the version of the identified physical element.

Property	Description
Tag	An arbitrary string that uniquely identifies the Physical Element and serves as the key of the Element. The Tag property can contain information such as asset tag or serial number data. The key for PhysicalElement is placed very high in the object hierarchy in order to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on. For example, a hotswappable or removable component can be taken from its containing (scoping) Package and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for Physical Element is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.
VendorCompatibilityStrings	An array of strings that identify the component that is compatible with, and can be inserted in a slot that reports this string as one of the array element in the VendorCompatibilityStrings. This allows system administrators to determine whether it is appropriate to insert a package into a slot to ensure uniqueness within the NameSpace, each value defined by the vendor for use in the VendorCompatibilityStrings property SHOULD be constructed using the following preferred algorithm: : Where and are separated by a colon ':', and where MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the _ structure of Schema class names.) In addition, to ensure uniqueness MUST NOT contain a colon (!:'). When using this algorithm, the first colon to appear in InstanceID MUST appear between and . is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements.
ChangePropertyOwnershipTag (Method)	This method allows a user to change the Property Ownership Tag of a system.
ChangeAssetTag (Method)	This method allows a user to change the Asset Tag of a system.

DCIM_Chip

Table 5. Chip

Property	Description
CanBeFRUed	Boolean that indicates whether this PhysicalElement can be FRUed (TRUE) or not (FALSE).
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

Property	Description
	<p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
Manufacturer	The name of the organization responsible for producing the PhysicalElement. This organization may be the entity from where the Element is purchased, but this is not necessarily true. The latter information is contained in the Vendor property of CIM_Product.
Model	The name by which the PhysicalElement is generally known.
PartNumber	The part number assigned by the organization that is responsible for producing or manufacturing the PhysicalElement.
SerialNumber	A manufacturer-allocated number used to identify the Physical Element.
SKU	The stock-keeping unit number for this PhysicalElement.
Tag	<p>An arbitrary string that uniquely identifies the Physical Element and serves as the key of the Element. The Tag property can contain information such as asset tag or serial number data. The key for PhysicalElement is placed very high in the object hierarchy to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on.</p> <p>For example, a hotswappable or removable component can be taken from its containing (scoping) Package and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for Physical Element is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.</p>

DCIM_DesktopMonitor

Table 6. DesktopMonitor

Property	Description
Bandwidth	Monitor's bandwidth in Mega Hertz. If unknown, enter 0.
Brightness	This property represents the brightness/Luminance of the video output. The property value is from 0 to the MaxBrightness property value. If the Brightness property is implemented but the brightness is unknown at the time, the property has a value 0x80000000.
Caption	The Caption property is a short textual description (one- line string) of the object.
ColorCodeFormatSupported	Color code format supported.
ColorDepthBits	Color Bit Depth.

Property	Description
ColorModePreset	<p>This property defines a specified color temperature of the display.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = sRGB • 3 = Display Native • 4 = 4000K • 5 = 5000K • 6 = 6500K • 7 = 7500K • 8 = 8200K • 9 = 9300K • 1011 = 10000K • 12 = 11500K • 13 = User 1 • 14 = User • 2 .. = User 3 • 32768..65535 = DMTF Reserved
ColorModePresetCapabilities	<p>This property lists the allowed values for ColorModePreset.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = sRGB • 3 = Display Native • 4 = 4000K • 5 = 5000K • 6 = 6500K • 7 = 7500K • 8 = 8200K • 9 = 9300K • 1011 = 10000K • 12 = 11500K • 13 = User 1 • 14 = User • .. = User 3 • 32768..65535 = DMTF Reserved
CommunicationStatus	<p>Indicates the ability of the instrumentation to communicate with the underlying ManagedElement. A Null return indicates the implementation (provider) does not implement this property.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the implementation is in general capable of returning this property, but is unable to do so now. • 1 = Not Available — Indicates that the implementation (provider) is capable of returning a value for this property, but not ever for this particular piece of hardware/software or the property is intentionally not used because it adds no meaningful information (as in the case of a property that is intended to add additional info to another property). • 2 = Communication OK — indicates that communication is established with the element, but does not convey any quality of service.

Property	Description
	<ul style="list-style-type: none"> 3 = Lost Communication — Indicates that the Managed Element is known to exist and has been contacted successfully in the past, but is unreachable. 4 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it. .. = DMTF Reserved 0x8000.. = Vendor Reserved
CompositSyncSignalOnGreenVideoSupported	Composite Sync Signal on Green video is supported.
CompositSyncSignalOnHorizontalSupported	Composite Sync Signal on Horizontal is supported.
ContinuousFrequency	For EDID 1.3, this bit indicated support for or no support for GTF(using the default GTF parameter values). For EDID 1.4 this bit has been redefined to indicate Continuous frequency(1) or Non-Continuous Frequency(0).
Contrast	This property represents the contrast of the video output. The property value is from 0 to the MaxContrast property value. If the Contrast property is implemented but the contrast is unknown at the time, the property has a value 0x80000000.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
CurrentResolutionH	This property indicated the current horizontal resolution in pixels.
CurrentResolutionV	This property indicated the current vertical resolution in pixels.
Description	Provides a textual description of the object.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
DisplayCharacteristics	<p>This array property represents various characteristics of a video output device. value.</p> <ul style="list-style-type: none"> StandbyModeSupported: the video output device can go into a stand by mode, SuspendModeSupported: the video output device can go into a suspend mode, VeryLowPowerSupported: the video output goes into a low power mode. If DisplayCharacteristics is implemented but the value is unknown, the property has an Unknown <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = StandbyModeSupported 3 = SuspendModeSupported 4 = VeryLowPowerSupported .. = DMTF Reserved 32768..65535 = Vendor Reserved

Property	Description
DisplayMode	<p>This property permits the selection of a preset optimized by manufacturer for an application type or the selection of a user-defined setting.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Standard/default mode • 3 = Productivity • 4 = Mixed • 5 = Movie • 6 = User defined • 7 = Games • 8 = Sports • 9 = Professional • 10 = Standard (intermediate power) • 11 = Standard(low power) • 12 = demonstration • 13 = Dynamic contrast • .. = DMTF Reserved • 32768.65535 = Vendor Reserved
DisplayModeCapabilities	<p>This property lists the allowed values for DisplayMode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Standard/default mode • 3 = Productivity • 4 = Mixed • 5 = Movie • 6 = User defined • 7 = Games • 8 = Sports • 9 = Professional • 10 = Standard (intermediate power) • 11 = Standard(low power) • 12 = demonstration • 13 = Dynamic contrast • .. = DMTF Reserved • 32768.65535 = Vendor Reserved
EDIDGamma	<p>Display transfer characteristics(GAMMA).Range is from 1.00->3.54. $GAMMA = (EDID\ Value + 100) / 100$</p>
EDIDVersionNumber	<p>EDID version and reversion number.</p>
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p>

NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

By default, the element is **Enabled** (value = 2).

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not run commands and drops any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

FrequencyH

This property is a horizontal synchronization signal frequency in Hz as determined by the display.

Property	Description
FrequencyV	This property is a vertical synchronization signal frequency in Hz as determined by the display.
HealthState	<p data-bbox="804 233 1490 310">Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p data-bbox="804 342 999 369">Possible values are:</p> <ul data-bbox="804 394 1490 968" style="list-style-type: none"> <li data-bbox="804 394 1490 472">• 0 = Unknown — The implementation cannot report on HealthState now. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future. <li data-bbox="804 478 1490 531">• 5 = OK — The element is fully functional and is operating within normal operational parameters and without error. <li data-bbox="804 537 1490 657">• 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors. <li data-bbox="804 663 1490 716">• 15 = Minor failure — All functionality is available but some may be degraded. <li data-bbox="804 722 1490 800">• 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working. <li data-bbox="804 806 1490 858">• 25 = Critical failure — The element is nonfunctional and recovery may not be possible. <li data-bbox="804 865 1490 942">• 30 = Non-recoverable error — The element has failed, and recovery is not possible. All functionality provided by this element has been lost. <li data-bbox="804 949 1046 976">• .. = DMTF Reserved
IdentifyingDescriptions	An array of free-form strings providing explanations and details behind the entries in the OtherIdentifyingInfo array. Each entry of this array is related to the entry in OtherIdentifyingInfo that is located at the same index.
InputAnalog	Input is an analog video signal interface.
InputDigital	Input is a digital video signal interface.
InputDisplayPort	DisplayPort is supported.
InputDVI	DVI is supported.
InputHDMI	HDMI is supported.
InputSource	<p data-bbox="804 1438 1481 1608">An enumerated value identifying the current input source. Writing a new value into this property changes the device's input source to the specified value, if the value is supported as specified in InputSourceCapabilities. If the requested value is not in InputSourceCapabilities, then the current value of InputSource is unchanged.</p> <p data-bbox="804 1633 999 1661">Possible values are:</p> <ul data-bbox="804 1686 1142 1879" style="list-style-type: none"> <li data-bbox="804 1686 979 1713">• 0 = Unknown <li data-bbox="804 1719 1142 1747">• 2 = Analog Video (R/G/B) #1 <li data-bbox="804 1753 1142 1780">• 3 = Analog Video (R/G/B) #2 <li data-bbox="804 1787 1126 1814">• 4 = Digital Video (TMDS) #1 <li data-bbox="804 1820 1126 1848">• 5 = Digital Video (TMDS) #2 <li data-bbox="804 1854 1086 1881">• 6 = Composite Video #1

Property

Description

	<ul style="list-style-type: none">• 7 = Composite Video #2• 8 = S-video #1• 9 = S-video #2• 1011 = Tuner - Analog #1• 12 = Tuner - Analog #2• 13 = Tuner - Digital #1• 14 = Tuner - Digital #2• 15 = Component Video #1• 16 = Component Video #2• 17 = Component Video #3• 18 = Digital Video (DisplayPort)• #1 .. = Digital Video (DisplayPort)• #2 32768..65535 = DMTF Reserved
InputSourceCapabilities	<p>This property lists the allowed values for InputSource.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Analog Video (R/G/B) #1• 3 = Analog Video (R/G/B) #2• 4 = Digital Video (TMDS) #1• 5 = Digital Video (TMDS) #2• 6 = Composite Video #1• 7 = Composite Video #2• 8 = S-video #1• 9 = S-video #2• 1011 = Tuner - Analog #1• 12 = Tuner - Analog #2• 13 = Tuner - Digital #1• 14 = Tuner - Digital #2• 15 = Component Video #1• 16 = Component Video #2• 17 = Component Video #3• 18 = Digital Video (DisplayPort)• #1 .. = Digital Video (DisplayPort)• #2 32768..65535 = DMTF Reserved
MaxBrightness	<p>This property defines the maximum value of brightness of the video output device. Different manufacturers may have different values.</p>
MaxContrast	<p>This property represents the maximum value of contrast of the video output device. Different manufacturers may have different values.</p>
MaxQuiesceTime	<p>The use of this property has been deprecated. When evaluating the use of Quiesce, it was determined that this single property is not adequate for describing when a device will automatically exit a quiescent state. In fact, the most likely scenario for a device to exit a quiescent state was determined to be based on the number of outstanding requests queued rather than on a maximum time. This decision is reevaluated and later. Depreciated description: Maximum time, in milliseconds, that a Device can run in a Quiesced state. The state is defined in its Availability and AdditionalAvailability properties, where Quiesced is conveyed by the value 21. What occurs at the</p>

Property

Description

MCCSVersionNumber

end of the time limit is device-specific. The Device can unquiesce, can be offline, or can take other actions. A value of 0 indicates that a Device can remain quiesced indefinitely.

This property represents the version number of the Monitor Command and Control Set (MCCS) standard recognized by the display.

OperationalStatus

Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure soon.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required

Property	Description
PhysicalSizeH	Horizontal screen size in cm.
PhysicalSizeV	Vertical screen size in cm.
PrimaryStatus	<p>Provides a high-level status value, intended to align with Red-Yellow-Green type representation of status. It should be used with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.</p> <p>PrimaryStatus consists of one of the following values:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the implementation is in general capable of returning this property, but is unable to do so now • 1 = OK — Indicates the ManagedElement is functioning normally. • 2 = Degraded — Indicates the ManagedElement is functioning below normal. • 3 = Error — Indicates the ManagedElement is in an Error condition. • .. = DMTF Reserved • 0x8000.. = Vendor Reserved
ProductCode	Product code of this monitor.
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. Unknown (0) indicates that the last requested state for the element is unknown.</p>

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState. There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

ScalerManufacturer

The name of the manufacturer of the controller chip used in a particular display.

Possible values are:

- 1 = Other
- 2 = Conexant
- 3 = Genesis
- 4 = Macronix
- 5 = MRT
- 6 = Mstar
- 7 = Myson
- 8 = Philips
- 9 = Pixelworks
- 10 = RealTek

Property	Description
	<ul style="list-style-type: none"> • 11 = Sage • 12 = SiliconImage • 13 = SmartASIC • 14 = STMicroelectronics • 15 = Topro • 16 = Trumpion • 17 = WellTrend • 18 = Samsung • 19 = Novatek • 20 = STK • .. = DMTF Reserved • 32768..65535 = Vendor Reserved
SerialNumber	Serial number of the monitor. Come from EDID.
SeparateSyncHVSUPPORTED	Separate Sync H & V Signals are supported.
sRGBStandardDefaultColorSpace	If this bit is set to 1, the display uses the sRGB standard default color space as its primary color space.
StandbyModeSupported	<p>This property represents if the video output device can go into a stand by mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Supported • 3 = Not Supported • .. = DMTF Reserved • 32768..65535 = Vendor Reserved
SuspendModeSupported	<p>This property represents if the video output device can go into a suspend mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Supported • 3 = Not Supported • .. = DMTF Reserved • 32768..65535 = Vendor Reserved
SystemCreationClassName	The creation class name of the scoping system.
SystemName	The system name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline

Property	Description
	<ul style="list-style-type: none"> 7 = Test 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>
VeryLowPowerSupported	<p>This property represents if the video output device can go into a low power mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = Supported 3 = Not Supported .. = DMTF Reserved 32768..65535 = Vendor Reserved

DCIM_DHCPProtocolEndpoint

Table 7. DHCPProtocolEndpoint

Property	Description
ClientState	<p>ClientState represents the current state of the DHCP client. See RFC1541 for more information on the meaning of each state.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = DMTF Reserved 2 = Init 3 = Selecting 4 = Requesting 5 = Rebinding 6 = Init-Reboot 7 = Rebooting 8 = Bound 9..32767 = DMTF Reserved 32768..65535 = Vendor specified
CreationClassName	<p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p>

i **NOTE:** The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

By default, the element is **Enabled** (value = **2**).

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

Name

A string that identifies this ProtocolEndpoint with either a port or an interface on a device. To ensure uniqueness, the Name property should be prepended or appended with information from the Type or OtherTypeDescription properties. The method selected is described in the NameFormat property of this class.

NameFormat

Contains the naming heuristic that is selected to ensure that the value of the Name property is unique. For example, you may choose to prepend the name of the port or

Property	Description
OtherTypeDescription	<p>interface with the Type of ProtocolEndpoint (for example, IPv4) of this instance followed by an underscore.</p> <p>A string that describes the type of ProtocolEndpoint when the Type property of this class (or any of its subclasses) is set to 1 (Other). This property should be set to null when the Type property is any value other than 1.</p>
ProtocolIFType	<p>An enumeration that is synchronized with the IANA ifType MIB. The ifType MIB is maintained at the URL, iana.org/assignments/ianaiftype-mib. Also, additional values defined by the DMTF are included. The property is used to categorize and classify instances of the ProtocolEndpoint class.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Regular 1822 · 3 = HDH 1822 · 4 = DDN X.25 · 5 = RFC877 X.25 · 6 = Ethernet CSMA/CD · 7 = ISO 802.3 CSMA/CD · 8 = ISO 802.4 Token Bus · 9 = ISO 802.5 Token Ring · 10 = ISO 802.6 MAN · 11 = StarLAN · 12 = Proteon 10Mbit · 13 = Proteon 80Mbit · 14 = HyperChannel · 15 = FDDI · 16 = LAP-B · 17 = SDLC · 18 = DS1 · 19 = E1 · 20 = Basic ISDN · 21 = Primary ISDN · 22 = Proprietary Point-to-Point Serial · 23 = PPP · 24 = Software Loopback · 25 = EON · 26 = Ethernet 3Mbit · 27 = NSIP · 28 = SLIP · 29 = Ultra · 30 = DS3 · 31 = SIP · 32 = Frame Relay · 33 = RS-232 · 34 = Parallel · 35 = ARCNet · 36 = ARCNet Plus · 37 = ATM · 38 = MIO X.25 · 39 = SONET

Property**Description**

- . 40 = X.25 PLE
- . 41 = ISO 802.211c
- . 42 = LocalTalk
- . 43 = SMDS DXI
- . 44 = Frame Relay Service
- . 45 = V.35
- . 46 = HSSI
- . 47 = HIPPI
- . 48 = Modem
- . 49 = AAL5
- . 50 = SONET Path
- . 51 = SONET VT
- . 52 = SMDS ICIP
- . 53 = Proprietary Virtual/Internal
- . 54 = Proprietary Multiplexor
- . 55 = IEEE 802.12
- . 56 = Fibre Channel
- . 57 = HIPPI Interface
- . 58 = Frame Relay Interconnect
- . 59 = ATM Emulated LAN for 802.3
- . 60 = ATM Emulated LAN for 802.5
- . 61 = ATM Emulated Circuit
- . 62 = Fast Ethernet (100BaseT)
- . 63 = ISDN
- . 64 = V.11
- . 65 = V.36
- . 66 = G703 at 64K
- . 67 = G703 at 2Mb
- . 68 = QLLC
- . 69 = Fast Ethernet 100BaseFX
- . 70 = Channel
- . 71 = IEEE 802.11
- . 72 = IBM 260/370 OEMI Channel
- . 73 = ESCON
- . 74 = Data Link Switching
- . 75 = ISDN S/T Interface
- . 76 = ISDN U Interface
- . 77 = LAP-D
- . 78 = IP Switch
- . 79 = Remote Source Route Bridging
- . 80 = ATM Logical
- . 81 = DS0
- . 82 = DS0 Bundle
- . 83 = BSC
- . 84 = Async
- . 85 = Combat Net Radio
- . 86 = ISO 802.5r DTR
- . 87 = Ext Pos Loc Report System
- . 88 = AppleTalk Remote Access Protocol
- . 89 = Proprietary Connectionless

Property**Description**

- 90 = ITU X.29 Host PAD
- 91 = ITU X.3 Terminal PAD
- 92 = Frame Relay MPI
- 93 = ITU X.213
- 94 = ADSL
- 95 = RADSL
- 96 = SDSL
- 97 = VDSL
- 98 = ISO 802.5 CRFP
- 99 = Myrinet
- 100 = Voice Receive and Transmit
- 101 = Voice Foreign Exchange Office
- 102 = Voice Foreign Exchange Service
- 103 = Voice Encapsulation
- 104 = Voice over IP
- 105 = ATM DXI
- 106 = ATM FUNI
- 107 = ATM IMA
- 108 = PPP Multilink Bundle
- 109 = IP over CDLC
- 110 = IP over CLAW
- 111 = Stack to Stack
- 112 = Virtual IP Address
- 113 = MPC
- 114 = IP over ATM
- 115 = ISO 802.5j Fibre Token Ring
- 116 = TDLC
- 117 = Gigabit Ethernet
- 118 = HDLC
- 119 = LAP-F
- 120 = V.37
- 121 = X.25 MLP
- 122 = X.25 Hunt Group
- 123 = Transp HDLC
- 124 = Interleave Channel
- 125 = FAST Channel
- 126 = IP (for APPN HPR in IP Networks)
- 127 = CATV MAC Layer
- 128 = CATV Downstream
- 129 = CATV Upstream
- 130 = Avalon 12MPP Switch
- 131 = Tunnel
- 132 = Coffee
- 133 = Circuit Emulation Service
- 134 = ATM SubInterface
- 135 = Layer 2 VLAN using 802.1Q
- 136 = Layer 3 VLAN using IP
- 137 = Layer 3 VLAN using IPX
- 138 = Digital Power Line
- 139 = Multimedia Mail over IP

Property**Description**

- 140 = DTM
- 141 = DCN
- 142 = IP Forwarding
- 143 = MSDSL
- 144 = IEEE 1394
- 145 = IF-GSN/HIPPI-6400
- 146 = DVB-RCC MAC Layer
- 147 = DVB-RCC Downstream
- 148 = DVB-RCC Upstream
- 149 = ATM Virtual
- 150 = MPLS Tunnel
- 151 = SRP
- 152 = Voice over ATM
- 153 = Voice over Frame Relay
- 154 = ISDL
- 155 = Composite Link
- 156 = SS7 Signaling Link
- 157 = Proprietary P2P Wireless
- 158 = Frame Forward
- 159 = RFC1483 Multiprotocol over ATM
- 160 = USB
- 161 = IEEE 802.3ad Link Aggregate
- 162 = BGP Policy Accounting
- 163 = FRF .16 Multilink FR
- 164 = H.323 Gatekeeper
- 165 = H.323 Proxy
- 166 = MPLS
- 167 = Multi-Frequency Signaling Link
- 168 = HDSL-2
- 169 = S-HDSL
- 170 = DS1 Facility Data Link
- 171 = Packet over SONET/SDH
- 172 = DVB-ASI Input
- 173 = DVB-ASI Output
- 174 = Power Line
- 175 = Non Facility Associated Signaling
- 176 = TR008
- 177 = GR303 RDT
- 178 = GR303 IDT
- 179 = ISUP
- 180 = Proprietary Wireless MAC Layer
- 181 = Proprietary Wireless Downstream
- 182 = Proprietary Wireless Upstream
- 183 = HIPERLAN Type 2
- 184 = Proprietary Broadband Wireless Access Point to Multipoint
- 185 = SONET Overhead Channel
- 186 = Digital Wrapper Overhead Channel
- 187 = ATM Adaptation Layer 2
- 188 = Radio MAC
- 189 = ATM Radio

Property**Description**

- 190 = Inter Machine Trunk
- 191 = MVL DSL
- 192 = Long Read DSL
- 193 = Frame Relay DLCI Endpoint
- 194 = ATM VCI Endpoint
- 195 = Optical Channel
- 196 = Optical Transport
- 197 = Proprietary ATM
- 198 = Voice over Cable
- 199 = Infiniband
- 200 = TE Link
- 201 = Q.2931
- 202 = Virtual Trunk Group
- 203 = SIP Trunk Group
- 204 = SIP Signaling
- 205 = CATV Upstream Channel
- 206 = Econet
- 207 = FSAN 155Mb PON
- 208 = FSAN 622Mb PON
- 209 = Transparent Bridge
- 210 = Line Group
- 211 = Voice E&M Feature Group
- 212 = Voice FGD EANA
- 213 = Voice DID
- 214 = MPEG Transport
- 215 = 6To4
- 216 = GTP
- 217 = Paradyne EtherLoop 1
- 218 = Paradyne EtherLoop 2
- 219 = Optical Channel Group
- 220 = HomePNA
- 221 = GFP
- 222 = ciscoSLvlan
- 223 = actelisMetaLOOP
- 224 = Fcip
- 225..4095 = IANA Reserved
- 4096 = IPv4
- 4097 = IPv6
- 4098 = IPv4/v6
- 4099 = IPX
- 4100 = DECnet
- 4101 = SNA
- 4102 = CONP
- 4103 = CLNP
- 4104 = VINES
- 4105 = XNS
- 4106 = ISDN B Channel Endpoint
- 4107 = ISDN D Channel Endpoint
- 4108 = BGP
- 4109 = OSPF

Property

Description

- 4110 = UDP
- 4111 = TCP
- 4112 = 802.11a
- 4113 = 802.11b
- 4114 = 802.11g
- 4115 = 802.11h
- 4200 = NFS
- 4201 = CIFS
- 4202 = DAFS
- 4203 = WebDAV
- 4204 = HTTP
- 4205 = FTP
- 4300 = NDMP
- 4400 = Telnet
- 4401 = SSH
- 4402 = SM CLP
- 4403 = SMTP
- 4404 = LDAP
- 4405 = RDP
- 4406 = HTTPS
- .. = DMTF Reserved
- 32768.. = Vendor Reserved

NOTE: If the `ProcollIFType` is set to 1 (Other), then the type information should be provided in the `OtherTypeDescription` string property.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by `EnabledState`. This property is provided to compare the last requested and current enabled or disabled states.

NOTE: When `EnabledState` is set to 5 (Not Applicable), then this property has no meaning. See the `EnabledState` property description for explanations of the values in the `RequestedState` enumeration.

NOTE: The value `No Change (5)` has been deprecated instead of indicating the last requested state is `Unknown (0)`. If the last requested or desired state is unknown, `RequestedState` should have the value `Unknown (0)`, but may have the value `No Change (5)`.

There are two new values in `RequestedState` that build on the statuses of `EnabledState`. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as `Start` or `StopService` on `CIM_Service`), or can be overridden and defined as `WRITEable` in a subclass. The method approach is considered superior to a `WRITEable` property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last `RequestedState` is not supported for the `EnabledLogicalElement`, the property is `NULL` or has the value **12 Not Applicable**.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down

Property	Description
	<ul style="list-style-type: none"> 5 = No Change 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. 7 = Test 8 = Deferred 9 = Quiesce 10 = Reboot — Refers to performing a Shut Down and then moving to an Enabled state. 11 = Reset — Indicates that the element is first Disabled and then Enabled. 12 = Not Applicable .. = DMTF Reserved 32768..65535 = Vendor Reserved
SystemCreationClassName	The CreationClassName of the scoping System.
SystemName	The Name of the scoping System.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = Enabled 3 = Disabled 4 = Shut Down 5 = No Change — Indicates that no transition is in progress. 6 = Offline 7 = Test 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_EthernetPort

Table 8. EthernetPort

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

i **NOTE:** The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

By default, the element is **Enabled** (value = 2).

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element does not run commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of moving to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. Starting (**10**) indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 10 = Starting
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

Linktechnology

An enumeration of the types of links. When set to **1** (Other), the related property OtherLinkTechnology contains a string description of the type of link.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Ethernet
- 3 = IB
- 4 = FC
- 5 = FDDI

Property	Description
	<ul style="list-style-type: none"> · 6 = ATM · 7 = Token Ring · 8 = Frame Relay · 9 = Infrared · 10 = Bluetooth · 11 = Wireless LAN
Name	The Name property defines the label by which the object is known. When subclassed, the Name property can be overridden to be a Key property.
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (Not Applicable), then this property has no meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration. Unknown (0) indicates the last requested state for the element is unknown.</p> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).</p> <p>Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 2 = Enabled · 3 = Disabled · 4 = Shut Down · 5 = No Change · 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. · 7 = Test · 8 = Deferred · 9 = Quiesce · 10 = Reboot — Refers to performing a Shut Down and then moving to an Enabled state. · 11 = Reset — Indicates that the element is first Disabled and then Enabled. · 12 = Not Applicable · .. = DMTF Reserved · 32768..65535 = Vendor Reserved
SystemCreationClassName	The creation classname of the scoping system.
SystemName	The system name of the scoping system.
TOEEnabledState	An integer enumeration that indicates the enabled and disabled states of the TOE.

Property	Description
	<p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Enabled — Indicates that the TOE is enabled and running. 3 = Disabled — Indicates that the TOE is disabled. 4 = Not Applicable — Indicates that the ethernet port does not have TOE capability. 5..32767 = DMTF Reserved 32768..65535 = Vendor Reserved

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_FlatPanel

Table 9. FlatPanel

Property	Description
Brightness	<p>The percentage (0 – 100) of total brightness of the video output device for system running on battery and AC power. The property is in the format BatteryBrightness:ACBrightness BuiltIn Defines whether the video output device is built in. True indicates that flat panel is directly attached to a portable computer and False means that flat panel is externally connected through graphics cable (such as VGA) to a computer.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = True 3 = False .. = DMTF Reserved 32768..65535 = Vendor Reserved
CreationClassName	<p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>

Property	Description
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
DisplayType	<p>An integer enumeration describing the type of flat panel display.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Passive Matrix LCD • 3 = Active Matrix LCD • 4 = Cholesteric LCD • 5 = Field Emission Display • 6 = Electro Luminescent Display • 7 = Gas Plasma 8 = LED
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
HorizontalResolution	The horizontal resolution in Pixels of the flat panel.
MaxQuiesceTime	<p>The use of this property has been deprecated. When evaluating the use of Quiesce, it was determined that this single property is not adequate for describing when a device will automatically exit a quiescent state. In fact, the most likely scenario for a device to exit a quiescent state was determined to be based on the number of outstanding requests queued rather than on a maximum time. This decision will be re-evaluated and repositioned later. Deprecated description: Maximum time, in milliseconds, that a Device can run in a Quiesced state. The state is defined in its Availability and Additional Availability properties, where Quiesced is conveyed by the value 21. What occurs at the end of the time limit is device-specific. The Device can unquiesce, can be offline, or can take other actions. A value of 0 indicates that a Device can remain quiesced indefinitely.</p>
ScanMode	<p>The scan mode of a flat panel indicating either single (value = 2) or dual scan 3.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Single Scan • 3 = Dual Scan
SystemCreationClassName	The creation class name of the scoping system.
SystemName	The system name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress.

Property	Description
	<ul style="list-style-type: none"> 6 = Offline 7 = Test 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>
VerticalResolution	Vertical resolution in Pixels of a flat panel.

DCIM_IPProtocolEndpoint

Table 10. IPProtocolEndpoint

Property	Description
AddressOrigin	<p>Identifies the method by which the IP Address, Subnet Mask, and Gateway were assigned to the IPProtocolEndpoint.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Not Applicable 3 = Static — Indicates the values were assigned manually. 4 = DHCP — Indicates the values were assigned utilizing the Dynamic Host Configuration Protocol. See RFC 2131 and related. 5 = BOOTP — Indicates the values were assigned utilizing BOOTP. See RFC 951 and related. 6 = IPv4 Link Local — Indicates the values were assigned using the IPv4 Link Local protocol. See RFC 3927. 7 = DHCPv6 — Indicates the values were assigned using DHCPv6. See RFC 3315. 8 = IPv6AutoConfig — Indicates the values were assigned using the IPv6 AutoConfig Protocol. See RFC 4862. .. = DMTF Reserved 32768..65535 = Vendor Reserved
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

By default, the element is **Enabled (value = 2)**.

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

IPv4Address

The IPv4 address that this ProtocolEndpoint represents.

Property	Description
IPv6Address	The IPv6 address that this ProtocolEndpoint represents.
IPv6AddressType	<p>Identifies the type of address found in the IPv6Address property. The values of this property are interpreted according to RFC4291, Section 2.4</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Unspecified • 3 = Loopback • 4 = Multicast • 5 = Link Local Unicast • 6 = Global Unicast • 7 = Embedded IPv4 Address • 8 = Site Local Unicast • .. = DMTF Reserved • 32768..65535 = Vendor Reserved
IPv6SubnetPrefixLength	Identifies the prefix length of the IPv6Address property that is used to specify a subnet
IPVersionSupport	<p>This property explicitly defines support for different versions of the IP protocol, for this Endpoint. It is deprecated since the ProtocolIFType also provides this functionality by describing an endpoint as IPv4 only (value = 4096), IPv6 only (value = 4097), or IPv4/v6 (value = 4098).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = IPv4 Only • 2 = IPv6 Only • 3 = Both IPv4 and IPv6
Name	A string that identifies this ProtocolEndpoint with either a port or an interface on a device. To ensure uniqueness, the Name property should be prepended or appended with information from the Type or OtherTypeDescription properties. The method selected is described in the NameFormat property of this class.
NameFormat	Contains the naming heuristic that is selected to ensure that the value of the Name property is unique. For example, you may choose to prepend the name of the port or interface with the Type of ProtocolEndpoint (for example, IPv4) of this instance followed by an underscore.
ProtocolIFType	<p>ProtocolIFType's enumeration is limited to IP-related and reserved values for this subclass of ProtocolEndpoint.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 225..4095 = IANA • Reserved 4096 = IPv4 • 4097 = IPv6 • 4098 = IPv4/v6 • 4301..32767 = DMTF Reserved • 32768.. = Vendor Reserved

Property

Description

ProtocolType

This property is deprecated instead of the ProtocolType enumeration. This deprecation was done to have better alignment between the IF-MIB of the IETF and this CIM class. Depreciated description: ProtocolType is an enumeration that provides information to categorize and classify different instances of this class. For most instances, information in this enumeration and the definition of the subclass overlap. However, there are several cases where a specific subclass of ProtocolEndpoint is not required (for example, there is no Fibre Channel subclass of ProtocolEndpoint). Therefore, this property is needed to define the type of Endpoint.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = IPv4
- 3 = IPv6
- 4 = IPX
- 5 = AppleTalk
- 6 = DECnet
- 7 = SNA
- 8 = CONP
- 9 = CLNP
- 10 = VINES
- 11 = XNS
- 12 = ATM
- 13 = Frame Relay
- 14 = Ethernet
- 15 = TokenRing
- 16 = FDDI
- 17 = Infiniband
- 18 = Fibre Channel
- 19 = ISDN BRI Endpoint
- 20 = ISDN B Channel Endpoint
- 21 = ISDN D Channel Endpoint
- 22 = IPv4/v6
- 23 = BGP
- 24 = OSPF
- 25 = MPLS
- 26 = UDP
- 27 = TCP

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change

- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to performing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or have the value 12 **Not Applicable**.

Status

A string indicating the current status of the object. Various operational and non-operational statuses are defined. This property is deprecated instead of OperationalStatus, which includes the same semantics in its enumeration. This change is made for the following reasons:

- Status is more correctly defined as an array. This definition overcomes the limitation of describing status using a single value, when it is really a multi-valued property (for example, an element may be OK AND Stopped).
- A MaxLen of 10 is too restrictive and leads to unclear enumerated values.
- The change to a uint16 data type was discussed when CIM V2.0 was defined. However, existing V1.0 implementations used the string property and did not want to modify their code. Therefore, Status was grandfathered into the Schema. Use of the deprecated qualifier allows the maintenance of the existing property, but also permits an improved definition using OperationalStatus.

Possible values are:

- OK
- Error

Property	Description
	<ul style="list-style-type: none"> • Degraded • Unknown • Pred Fail • Starting • Stopping • Service • Stressed • NonRecover • No Contact • Lost • Comm • Stopped
SubnetMask	The mask for the IPv4 address of this ProtocolEndpoint, if one is defined.
SystemCreationClassName	The creation class name of the scoping System.
SystemName	The Name of the scoping System.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_ControllerView

Table 11. ControllerView

Property	Description
BusType	<p>The property represents the type of the PCI bus.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 =Unknown • 3 = PCI Bus

Property	Description
	<ul style="list-style-type: none"> · 4 = PCMCIA Bus · 0x8000 = DMTF Reserved · 0xffff = Vendor Reserved
ControllerFirmwareVersion	This property represents the firmware version.
Device	This property represents the device name.
Driver Version	This property represents the version of the driver.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often sub-classed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	This property contains the value of the Fully Qualified Device Description (FQDD).
PrimaryStatus	<p>This property represents the status of the device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = OK · 2 = Degraded · 3 = Error
ProductName	This property represents the family name of the controller.

DCIM_PhysicalDiskView

Table 12. PhysicalDiskView

Property	Description
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

Property	Description
	<p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	The property contains the value of the Fully Qualified Device Description (FQDD).
PrimaryStatus	<p>This property represents the status of the device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = OK 2 = Degraded 3 = Error 4 = Rebuilding 5 = Offline 0x8000 = DMTF Reserved 0xFFFF = Vendor Reserved
DriveUsage	<p>This property indicates if the physical disk is in a RAID set.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Not in a RAID Set 1 = In a RAID Set 2 = Hot Spare
Model	This property represents the model name of the physical disk.
SerialNumber	This property represents the serial number of the physical disk.
DriveAFStatus	<p>This property indicates if the physical disk is an advanced format drive.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 - Non AF Drive 1 - AF Drive 2 - Unknown

DCIM_VirtualDiskView

Table 13. VirtualDiskView

Property	Description
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

Property	Description
InstanceID	The property contains the value of the Fully Qualified Device Description (FQDD).
PrimaryStatus	<p>This property represents the status of the device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = OK • 2 = Degraded • 3 = Error • 4 = Rebuilding • 5 = Offline
RAIDStatus	<p>This property represents the RAID specific status.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Ready • 2 = Online • 3 = Foreign • 4 = Offline • 5 = Blocked • 6 = Failed • 7 = Degraded • 8 = Rebuilding
RAIDTypes	<p>This property represents the current RAID level.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = No RAID • 2 = RAID-0 • 4 = RAID-1 • 64 = RAID-5 • 128 = RAID- 6 • 2048 = RAID-10 • 8192 = RAID-50 • 16384 = RAID- 60
SizeinMegabytes	The property represents the size of the virtual disk in megabytes.
StripeSize	<p>This property represents the current strip size.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Default • 1 = 512Bytes

NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

Property	Description
	<ul style="list-style-type: none"> • 2 = 1KB • 4 = 2KB • 8 = 4 KB • 16 = 8 kB • 32 = 16 KB • 64 = 32 KB • 128 = 64 KB • 256 = 128 KB • 512 = 256 KB • 1024 = 512 KB • 2048 = 1 MB • 4096 = 2 MB • 8192 = 4 MB • 16384 = 8 MB • 32768 = 16 MB
PhysicalDiskIDs	The property represents the array of physical disk FQDDs.

DCIM_PhysicalMemory

Table 14. PhysicalMemory

Property	Description
BankLabel	A string identifying the physically labeled bank where the Memory is located. For example, Bank 0 or Bank A .
CanBeFRUed	Boolean that indicates whether this PhysicalElement can be FRUed (TRUE) or not (FALSE).
Capacity	The total capacity of this PhysicalMemory, in bytes.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DataWidth	Data width of the PhysicalMemory, in bits. A data width of 0 and a TotalWidth of 8 would indicate that the Memory is solely used to provide error correction bits.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

Property	Description
FormFactor	<p>The implementation form factor for the Chip.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = SIP • 3 = DIP 4 = ZIP • 5 = SOJ • 6 = Proprietary • 7 = SIMM • 8 = DIMM • 9 = TSOP • 10 = PGA • 11 = RIMM • 12 = SODIMM • 13 = SRIMM • 14 = SMD • 15 = SSMP • 16 = QFP • 17 = TQFP • 18 = SOIC • 19 = LCC • 20 = PLCC • 21 = BGA • 22 = FPBGA • 23 = LGA <p>For example, values such as SIMM (7), TSOP (9), or PGA (10) can be specified.</p>
IsSpeedInMhz	<p>Indicates if the Speed property or the MaxMemorySpeed contains the value of the memory speed. A value of TRUE indicates that the speed is represented by the MaxMemorySpeed property. A value of FALSE indicates that the speed is represented by the Speed property.</p>
ManufactureDate	<p>The date this PhysicalElement was manufactured.</p>
Manufacturer	<p>The name of the organization responsible for producing the PhysicalElement. This organization may be the entity from where the Element is purchased, but this is not necessarily true. The latter information is contained in the Vendor property of CIM_Product.</p>
MemoryType	<p>The type of PhysicalMemory. Synchronous DRAM is also known as SDRAM. Cache DRAM is also known as CDRAM. BRAM is also known as Block RAM.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = DRAM • 3 = Synchronous DRAM • 4 = Cache DRAM • 5 = EDO • 6 = EDRAM

Property	Description
	<ul style="list-style-type: none"> • 7 = VRAM • 8 = SRAM • 9 = RAM • 10 = ROM • 11 = Flash • 12 = EEPROM • 13 = FEPRM • 14 = EPROM • 15 = CDRAM • 16 = 3DRAM • 17 = SDRAM • 18 = SGRAM • 19 = RDRAM • 20 = DDR • 21 = DDR-2 • 22 = BRAM • 23 = FB-DIMM • 24 = DDR3 • 25 = FBD2 • 26 = DDR4 • 27 = LPDDR • 28 = LPDDR2 • 29 = LPDDR3 • 30 = LPDDR4 • 31..32567 = DMTF Reserved • 32568..65535 = Vendor Reserved
Model	The name by which the PhysicalElement is generally known.
PartNumber	The part number assigned by the organization that is responsible for producing or manufacturing the PhysicalElement.
SerialNumber	A manufacturer-allocated number used to identify the Physical Element.
SKU	The stock-keeping unit number for this PhysicalElement.
Speed	The speed of the PhysicalMemory, in nanoseconds.
Tag	<p>An arbitrary string that uniquely identifies the Physical Element and serves as the key of the Element. The Tag property can contain information such as asset tag or serial number data. The key for PhysicalElement is placed very high in the object hierarchy to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on. For example, a hotswappable or removable component can be taken from its containing (scoping) Package and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for Physical Element is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.</p>

DCIM_PhysicalPackage

Table 15. PhysicalPackage

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
ManufactureDate	The date that this PhysicalElement was manufactured.
Manufacturer	The name of the organization responsible for producing the PhysicalElement. This organization may be the entity from whom the Element is purchased, but this is not necessarily true. The latter information is contained in the Vendor property of CIM_Product.
Model	The name by which the PhysicalElement is generally known.
Name	The Name property defines the label by which the object is known. When subclassed, the Name property can be overridden to be a Key property.
OtherPackageType	A string describing the package when the instance's PackageType property is 1 (Other).
PackageType	<p>Enumeration defining the type of the PhysicalPackage.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown — Indicates that the package type is not known.• 1 = Other — The package type does not correspond to an existing enumerated value. The value is specified using the OtherPackageType property.• 2 = Rack• 3 = Chassis/Frame• 4 = Cross Connect/Backplane• 5 = Container/Frame Slot• 6 = Power Supply• 7 = Fan• 8 = Sensor• 9 = Module/Card• 10 = Port/Connector• 11 = Battery

Property

Description

- 12 = Processor
- 13 = Memory
- 14 = Power Source/Generator
- 15 = Storage Media Package (example, Disk or Tape Drive)
- 16 = Blade
- 17 = Blade Expansion

NOTE: This enumeration expands on the list in the Entity MIB (the attribute, `entPhysicalClass`). The numeric values are consistent with CIM's enum numbering guidelines, but are slightly different than the MIB's values. The values Rack through Port/Connector are defined per the Entity-MIB (where the semantics of rack are equivalent to the MIB's stack value). The other values (for battery, processor, memory, power source/generator and storage media package) are self-explanatory.

A value of **Blade** should be used when the `PhysicalPackage` contains the operational hardware aspects of a `ComputerSystem`, without the supporting mechanicals such as power and cooling. For example, a Blade Server includes processor(s) and memory, and relies on the containing chassis to supply power and cooling. In many respects, a Blade can be considered a **Module/Card**. However, it is tracked differently by inventory systems and differs in terms of service philosophy. For example, a Blade is intended to be hot-plugged into a hosting enclosure without requiring additional cabling, and does not require a cover to be removed from the enclosure for installation. Similarly, a **Blade Expansion** has characteristics of a **Blade** and a **Module/Card**. However, it is distinct from both due to inventory tracking and service philosophy, and because of its hardware dependence on a Blade. A Blade Expansion must be attached to a Blade prior to inserting the resultant assembly into an enclosure.

PartNumber

The part number assigned by the organization that is responsible for producing or manufacturing the `PhysicalElement`.

SerialNumber

A manufacturer-allocated number used to identify the `PhysicalElement`.

SKU

The stock-keeping unit number for this `PhysicalElement`.

Tag

An arbitrary string that uniquely identifies the `PhysicalElement` and serves as the key of the `Element`. The `Tag` property can contain information such as asset tag or serial number data. The key for `PhysicalElement` is placed very high in the object hierarchy in order to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on. For example, a hotswappable or removable component can be taken from its containing (scoping) `Package` and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for `PhysicalElement` is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.

Version

A string that indicates the version of the `PhysicalElement`.

DCIM_ParallelPort

Table 16. ParallelPort

Property	Description
BaseIOAddress	An integer value that represents the base I/O address used by the parallel port.
ConnectorType	<p>ConnectorType is defined to force consistent naming of the 'connector type' property in subclasses and to guarantee unique enum values for all instances of ParallelPort. When set to 3 (Proprietary), the related property OtherConnectorType contains a string description of the type of port.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Centronics• 2 = Mini-Centronics• 3 = Proprietary• 4 = DB-25 Female• 5 = DB-25 Male• .. = DMTF Reserved• 32768.. = Vendor Reserved
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce .. = DMTF Reserved

Property	Description
EnabledState	<ul style="list-style-type: none"> • 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p> <p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value= 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. Starting (10) indicates that the element is in the process of going to an Enabled state. New requests are queued. • 10 = Starting • 11..32767 = DMTF Reserved • 32768..65535 = Vendor Reserved
IRQLevel	<p>An integer value that represents the IRQ level used by the parallel port.</p>
Pinout	<p>The pinout used by the I/O device on this parallel port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = XT/AT • 2 = PS/2 • 3 = ECP • 4 = EPP • 5 = IEEE 1284 • 25 = PC-98 • 26 = PC-98-Hireso • .. = DMTF Reserved
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when</p>

EnabledState is set to **5 (Not Applicable)**, then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. **Unknown (0)** indicates the last requested state for the element is unknown.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState. There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the pro

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

Security

An enumeration indicating the operational security for the Controller. For example, information that the Device's external interface is locked out (valuemap = **3**) or **Boot Bypass (valuemap = 5)** can be described using this property.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = None
- 3 = External Interface Locked Out
- 4 = External Interface Enabled

Property	Description
	<ul style="list-style-type: none"> 5 = Boot Bypass .. = DMTF Reserved 32768.. = Vendor Reserved
Speed	The bandwidth of the Port in Bits per Second.
SystemCreationClassName	The creation class name of the scoping system.
SystemName	The system name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = Enabled 3 = Disabled 4 = Shut Down 5 = No Change — Indicates that no transition is in progress. 6 = Offline 7 = Test 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_RemoteServiceAccessPoint

Table 17. RemoteServiceAccessPoint

Property	Description
AccessContext	<p>The AccessContext property identifies the role this RemoteServiceAccessPoint is playing in the hosting system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Default Gateway 3 = DNS Server 4 = SNMP Trap Destination 5 = MPLS Tunnel Destination 6 = DHCP Server 7 = SMTP Server 8 = LDAP Server 9 = Network Time Protocol (NTP) Server .. = DMTF Reserved

Property	Description
AccessInfo	<ul style="list-style-type: none"> 32768..65535 = Vendor Reserved <p>Access or addressing information or a combination of this information for a remote connection. This information can be a host name, network address, or similar information.</p>
CreationClassName	<p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved 32768..65535 = Vendor Reserved
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. 5 = Not Applicable — Indicates the element does not support being enabled or disabled. 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. 7 = In Test — Indicates that the element is in a test state. 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.

Property

Description

- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

InfoFormat

An enumerated integer that describes the format and interpretation of the AccessInfo property.

Possible values are:

- 1 = Other
- 2 = Host Name
- 3 = IPv4 Address
- 4 = IPv6 Address
- 5 = IPX Address
- 6 = DECnet Address
- 7 = SNA Address
- 8 = Autonomous System Number
- 9 = MPLS Label
- 10 = IPv4 Subnet Address
- 11 = IPv6 Subnet Address
- 12 = IPv4 Address Range
- 13 = IPv6 Address Range
- 100 = Dial String
- 101 = Ethernet Address
- 102 = Token Ring Address
- 103 = ATM Address
- 104 = Frame Relay Address
- 200 = URL 201 = FQDN
- 202 = User FQDN
- 203 = DER ASN1 DN
- 204 = DER ASN1 GN
- 205 = Key ID .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

Name

The Name property uniquely identifies the ServiceAccessPoint and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is **Unknown (0)**. If the last requested or desired state is unknown, **RequestedState** should have the value **Unknown (0)**, but may have the value **No Change (5)**.

There are two new values in **RequestedState** that build on the statuses of **EnabledState**. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as **Start** or **StopService** on **CIM_Service**), or can be overridden and defined as **WRITEable** in a subclass. The method approach is considered superior to a **WRITEable** property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last **RequestedState** is not supported for the **EnabledLogicalElement**, the property is **NULL** or has the value 12 **Not Applicable**.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline **EnabledState**.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

SystemCreationClassName

The **CreationClassName** of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning. A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in-progress.
- 6 = Offline
- 7 = Test

Property	Description
	<ul style="list-style-type: none"> 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions

DCIM_Slot

Table 18. Slot

Property	Description
ConnectorLayout	<p>Describes the type of packaging normally associated with this type of connector.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = RS232 3 = BNC 4 = RJ11 5 = RJ45 6 = DB9 7 = Slot 8 = SCSI High Density 9 = SCSI Low Density 10 = Ribbon 11 = AUI 12 = Fiber SC 13 = Fiber ST 14 = FDDI-MIC 15 = Fiber-RTMJ 16 = PCI — Describes the generic PCI connector layout. 17 = PCI-X — Describes the PCI Extended connector layout. 18 = PCI-E — Describes the PCI Express connector layout, where the actual layout with respect to the length is unknown. 19 = PCI-E x1 20 = PCI-E x2 21 = PCI-E x4 22 = PCI-E x8 23 = PCI-E x16 24 = PCI-E x32 25 = PCI-E x64 26..32567 = DMTF Reserved 32568..65535 = Vendor Reserved

Property

Description

ConnectorType

19 — 25 (PCI-E xN) — Describes the PCI Express connector layout, where N is the lane count that appropriately describes the length of the PCI-E connector.

An array of integers defining the type of PhysicalConnector. An array is specified to allow the description of **combinations** of Connector information.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Male
- 3 = Female
- 4 = Shielded
- 5 = Unshielded
- 6 = SCSI (A) High-Density (50 pins)
- 7 = SCSI (A) Low-Density (50 pins)
- 8 = SCSI (P) High-Density (68 pins)
- 9 = SCSI SCA-I (80 pins)
- 10 = SCSI SCA-II (80 pins)
- 11 = Fibre Channel (DB-9, Copper)
- 12 = Fibre Channel (Optical Fibre)
- 13 = Fibre Channel SCA-II (40 pins)
- 14 = Fibre Channel SCA-II (20 pins)
- 15 = Fibre Channel BNC
- 16 = ATA 3-1/2 Inch (40 pins)
- 17 = ATA 2-1/2 Inch (44 pins)
- 18 = ATA-2
- 19 = ATA-3
- 20 = ATA/66
- 21 = DB-9
- 22 = DB-15
- 23 = DB-25
- 24 = DB-36
- 25 = RS-232C
- 26 = RS-422
- 27 = RS-423
- 28 = RS-485
- 29 = RS-449
- 30 = V.35
- 31 = X.21
- 32 = IEEE-488
- 33 = AUI
- 34 = UPT Category 3
- 35 = UPT Category 4
- 36 = UPT Category 5
- 37 = BNC
- 38 = RJ11
- 39 = RJ45
- 40 = Fiber MIC
- 41 = Apple AUI
- 42 = Apple GeoPort

Property**Description**

- 43 = PCI
- 44 = ISA
- 45 = EISA
- 46 = VESA
- 47 = PCMCIA
- 48 = PCMCIA Type I
- 49 = PCMCIA Type II
- 50 = PCMCIA Type III
- 51 = ZV Port
- 52 = CardBus
- 53 = USB
- 54 = IEEE 1394
- 55 = HIPPI
- 56 = HSSDC (6 pins)
- 57 = GBIC
- 58 = DIN
- 59 = Mini-DIN
- 60 = Micro-DIN
- 61 = PS/2
- 62 = Infrared
- 63 = HP-HIL
- 64 = Access.bus
- 65 = NuBus
- 66 = Centronics
- 67 = Mini-Centronics
- 68 = Mini-Centronics Type-14
- 69 = Mini-Centronics Type-20
- 70 = Mini-Centronics Type-26
- 71 = Bus Mouse
- 72 = ADB
- 73 = AGP
- 74 = VME Bus
- 75 = VME64
- 76 = Proprietary
- 77 = Proprietary Processor Card Slot
- 78 = Proprietary Memory Card Slot
- 79 = Proprietary I/O Riser Slot
- 80 = PCI-66MHZ
- 81 = AGP2X
- 82 = AGP4X
- 83 = PC-98
- 84 = PC-98-Hireso
- 85 = PC-H98
- 86 = PC-98Note
- 87 = PC-98Full
- 88 = SSA SCSI
- 89 = Circular
- 90 = On Board IDE Connector
- 91 = On Board Floppy Connector
- 92 = 9 Pin Dual Inline

Property

Description

- 93 = 25 Pin Dual Inline
- 94 = 50 Pin Dual Inline
- 95 = 68 Pin Dual Inline
- 96 = On Board Sound Connector
- 97 = Mini-jack
- 98 = PCI-X
- 99 = Sbus IEEE 1396-1993 32 bit
- 100 = Sbus IEEE 1396-1993 64 bit
- 101 = MCA
- 102 = GIO
- 103 = XIO
- 104 = HIO
- 105 = NGIO
- 106 = PMC
- 107 = MTRJ
- 108 = VF-45
- 109 = Future I/O
- 110 = SC
- 111 = SG
- 112 = Electrical
- 113 = Optical
- 114 = Ribbon
- 115 = GLM
- 116 = 1x9
- 117 = Mini SG
- 118 = LC
- 119 = HSSC
- 120 = VHDCI Shielded (68 pins)
- 121 = InfiniBand
- 122 = AGP8X

For example, one array entry could specify RS-232 (value = **25**), another DB-25 (value = **23**) and a third entry define the Connector as **Male** (value = **2**). This single property is being deprecated instead of using separate properties to describe the various aspects of the connector. The separation allows for a more generic means of describing the connectors. Obsolete connectors were intentionally removed from the new list.

CreationClassName

Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.

ElementName

A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

Property	Description
	<p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
Number	The Number property indicates the physical slot number, which can be used as an index into a system slot table, whether or not that slot is physically occupied.
SupportsHotPlug	Boolean indicating whether the Slot supports hot-plug of adapter Cards.
Tag	An arbitrary string that uniquely identifies the Physical Element and serves as the key of the Element. The Tag property can contain information such as asset tag or serial number data. The key for PhysicalElement is placed very high in the object hierarchy to independently identify the hardware or entity, regardless of physical placement in or on Cabinets, Adapters, and so on. For example, a hotswappable or removable component can be taken from its containing (scoping) Package and be temporarily unused. The object still continues to exist and can even be inserted into a different scoping container. Therefore, the key for Physical Element is an arbitrary string and is defined independently of any placement or location-oriented hierarchy.
VendorCompatibilityStrings	An array of strings that identify the components that are compatible and can be inserted in a slot. This allows vendors to provide clues to the system administrators by providing sufficient information to request the appropriate hardware that can populate the slot. To ensure uniqueness within the NameSpace, each value defined by the vendor for use in the VendorCompatibilityStrings property SHOULD be constructed using the following 'preferred' algorithm: : Where and are separated by a colon ':', and where MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the _ structure of Schema class names.) In addition, to ensure uniqueness MUST NOT contain a colon ':'. When using this algorithm, the first colon to appear in InstanceID MUST appear between and . is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements.

DCIM_SerialPort

Table 19. SerialPort

Property	Description
BaseIOAddress	An integer value that represents the base I/O address used by the serial port. Caption The Caption property is a short textual description (one- line string) of the object.
ConnectorType	ConnectorType is defined to force consistent naming of the connector type property in subclasses and to guarantee unique

Property

Description

enum values for all instances of SerialPort. When set to 1 (**Other**), related property OtherConnectorType contains a string description of the type of port. A range of values, DMTF_Reserved, has been defined that allows subclasses to override and define their specific types of ports.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Not Applicable
- 3..15999 = DMTF Reserved
- 16003 = DB9Male
- 16004 = DB9Female
- 16005 = DB25Male1
- 16006 = DB25Female1
- 16007 = RJ11
- 16008 = RJ45
- 16009 = Proprietary
- 16010 = CircularDIN8Male
- 16011 = CircularDIN8Female
- 16160 = MiniCentronicsType14
- 16161 = MiniCentronicsType26
- 16162..65535 = Vendor Reserved

CreationClassName

Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.

DeviceID

An address or other identifying information used to uniquely name the LogicalDevice.

ElementName

A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.



NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved

Property

Description

EnabledState

- 32768..65535 = Vendor Reserved

By default, the element is **Enabled (value = 2)**.

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, processes any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not run commands and drops any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState now. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is nonfunctional and recovery may not be possible.
- 30 = Non-recoverable error

Property	Description
IRQLevel	<ul style="list-style-type: none"> .. = DMTF Reserved — The element has failed, and recovery is not possible. All functionality provided by this element has been lost. <p>An integer value that represents the IRQ level used by the serial port.</p>
MaxSpeed	<p>The maximum bandwidth of the Port in Bits per Second.</p>
OperationalStatus	<p>Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory. However, a few are not and are described here in more detail.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = OK 3 = Degraded 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of Stressed states are overload, overheated, and so on. 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure soon. 6 = Error 7 = Non-Recoverable Error 8 = Starting 9 = Stopping 10 = Stopped — Implies a clean and orderly stop. 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered. 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it. 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is unreachable. 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated. 15 = Dormant — Indicates that the element is inactive or quiesced. 16 = Supporting Entity in Error — Indicates that this element may be OK but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems. 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error). 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association. .. = DMTF Reserved 0x8000.. = Vendor Reserved <p>OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array</p>

Property

Description

property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

PortType

PortType is defined to force consistent naming of the **type** property in subclasses and to guarantee unique enum values for all instances of NetworkPort. When set to 1 (**Other**), related property OtherPortType contains a string description of the type of port. A range of values, DMTF_Reserved, has been defined that allows subclasses to override and define their specific types of ports.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Not Applicable
- 3..15999 = DMTF Reserved
- 16192 = Parallel Port
- 16193 = Serial Port
- 16194 = Pointing Device
- 16195 = Keyboard
- 16196 = Processor
- 16197 = Memory Device
- 16198 = USB
- 16199 = Monitor
- 16200 = SCSI
- 16201..65535 = Vendor Reserved

PrimaryStatus

Provides a high-level status value, intended to align with Red-Yellow-Green type representation of status. It should be used with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Not Applicable
- 3..15999 = DMTF Reserved
- 16192 = Parallel Port
- 16193 = Serial Port
- 16194 = Pointing Device
- 16195 = Keyboard
- 16196 = Processor
- 16197 = Memory Device
- 16198 = USB
- 16199 = Monitor
- 16200 = SCSI
- 16201..65535 = Vendor Reserved

Property	Description
PrimaryStatus	<p>Provides a high-level status value, intended to align with Red-Yellow-Green type representation of status. It should be used with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the implementation is in general capable of returning this property, but is unable to do so now. • 1 = OK — Indicates the ManagedElement is functioning normally. • 2 = Degraded — Indicates the ManagedElement is functioning below normal. • 3 = Error — Indicates the ManagedElement is in an Error condition. • .. = DMTF Reserved • 0x8000.. = Vendor Reserved
RequestedSpeed	<p>The requested bandwidth of the Port in Bits per Second. The actual bandwidth is reported in LogicalPort.Speed.</p>
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.</p> <div style="border: 1px solid blue; padding: 5px; margin: 10px 0;"> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).</p> </div> <p>Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the last requested state for the element is unknown. • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change • 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. • 7 = Test

Property	Description
Security	<ul style="list-style-type: none"> • 8 = Deferred • 9 = Quiesce • 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. • 11 = Reset — Indicates that the element is first Disabled and then Enabled. • 12 = Not Applicable • .. = DMTF Reserved • 32768..65535 = Vendor Reserved <p>An enumeration indicating the operational security for the Controller. For example, information that the Device's external interface is locked out (value = 4) or Boot Bypass (value = 6) can be described using this property.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 2 = Unknown • 3 = None • 4 = External Interface Locked Out • 5 = External Interface Enabled • 6 = Boot Bypass
SerialPortCapabilities	<p>The capabilities of this Serial port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 2 = Unknown • 3 = XT/AT compatible • 4 = 16450 compatible • 5 = 16550 compatible • 6 = 16550A compatible • 160 = 8251 compatible • 161 = 8251FIFO compatible
SystemCreationClassName	<p>The creation class name of the scoping system.</p>
SystemName	<p>The system name of the scoping system.</p>
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset

Property	Description
	<ul style="list-style-type: none"> 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_USBPort

Table 20. USBPort

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating a configuration of an administrator for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other

Property

Description

- 2 = Enabled — Indicates that the element is or could be running commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not run commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

IdentifyingDescriptions

An array of free-form strings providing explanations and details behind the entries in the OtherIdentifyingInfo array. Note that each entry of this array is related to the entry in OtherIdentifyingInfo that is located at the same index.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by

Property

Description

EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (**Not Applicable**), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. **Unknown (0)** indicates the last requested state for the element is unknown.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

Speed

USB Port Speed in bits per second. This speed is determined and set by the attached Device. The **attached Device** is indicated using the USBConnection association. At this time, only several Port speeds are valid. These are: 1.5Mbps and 12Mbps. The value 0 can also be specified to indicate that the current speed is **unknown** or 1 to indicate that the speed is **other** than 1.5 or 12Mbps. Possible values are: 0, 1, 1500000, 12000000

SystemCreationClassName

The CreationClassName of the scoping system.

Property	Description
SystemName	The System Name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_Memory

Table 21. Memory

Property	Description
Access	<p>Access describes whether the media is readable (value = 1), writeable (value = 2), or both (value = 3). Unknown (0) and Write Once (4) can also be defined.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Readable • 2 = Writeable • 3 = Read/Write Supported • 4 = Write Once
BlockSize	<p>Size in bytes of the blocks which form this StorageExtent. If variable block size, then the maximum block size in bytes should be specified. If the block size is unknown or if a block concept is not valid (for example, for AggregateExtents, Memory or LogicalDisks), enter a 1.</p>
ConsumableBlocks	<p>The maximum number of blocks, of size BlockSize, which are available for consumption when layering StorageExtents using the BasedOn association. This property only has meaning when this StorageExtent is an Antecedent reference in a BasedOn relationship. For example, a StorageExtent could be composed of 120 blocks. However, the Extent itself may use 20 blocks for redundancy data. If another StorageExtent is BasedOn this Extent, only 100 blocks would be available to it. This information (100</p>

Property	Description
CreationClassName	<p>blocks is available for consumption) is indicated in the ConsumableBlocks property.</p> <p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>
DeviceID	<p>An address or other identifying information used to uniquely name the LogicalDevice.</p>
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768.65535 = Vendor Reserved
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state.

Property	Description
ErrorMethodology	<ul style="list-style-type: none"> • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768..65535 = Vendor Reserved <p>ErrorMethodology for Memory is a string property that indicates whether parity or CRC algorithms, ECC or other mechanisms are used. Details on the algorithm can also be supplied.</p>
FailOverState	<p>An integer enumeration indicating that active memory has failed and the spare or backup memory may have taken over.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = None • 3 = Active
HealthState	<p>Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — The implementation cannot report on HealthState at this time. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future. • 5 = OK — The element is fully functional and is operating within normal operational parameters and without error. • 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors. • 15 = Minor failure — All functionality is available but some may be degraded. • 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working. • 25 = Critical failure — The element is non-functional and recovery may not be possible. • 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost. • .. = DMTF Reserved
NumberOfBlocks	<p>Total number of logically contiguous blocks, of size Block Size, which form this Extent. The total size of the Extent can be calculated by multiplying BlockSize by NumberOfBlocks. If the BlockSize is 1, this property is the total size of the Extent.</p>
OperationalStatus	<p>Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.</p>

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

OtherIdentifyingInfo

Captures data, in addition to DeviceID information, that could be used to identify a LogicalDevice. For example, you could use this property to hold the operating system's user-friendly name for the Device.

Property

Description

PrimaryStatus

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error — Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

Primordial

If true, **Primordial** indicates that the containing System does not have the ability to create or delete this operational element. This is important because StorageExtents are assembled into higher-level abstractions using the BasedOn association. Although the higher-level abstractions can be created and deleted, the most basic, (that is, primordial), hardware-based storage entities cannot. They are physically realized as part of the System, or are actually managed by some other System and imported as if they were physically realized. In other words, a Primordial StorageExtent exists in, but is not created by its System and conversely a non-Primordial StorageExtent is created in the context of its System. For StorageVolumes, this property will generally be false. One use of this property is to enable algorithms that aggregate StorageExtent. ConsumableSpace across all, StorageExtents but that also want to distinguish the space that underlies Primordial StoragePools. Since implementations are not required to surface all Component StorageExtents of a StoragePool, this information is not accessible in any other way. Purpose A free form string describing the media and/or its use. RedundancyConfiguration is an integer enumeration indicating the redundancy configuration when active memory fails.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Disabled
- 3 = Spared
- 4 = Mirrored
- 5 = LockStep

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.



NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is **Unknown (0)**. If the last requested or desired state is unknown, **RequestedState** should have the value **Unknown (0)**, but may have the value **No Change (5)**.

There are two new values in **RequestedState** that build on the statuses of **EnabledState**. These are **Reboot (10)** and **Reset (11)**. **Shut Down** requests an orderly transition to the **Disabled** state, and may involve removing power, to completely erase any existing state. The **Disabled** state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as **Start** or **StopService** on **CIM_Service**), or can be overridden and defined as **WRITEable** in a subclass. The method approach is considered superior to a **WRITEable** property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last **RequestedState** is not supported for the **EnabledLogicalElement**, the property is **NULL** or has the value **12 (Not Applicable)**.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the **Enabled** but **Offline EnabledState**.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset - Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

SystemCreationClassName

The **CreationClassName** of the scoping system.

SystemName

The **System Name** of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce

Property	Description
	<ul style="list-style-type: none"> 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>
Volatile	Volatile is a property that indicates whether this memory is volatile or not.

DCIM_PCIDevice

Table 22. PCIDevice

Property	Description
BusNumber	The bus number where this PCI device resides.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
Description	Provides a textual description of the object.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
DeviceNumber	The device number assigned to this PCI device for this bus.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved

Property

Description

EnabledState

- 32768..65535 = Vendor Reserved

By default, the element is **Enabled (value = 2)**.

A number enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and restarting (value = **10**) are temporary states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

FunctionNumber

The function number for this PCI device.

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.

Property

Description

StatusInfo

- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

The use of this method is deprecated instead of a more clearly named property (EnabledState) that is inherited from ManagedSystemElement and that has additional enumerated values. Deprecated description: The StatusInfo property indicates whether the Logical Device is in an enabled state (value = **3**), disabled state (value = **4**), some other state (value = **1**), or an unknown state (value = **2**). If this property does not apply to the LogicalDevice, the value 5 (**Not Applicable**) should be used. If a Device is **Enabled (value = 3)**, it has been powered up and is configured and operational. The Device may or may not be functionally active, depending on whether its Availability (or AdditionalAvailability) indicates that it is **Running/Full Power (value = 3)** or **Off line (value = 8)**. In an enabled but offline mode, a Device may be performing out-of-band requests, such as running Diagnostics. If StatusInfo is **Disabled (value = 4)**, a Device can only be **enabled** or powered off. In a personal computer environment, **disabled** means that the driver of the device is not available in the stack. In other environments, a Device can be disabled by removing its configuration file. A disabled device is physically present in a System and consuming resources, but it cannot be communicated with until a driver is loaded, a configuration file is loaded, or some other **enabling** activity has occurred.

Possible values are:

- 1 = Other
- 2 = Unknown
- 3 = Enabled
- 4 = Disabled
- 5 = Not Applicable

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_DisplayController

Table 23. DisplayController

Property	Description
CapabilityDescriptions	An array of free-form strings providing more detailed explanations for any of the video Accelerator features indicated in the Capabilities array. Note, each entry of this array is related to the entry in the Capabilities array that is located at the same index.
CommunicationStatus	<p>CommunicationStatus indicates the ability of the instrumentation to communicate with the underlying ManagedElement. CommunicationStatus consists of one of the following values: Unknown, None, Communication OK, Lost Communication, or No Contact. A Null return indicates the implementation (provider) does not implement this property.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time. • 1 = Not Available — Indicates that the implementation (provider) is capable of returning a value for this property, but not ever for this particular piece of hardware/software or the property is intentionally not used because it adds no meaningful information (as in the case of a property that is intended to add additional info to another property). • 2 = Communication OK — Indicates communication is established with the element, but does not convey any quality of service. • 3 = Lost Communication — Indicates that the Managed Element is known to exist and has been contacted successfully in the past, but is currently unreachable. • 4 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it. • .. = DMTF Reserved • 0x8000.. = Vendor Reserved
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
Description	Provides a textual description of the object.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. By default, the element is Enabled (value = 2).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled

Property

Description

- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

Name

The Name property defines the label by which the object is known. When subclassed, the Name property can be overridden to be a Key property.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to **5 (Not Applicable)**, then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

i **NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).**

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code. If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 Not Applicable**.

Property**Description**

	<p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown — Indicates the last requested state for the element is unknown.• 2 = Enabled• 3 = Disabled• 4 = Shut Down• 5 = No Change• 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.• 7 = Test• 8 = Deferred• 9 = Quiesce• 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state.• 11 = Reset — Indicates that the element is first Disabled and then Enabled.• 12 = Not Applicable• .. = DMTF Reserved• 32768.65535 = Vendor Reserved
SystemCreationClassName	The CreationClassName of the scoping system.
SystemName	The System Name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 2 = Enabled• 3 = Disabled• 4 = Shut Down• 5 = No Change — Indicates that no transition is in progress.• 6 = Offline• 7 = Test• 8 = Defer• 9 = Quiesce• 10 = Reboot• 11 = Reset• 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_Fan

Table 24. Fan

Property	Description
ActiveCooling	ActiveCooling is a Boolean that indicates that the Cooling Device provides active (as opposed to passive) cooling.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.

Property

Description

	<ul style="list-style-type: none">• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce - Indicates that the element is enabled but in a restricted mode.• 10 = Starting - Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
ErrorCleared	The use of this method is deprecated. Deprecated description: ErrorCleared is a Boolean property that indicates that the error reported in LastErrorCode is now cleared.
ErrorDescription	The use of this method is deprecated. Deprecated description: ErrorDescription is a free-form string that supplies more information about the error recorded in LastErrorCode and information on any corrective actions that can be taken.
HealthState	<p>Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown — The implementation cannot report on HealthState at this time. DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.• 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.• 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.• 15 = Minor failure — All functionality is available but some may be degraded.• 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.• 25 = Critical failure — The element is non-functional and recovery may not be possible.• 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.• .. = DMTF Reserved
OperationalStatus	<p>Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory. However, a few are not and are described here in more detail.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = OK• 3 = Degraded• 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of Stressed states are overload, overheated, and so on.• 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.• 6 = Error• 7 = Non-Recoverable Error• 8 = Starting• 9 = Stopping• 10 = Stopped - Implies a clean and orderly stop.• 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.

Property

Description

- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

PrimaryStatus

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error — Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved
-

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to **5 (Not Applicable)**, then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. **Unknown (0)** indicates the last requested state for the element is unknown.

i **NOTE:** The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState. There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Reboot refers to doing a Shut Down and then moving to an Enabled state. Reset indicates that the element is first Disabled and then Enabled. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

Property**Description**

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 (Not Applicable)**.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

VariableSpeed

Indication of whether the fan supports variable speeds.

DCIM_IndicatorLED

Table 25. IndicatorLED

Property	Description
Color	<p>Color This property indicates the current color of the LED. If the value of the ActivationState property is 4 (Off) this property indicates the color of the LED the last time it was lit, or has the value 2 (Not Applicable).</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Not Applicable• 3 = White• 4 = Red• 5 = Green• 6 = Blue• 7 = Orange• 8 = Yellow• 9 = Black• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
ControlMode	<p>ControlMode indicates the current control mode for the LED.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Automatic — Indicates the state of the LED is being controlled by the management infrastructure.• 3 = Manual — Indicates the state of the LED is being controlled by a management client.• 4 = Test — Indicates the LED is in a test mode.• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
ControlPattern	<p>An LED may exhibit a range of behavior from very simple (ex. solid on) to very complicated (ex. a series of blinks of alternating color and duration). ControlPattern specifies the vendor or standard behavior exhibited by the LED if it cannot be described using one of the standard behaviors listed for the ActivationState property.</p> <p>If ActivationState has the value 5 (ControlPattern), the ControlPattern property is not NULL.</p> <p>The value of ControlPattern is constructed using the following preferred algorithm:</p> <p><OrgID>::<pattern>< p=""><p>Where <OrgID> and <Pattern> are separated by two colons (::), and where <OrgID> includes a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the ControlPattern or that is a registered ID assigned to the business entity by a recognized global authority. If the definition of the value is specified by the DMTF, the value of <OrgID> is DMTF. <Pattern> is chosen by the business entity and is not reused to identify different underlying (real-world) behaviors. If the behavior specified for the LED adheres to a standard or proprietary specification, <Pattern> is a uniquely assigned value identifying the behavior. If the behavior for the LED is described</p></pattern><></p>

Property	Description
CreationClassName	<p>using a standard or proprietary grammar, <Pattern> is prefixed with a uniquely assigned identifier for the grammar.</p> <p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>
DefaultActivationState	<p>Indicates the default state of an LED. See ActivationState for a description of the values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Lit · 3 = Blinking · 4 = Off · 5 = Control Pattern · .. = DMTF Reserved · 32768.65535 = Vendor Reserved
DeviceID	<p>An address or other identifying information used to uniquely name the LogicalDevice.</p>
ElementName	<p>Specifies an identifier for the LED. The value of ElementName is constructed using the following preferred algorithm:</p> <p><OrgID>::<localid>< p=""> <p>Where <OrgID> and <LocalID> are separated by two colons (::), and where <OrgID> includes a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the ControlPattern or that is a registered ID assigned to the business entity by a recognized global authority. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements.</p> </localid><></p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · 5 = Not Applicable · 6 = Enabled but Offline · 7 = No Default · 9 = Quiesce · .. = DMTF Reserved · 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>It is an integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.

Property**Description**

- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

Property	Description
	A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.

DCIM_PowerSupply

Table 26. PowerSupply

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · 5 = Not Applicable · 6 = Enabled but Offline · 7 = No Default · 9 = Quiesce · .. = DMTF Reserved · 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Enabled — Indicates that the element is or could be executing commands, processes any queued commands, and queues new requests. · 3 = Disabled — Indicates that the element will not run commands and drops any new requests. · 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. · 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.

Property

Description

- 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState now.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is nonfunctional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested.

Possible values are:

- 0 = Unknown — Indicates that the last requested state for the element is unknown.
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Requests an immediate disabling of the element, such that it will not run or accept any commands or processing requests.
- 4 = Shut Down — Requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state.
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved

- 32768..65535 = Vendor Reserved

The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (**Not Applicable**), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is **Unknown (0)**. If the last requested or desired state is **unknown**, **RequestedState** should have the value **Unknown (0)**, but may have the value **No Change (5)**.

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TotalOutputPower

Represents the total output power of the PowerSupply in milli Watts. 0 denotes **unknown**.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

TypeOfRangeSwitching

Describes the kind of input voltage range switching that is implemented in this PowerSupply.

Possible values are:

- 1 = Other
- 2 = Unknown
- 3 = Manual
- 4 = Autoswitch
- 5 = Wide Range

Property	Description
	<ul style="list-style-type: none"> 6 = Not Applicable <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_Battery

Table 27. Battery

Property	Description
BatteryStatus	<p>Description of the charge status of the Battery.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 = Other 2 = Unknown 3 = Fully Charged 4 = Low 5 = Critical 6 = Charging 7 = Charging and High 8 = Charging and Low 9 = Charging and Critical 10 = Undefined 11 = Partially Charged 12 = Learning 13 = Overcharged <p>Values such as Fully Charged (value = 3) or Partially Charged (value = 11) can be specified. The value, 10, is not valid in the CIM Schema because in DMI it represents that no battery is installed. In this case, this object should not be instantiated.</p>
ChargingStatus	<p>This property defines status information about the AC line in the notebook.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 = Other 2 = Unknown 3 = Off- Line 4 = On-Line 5 = On Backup Power
Chemistry	<p>An enumeration that describes the chemistry of the Battery.</p> <ul style="list-style-type: none"> 1 = Other 2 = Unknown 3 = Lead Acid 4 = Nickel Cadmium 5 = Nickel Metal Hydride 6 = Lithium-ion 7 = Zinc air 8 = Lithium Polymer

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DesignCapacity	The design capacity of the battery in m Watt-hours. If this property is not supported, enter 0.
DesignVoltage	The design voltage of the battery in mVolts. If this attribute is not supported, enter 0.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · 5 = Not Applicable · 6 = Enabled but Offline · 7 = No Default · 9 = Quiesce · .. = DMTF Reserved · 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. · 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. · 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. · 5 = Not Applicable — Indicates the element does not support being enabled or disabled. · 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. · 7 = In Test — Indicates that the element is in a test state. · 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests · 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. · 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.

Property	Description
	<ul style="list-style-type: none"> 11..32767 = DMTF Reserved 32768..65535 = Vendor Reserved <p>For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p>
EstimatedChargeRemaining	An estimate of the percentage of full charge remaining.
EstimatedRunTime	An estimate in minutes of the time that battery charge depletion will occur under the present load conditions if the utility power is off, or is lost and remains off, or a Laptop is disconnected from a power source.
HealthState	<p>Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p>DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — The implementation cannot report on HealthState at this time. 5 = OK — The element is fully functional and is operating within normal operational parameters and without error. 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors. 15 = Minor failure — All functionality is available but some may be degraded. 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working. 25 = Critical failure — The element is non-functional and recovery may not be possible. 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost. .. = DMTF Reserved
IdentifyingDescriptions	An array of free-form strings providing explanations and details behind the entries in the OtherIdentifyingInfo array. Note that each entry of this array is related to the entry in OtherIdentifyingInfo that is located at the same index.
Name	The Name property defines the label by which the object is known. When subclassed, the Name property can be overridden to be a Key property.
OperationalStatus	<p>Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = OK 3 = Degraded 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of Stressed states are overload, overheated, and so on. 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future. 6 = Error 7 = Non-Recoverable Error 8 = Starting 9 = Stopping

Property

Description

- 10 = Stopped — Implies a clean and orderly stop
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed - Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

OtherIdentifyingInfo

OtherIdentifyingInfo captures data, in addition to DeviceID information, that could be used to identify a LogicalDevice. For example, you could use this property to hold the operating system's user-friendly name for the Device.

PrimaryStatus

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error — Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

RemainingCapacityMaxError

The maximum error (as a percentage) in the mWatt-hour data reported by RemainingCapacity property.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Property

Description

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SmartBatteryVersion

The Smart Battery Data Specification version number that is supported by this Battery. If the Battery does not support this function, the value should be left blank.

Status

A string indicating the current status of the object. Various operational and non-operational statuses are defined. This property is deprecated instead of OperationalStatus, which includes the same semantics in its enumeration. This change is made for three reasons:

- 1 Status is more correctly defined as an array. This definition overcomes the limitation of describing status using a single value, when it is really a multi-valued property (for example, an element may be OK AND Stopped).
- 2 A MaxLen of 10 is too restrictive and leads to unclear enumerated values.
- 3 The change to a uint16 data type was discussed when CIM V2.0 was defined. However, existing V1.0 implementations used the string property and did not want to modify their code. Therefore, Status was grandfathered into the Schema. Use of the deprecated qualifier allows the maintenance of the existing property, but also permits an improved definition using OperationalStatus.

Property	Description
	<p>Possible values are:</p> <ul style="list-style-type: none"> • OK • Error • Degraded • Unknown • Pred Fail • Starting • Stopping • Service • Stressed • NonRecover • No Contact • Lost Comm • Stopped
SystemCreationClassName	The CreationClassName of the scoping system.
SystemName	The System Name of the scoping system.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_Processor

Table 28. Processor

Property	Description
Caption	The Caption property is a short textual description (one- line string) of the object.
CPUStatus	<p>The CPUStatus property that indicates the current status of the Processor.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown

Property	Description
	<ul style="list-style-type: none"> 1 = CPU Enabled 2 = CPU Disabled by User 3 = CPU Disabled By BIOS (POST Error) 4 = CPU Is Idle 7 = Other <p>For example, the Processor may be disabled by the user (value = 2), or disabled due to a POST error (value = 3). Information in this property can be obtained from SMBIOS, the Type 4 structure, and the Status attribute.</p>
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
CurrentClockSpeed	The current speed (in MHz) of this Processor.
Description	Provides a textual description of the object.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.

Property

Description

- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

ExternalBusClockSpeed

The speed (in MHz) of the external bus interface (also known as the front side bus).

Family

The Processor family type.

Possible values are:

- 1 = Other
- 2 = Unknown
- 3 = 8086
- 4 = 80286
- 5 = 80386
- 6 = 80486
- 7 = 8087
- 8 = 80287
- 9 = 80387
- 10 = 80487
- 11 = Pentium(R) brand
- 12 = Pentium(R) Pro
- 13 = Pentium(R) II
- 14 = Pentium(R) processor with MMX(TM) technology
- 15 = Celeron(TM)
- 16 = Pentium(R) II Xeon(TM)
- 17 = Pentium(R) III
- 18 = M1 Family
- 19 = M2 Family
- 20 = Intel(R) Celeron(R) M processor
- 21 = Intel(R) Pentium(R) 4 HT processor
- 24 = K5 Family
- 25 = K6 Family
- 26 = K6-2
- 27 = K6-3
- 28 = AMD Athlon(TM) Processor Family
- 29 = AMD(R) Duron(TM) Processor
- 30 = AMD29000 Family
- 31 = K6-2+
- 32 = Power PC Family
- 33 = Power PC 601
- 34 = Power PC 603
- 35 = Power PC 603+

Property**Description**

- 36 = Power PC 604
- 37 = Power PC 620
- 38 = Power PC X704
- 39 = Power PC 750
- 40 = Intel(R) Core(TM) Duo processor
- 41 = Intel(R) Core(TM) Duo mobile processor
- 42 = Intel(R) Core(TM) Solo mobile processor
- 43 = Intel(R) Atom(TM) processor
- 48 = Alpha Family
- 49 = Alpha 21064
- 50 = Alpha 21066
- 51 = Alpha 21164
- 52 = Alpha 21164PC
- 53 = Alpha 21164a
- 54 = Alpha 21264
- 55 = Alpha 21364
- 56 = AMD Turion(TM) II Ultra Dual-Core Mobile M Processor Family
- 57 = AMD Turion(TM) II Dual-Core Mobile M Processor Family
- 58 = AMD Athlon(TM) II Dual-Core Mobile M Processor Family
- 59 = AMD Opteron(TM) 6100 Series Processor
- 60 = AMD Opteron(TM) 4100 Series Processor
- 64 = MIPS Family
- 65 = MIPS R4000
- 66 = MIPS R4200
- 67 = MIPS R4400
- 68 = MIPS R4600
- 69 = MIPS R10000
- 80 = SPARC Family
- 81 = SuperSPARC
- 82 = microSPARC II
- 83 = microSPARC IIep
- 84 = UltraSPARC
- 85 = UltraSPARC II
- 86 = UltraSPARC Ili
- 87 = UltraSPARC III
- 88 = UltraSPARC IIIi
- 96 = 68040
- 97 = 68xxx Family
- 98 = 68000
- 99 = 68010
- 100 = 68020
- 101 = 68030
- 112 = Hobbit Family
- 120 = Crusoe(TM) TM5000 Family
- 121 = Crusoe(TM) TM3000 Family
- 122 = Efficeon(TM) TM8000 Family
- 128 = Weitek
- 130 = Itanium(TM) Processor
- 131 = AMD Athlon(TM) 64 Processor Family
- 132 = AMD Opteron(TM) Processor Family

- 133 = AMD Sempron(TM) Processor Family
- 134 = AMD Turion(TM) 64 Mobile Technology
- 135 = Dual-Core AMD Opteron(TM) Processor Family
- 136 = AMD Athlon(TM) 64 X2 Dual-Core Processor Family
- 137 = AMD Turion(TM) 64 X2 Mobile Technology
- 138 = Quad-Core AMD Opteron(TM) Processor Family
- 139 = Third-Generation AMD Opteron(TM) Processor Family
- 140 = AMD Phenom(TM) FX Quad-Core Processor Family
- 141 = AMD Phenom(TM) X4 Quad-Core Processor Family
- 142 = AMD Phenom(TM) X2 Dual-Core Processor Family
- 143 = AMD Athlon(TM) X2 Dual-Core Processor Family
- 144 = PA-RISC Family
- 145 = PA-RISC 8500
- 146 = PA-RISC 8000
- 147 = PA-RISC 7300LC
- 148 = PA-RISC 7200
- 149 = PA-RISC 7100LC
- 150 = PA-RISC 7100
- 160 = V30 Family
- 161 = Quad-Core Intel(R) Xeon(R) processor 3200 Series
- 162 = Dual-Core Intel(R) Xeon(R) processor 3000 Series
- 163 = Quad-Core Intel(R) Xeon(R) processor 5300 Series
- 164 = Dual-Core Intel(R) Xeon(R) processor 5100 Series
- 165 = Dual-Core Intel(R) Xeon(R) processor 5000 Series
- 166 = Dual-Core Intel(R) Xeon(R) processor LV
- 167 = Dual-Core Intel(R) Xeon(R) processor ULV
- 168 = Dual-Core Intel(R) Xeon(R) processor 7100 Series
- 169 = Quad-Core Intel(R) Xeon(R) processor 5400 Series
- 170 = Quad-Core Intel(R) Xeon(R) processor
- 171 = Dual-Core Intel(R) Xeon(R) processor 5200 Series
- 172 = Dual-Core Intel(R) Xeon(R) processor 7200 Series
- 173 = Quad-Core Intel(R) Xeon(R) processor 7300 Series
- 174 = Quad-Core Intel(R) Xeon(R) processor 7400 Series
- 175 = Multi-Core Intel(R) Xeon(R) processor 7400 Series
- 176 = Pentium(R) III Xeon(TM)
- 177 = Pentium(R) III Processor with Intel(R) SpeedStep(TM) Technology
- 178 = Pentium(R) 4
- 179 = Intel(R) Xeon(TM)
- 180 = AS400 Family
- 181 = Intel(R) Xeon(TM) processor MP
- 182 = AMD Athlon(TM) XP Family
- 183 = AMD Athlon(TM) MP Family
- 184 = Intel(R) Itanium(R) 2
- 185 = Intel(R) Pentium(R) M processor
- 186 = Intel(R) Celeron(R) D processor
- 187 = Intel(R) Pentium(R) D processor
- 188 = Intel(R) Pentium(R) Processor Extreme Edition
- 189 = Intel(R) Core(TM) Solo Processor
- 190 = Intel(R) Core(TM)
- 191 = Intel(R) Core(TM)2 Duo Processor

Property**Description**

- 192 = Intel(R) Core(TM)2 Solo processor
- 193 = Intel(R) Core(TM)2 Extreme processor
- 194 = Intel(R) Core(TM)2 Quad processor
- 195 = Intel(R) Core(TM)2 Extreme mobile processor
- 196 = Intel(R) Core(TM)2 Duo mobile processor
- 197 = Intel(R) Core(TM)2 Solo mobile processor
- 198 = Intel(R) Core(TM) i7 processor
- 199 = Dual-Core Intel(R) Celeron(R) Processor
- 200 = S/390 and zSeries Family
- 201 = ESA/390 G4
- 202 = ESA/390 G5
- 203 = ESA/390 G6
- 204 = z/Architectur base
- 205 = Intel(R) Core(TM) i5 processor
- 206 = Intel(R) Core(TM) i3 processor
- 210 = VIA C7(TM)-M Processor Family
- 211 = VIA C7(TM)-D Processor Family
- 212 = VIA C7(TM) Processor Family
- 213 = VIA Eden(TM) Processor Family
- 214 = Multi-Core Intel(R) Xeon(R) processor
- 215 = Dual-Core Intel(R) Xeon(R) processor 3xxx Series
- 216 = Quad-Core Intel(R) Xeon(R) processor 3xxx Series
- 217 = VIA Nano(TM) Processor Family
- 218 = Dual-Core Intel(R) Xeon(R) processor 5xxx Series
- 219 = Quad-Core Intel(R) Xeon(R) processor 5xxx Series
- 221 = Dual-Core Intel(R) Xeon(R) processor 7xxx Series
- 222 = Quad-Core Intel(R) Xeon(R) processor 7xxx Series
- 223 = Multi-Core Intel(R) Xeon(R) processor 7xxx Series
- 224 = Multi-Core Intel(R) Xeon(R) processor 3400 Series
- 230 = Embedded AMD Opteron(TM) Quad-Core Processor Family
- 231 = AMD Phenom(TM) Triple-Core Processor Family
- 232 = AMD Turion(TM) Ultra Dual-Core Mobile Processor Family
- 233 = AMD Turion(TM) Dual-Core Mobile Processor Family
- 234 = AMD Athlon(TM) Dual-Core Processor Family
- 235 = AMD Sempron(TM) SI Processor Family
- 236 = AMD Phenom(TM) II Processor Family
- 237 = AMD Athlon(TM) II Processor Family
- 238 = Six-Core AMD Opteron(TM) Processor Family
- 239 = AMD Sempron(TM) M Processor Family
- 250 = i860
- 251 = i960
- 254 = Reserved (SMBIOS Extension)
- 255 = Reserved (Un-initialized Flash Content - Lo)
- 260 = SH-3
- 261 = SH-4
- 280 = ARM
- 281 = StrongARM
- 300 = 6x86
- 301 = MediaGX
- 302 = MII

Property

Description

- 320 = WinChip
- 350 = DSP
- 500 = Video Processor
- 65534 = Reserved (For Future Special Purpose Assignment)
- 65535 = Reserved (Un-initialized Flash Content - Hi)

For example, values include **Pentium(R) processor with MMX(TM) technology** (value = **14**) and **68040 (value = 96)**.

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

MaxClockSpeed

The maximum speed (in MHz) of this Processor.

NumberOfEnabledCores

Number of processor cores enabled for processor.

OperationalStatus

Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory. However, a few are not and are described here in more detail.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop.
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.

Property

Description

- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

PrimaryStatus

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error - Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset

- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

i **NOTE:** When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. Unknown (0) indicates the last requested state for the element is unknown.

i **NOTE:** The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState. There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Reboot refers to doing a Shut Down and then moving to an Enabled state. Reset indicates that the element is first Disabled and then Enabled.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

Stepping

Stepping is a free-form string that indicates the revision level of the Processor within the Processor.Family.

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

Property	Description
UniqueID	A global unique identifier for the processor. This identifier can be unique only within a processor family.
UpgradeMethod	<p data-bbox="542 210 1503 273">CPU socket information that includes data on how the processor can be upgraded (if upgrades are supported). This property is an integer enumeration.</p> <p data-bbox="542 294 1503 325">Possible values are:</p> <ul data-bbox="542 346 1503 1873" style="list-style-type: none"> <li data-bbox="542 346 1503 378">· 1 = Other <li data-bbox="542 378 1503 409">· 2 = Unknown <li data-bbox="542 409 1503 441">· 3 = Daughter Board <li data-bbox="542 441 1503 472">· 4 = ZIF Socket <li data-bbox="542 472 1503 504">· 5 = Replacement/Piggy Back <li data-bbox="542 504 1503 535">· 6 = None <li data-bbox="542 535 1503 567">· 7 = LIF Socket <li data-bbox="542 567 1503 598">· 8 = Slot 1 <li data-bbox="542 598 1503 630">· 9 = Slot 2 <li data-bbox="542 630 1503 661">· 10 = 370 Pin Socket <li data-bbox="542 661 1503 693">· 11 = Slot A <li data-bbox="542 693 1503 724">· 12 = Slot M <li data-bbox="542 724 1503 756">· 13 = Socket 423 <li data-bbox="542 756 1503 787">· 14 = Socket A (Socket 462) <li data-bbox="542 787 1503 819">· 15 = Socket 478 <li data-bbox="542 819 1503 850">· 16 = Socket 754 <li data-bbox="542 850 1503 882">· 17 = Socket 940 <li data-bbox="542 882 1503 913">· 18 = Socket 939 <li data-bbox="542 913 1503 945">· 19 = Socket mPGA604 <li data-bbox="542 945 1503 976">· 20 = Socket LGA771 <li data-bbox="542 976 1503 1008">· 21 = Socket LGA775 <li data-bbox="542 1008 1503 1039">· 22 = Socket S1 <li data-bbox="542 1039 1503 1071">· 23 = Socket AM2 <li data-bbox="542 1071 1503 1102">· 24 = Socket F (1207) <li data-bbox="542 1102 1503 1134">· 25 = Socket LGA1366 <li data-bbox="542 1134 1503 1165">· 26 = Socket G34 <li data-bbox="542 1165 1503 1197">· 27 = Socket AM3 <li data-bbox="542 1197 1503 1228">· 28 = Socket C32 <li data-bbox="542 1228 1503 1260">· 29 = Socket LGA1156 <li data-bbox="542 1260 1503 1291">· 30 = Socket LGA1567 <li data-bbox="542 1291 1503 1323">· 31 = Socket PGA988A <li data-bbox="542 1323 1503 1354">· 32 = Socket BGA1288 <li data-bbox="542 1354 1503 1386">· 33 = rPGA988B <li data-bbox="542 1386 1503 1417">· 34 = BGA1023 <li data-bbox="542 1417 1503 1449">· 35 = BGA1224 <li data-bbox="542 1449 1503 1480">· 36 = LGA1155 <li data-bbox="542 1480 1503 1512">· 37 = LGA1356 <li data-bbox="542 1512 1503 1543">· 38 = LGA2011 <li data-bbox="542 1543 1503 1575">· 39 = Socket FS1 <li data-bbox="542 1575 1503 1606">· 40 = Socket FS2 <li data-bbox="542 1606 1503 1638">· 41 = Socket FM1 <li data-bbox="542 1638 1503 1669">· 42 = Socket FM2 <li data-bbox="542 1669 1503 1701">· 43 = Socket LGA2011-3 <li data-bbox="542 1701 1503 1732">· 44 = Socket LGA1356-3

Property	Description
	<ul style="list-style-type: none"> 45 = Socket LGA1150 46 = Socket BGA1168

DCIM_NumericSensor

Table 29. NumericSensor

Property	Description	Supported Operating System(s)
BaseUnits	<p>The base unit of the values returned by this Sensor. All the values returned by this Sensor are represented in the units obtained by (BaseUnits * 10 raised to the power of the UnitModifier). For example, if BaseUnits is Volts and the UnitModifier is -6, then the units of the values returned are MicroVolts. However, if the RateUnits property is set to a value other than None, then the units are further qualified as rate units. In the above example, if RateUnits is set to Per Second, then the values returned by the Sensor are in MicroVolts/Second. The units apply to all numeric properties of the Sensor, unless explicitly overridden by the Units qualifier.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Degrees C 3 = Degrees F 4 = Degrees K 5 = Volts 6 = Amps 7 = Watts 8 = Joules 9 = Coulombs 10 = VA 11 = Nits 12 = Lumens 13 = Lux 14 = Candelas 15 = kPa 16 = PSI 17 = Newtons 18 = CFM 19 = RPM 20 = Hertz 21 = Seconds 22 = Minutes 23 = Hours 24 = Days 25 = Weeks 26 = Mils 27 = Inches 28 = Feet 29 = Cubic Inches 	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> • 30 = Cubic Feet • 31 = Meters • 32 = Cubic Centimeters • 33 = Cubic Meters • 34 = Liters • 35 = Fluid Ounces • 36 = Radians • 37 = Steradians • 38 = Revolutions • 39 = Cycles • 40 = Gravities • 41 = Ounces • 42 = Pounds • 43 = Foot-Pounds • 44 = Ounce-Inches • 45 = Gauss • 46 = Gilberts • 47 = Henries • 48 = Farads • 49 = Ohms • 50 = Siemens • 51 = Moles • 52 = Becquerels • 53 = PPM (parts/million) • 54 = Decibels • 55 = DbA • 56 = DbC • 57 = Grays • 58 = Sieverts • 59 = Color Temperature Degrees K • 60 = Bits • 61 = Bytes • 62 = Words (data) • 63 = DoubleWords • 64 = QuadWords • 65 = Percentage • 66 = Pascals 	
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.	Microsoft Windows, Linux
CurrentReading	The current value indicated by the Sensor.	Microsoft Windows, Linux
CurrentState	The current state indicated by the Sensor. This is always one of the PossibleStates .	Microsoft Windows, Linux
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties. We have introduced new elements for Temperature sensor, Fan Speed Sensor, Current Supply and Voltage Numeric Sensor.</p>	Microsoft Windows, Linux
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>	Microsoft Windows, Linux
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768..65535 = Vendor Reserved <p>For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p>	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
HealthState	<p>Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — The implementation cannot report on HealthState at this time. • 5 = OK — The element is fully functional and is operating within normal operational parameters and without error. • 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors. • 15 = Minor failure — All functionality is available but some may be degraded. • 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working. • 25 = Critical failure — The element is non-functional and recovery may not be possible. • 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost. • .. = DMTF Reserved <p>DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.</p>	Microsoft Windows, Linux
LowerThresholdCritical	<p>The Sensor's threshold values specify the ranges (min and max values) for determining whether the Sensor is operating under Normal, NonCritical or Critical conditions. The CurrentState is Critical once the CurrentReading is below LowerThresholdCritical.</p>	Microsoft Windows, Linux
LowerThresholdNonCritical	<p>The Sensor's threshold values specify the ranges (min and max values) for determining whether the Sensor is operating under Normal, NonCritical, Critical conditions. If CurrentReading is between LowerThresholdNonCritical and Upper ThresholdNonCritical, then the Sensor is reporting a normal value. If CurrentReading is between LowerThresholdNonCritical and LowerThresholdCritical, then the CurrentState is NonCritical.</p> <p>Example for Set command: <code>wmic /namespace:\\root\dcim\sysman path dcim_numericsensor Where ElementName like '%Temperature Sensor:%' set LowerThresholdNonCritical = 30</code>. This sets the all temperature probes (lower threshold non critical) in the system to 30 degree Celsius.</p>	Microsoft Windows, Linux
NormalMax	<p>NormalMax provides guidance for the user as to the normal maximum range for the NumericSensor.</p>	Linux
NormalMin	<p>NormalMin provides guidance for the user as to the normal minimum range for the NumericSensor.</p>	Linux
OperationalStatus	<p>Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = OK • 3 = Degraded • 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of Stressed states are overload, overheated, and so on. • 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future. • 6 = Error 	Microsoft Windows, Linux

- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant - Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

PossibleStates

Enumerates the string outputs of the Sensor.

Microsoft
Windows, Linux

Example 1 - A **Switch** Sensor may output the states **On**, or **Off**. Another implementation of the Switch may output the states **Open**, and **Close**.

Example 2 - Is a NumericSensor supporting thresholds. This Sensor can report the states like **Normal**, **Upper Non-Critical**, **Lower Non-Critical**, and so on. A NumericSensor that does not publish readings and thresholds, but stores this data internally, can still report its states.

RateUnits

Specifies if the units returned by this Sensor are rate units. All the values returned by this Sensor are represented in the units obtained by (BaseUnits * 10 raised to the power of the UnitModifier). This is true unless this property (RateUnits) has a value different than **None**. For example, if BaseUnits is Volts and the UnitModifier is -6, then the units of the values returned are MicroVolts. But, if the RateUnits property is set to a value other than **None**, then the units are further qualified as rate units. In the above example, if RateUnits is set to **Per Second**, then the values returned by the Sensor are in MicroVolts/Second. The units apply to all numeric properties of the Sensor, unless explicitly overridden by the Units qualifier. Any implementation of CurrentReading should be qualified with either a Counter or a Gauge qualifier, depending on the characteristics of the sensor being modeled.

Microsoft
Windows, Linux

Possible values are:

- 0 = None

Property	Description	Supported Operating System(s)
RequestedState	<ul style="list-style-type: none"> • 1 = Per MicroSecond • 2 = Per MilliSecond • 3 = Per Second • 4 = Per Minute • 5 = Per Hour • 6 = Per Day • 7 = Per Week • 8 = Per Month • 9 = Per Year <p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.</p> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState.</p> <p>There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).</p> <p>Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.</p> <p>This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.</p> <p>If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates the last requested state for the element is unknown. • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change • 6 = Offline • 7 = Test • 8 = Deferred • 9 = Quiesce • 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. • 11 = Reset — Indicates that the element is first Disabled and then Enabled. • 12 = Not Applicable • .. = DMTF Reserved • 32768..65535 = Vendor Reserved 	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
SensorType	<p>The Type of the Sensor, e.g. Voltage or Temperature Sensor. If the type is set to Other, then the OtherSensorType Description can be used to further identify the type, or if the Sensor has numeric readings, then the type of the Sensor can be implicitly determined by the Units. A description of the different Sensor types is as follows: A Temperature Sensor measures the environmental temperature. Voltage and Current Sensors measure electrical voltage and current readings. A Tachometer measures speed/revolutions of a Device. For example, a Fan Device can have an associated Tachometer which measures its speed. A Counter is a general purpose Sensor that measures some numerical property of a Device. A Counter value can be cleared, but it never decreases. A Switch Sensor has states like Open/Close, On/Off, or Up/Down. A Lock has states of Locked/Unlocked. Humidity, Smoke Detection and Air Flow Sensors measure the equivalent environmental characteristics. A Presence Sensor detects the presence of a PhysicalElement. A Power Consumption Sensor measures the instantaneous power consumed by a managed element. A Power Production Sensor measures the instantaneous power produced by a managed element such as a power supply or a voltage regulator. A pressure sensor is used to report pressure. Intrusion sensor reports an intrusion of an enclosure regardless whether it was authorized or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Temperature • 3 = Voltage • 4 = Current • 5 = Tachometer • 6 = Counter • 7 = Switch • 8 = Lock • 9 = Humidity • 10 = Smoke Detection • 11 = Presence • 12 = Air Flow • 13 = Power Consumption • 14 = Power Production • 15 = Pressure • 16 = Intrusion • .. = DMTF Reserved • 32768..65535 = Vendor Reserved 	Microsoft Windows, Linux
SystemCreationClassName	The CreationClassName of the scoping system.	Microsoft Windows, Linux
SystemName	The System Name of the scoping system.	Microsoft Windows, Linux
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test 	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>	
UnitModifier	<p>The unit multiplier for the values returned by this Sensor. All the values returned by this Sensor are represented in the units obtained by (BaseUnits * 10 raised to the power of the UnitModifier).</p> <p>For example, if BaseUnits is Volts and the Unit Modifier is -6, then the units of the values returned are MicroVolts. However, if the RateUnits property is set to a value other than None, then the units are further qualified as rate units.</p> <p>In the above example, if RateUnits is set to Per Second, then the values returned by the Sensor are in MicroVolts/Second. The units apply to all numeric properties of the Sensor, unless explicitly overridden by the Units qualifier.</p>	Microsoft Windows, Linux
UpperThresholdCritical	<p>The Sensor's threshold values specify the ranges (min and max values) for determining whether the Sensor is operating under Normal, NonCritical, Critical conditions. If the CurrentReading is above UpperThresholdCritical, then the Current State is critical.</p>	Microsoft Windows, Linux
UpperThresholdNonCritical	<p>The Sensor's threshold values specify the ranges (min and max values) for determining whether the Sensor is operating under Normal, NonCritical or Critical conditions. If the CurrentReading is between LowerThresholdNonCritical and UpperThresholdNonCritical, then the Sensor is reporting a normal value. If the CurrentReading is between UpperThreshold NonCritical and UpperThresholdCritical, then the CurrentState is NonCritical.</p> <p>Example for Set command: wmic /namespace:\\root\dcim\sysman path dcim_numericsensor Where ElementName like '%Temperature Sensor:%' set UpperThresholdNonCritical = 70</p>	Microsoft Windows, Linux
ValueFormulation	<p>Indicates the method used by the sensor to produce its reading.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 2 = Measured - Indicates the value is measured directly by the sensor. 3 = Derived - Indicates the value is derived from other measured values that are not reported discretely by this sensor. .. = DMTF Reserved 32768..65535 = Vendor Reserved 	Microsoft Windows, Linux
SupportedThresholds	<p>SupportedThresholds property is an array that contains the list of the implemented thresholds: LowerThresholdNonCritical, UpperThresholdNonCritical, LowerThresholdCritical, UpperThresholdCritical. When the implementation does not support any of these threshold properties, the CIM_NumericSensor.SupportedThresholds property shall be an empty array.</p>	Microsoft Windows, Linux
SettableThresholds	<p>SettableThresholds property is an array that contains the list of the settable implemented thresholds: LowerThresholdNonCritical, UpperThresholdNonCritical. The CIM_NumericSensor.SettableThresholds array shall contain the subset of values in the CIM_NumericSensor.SupportedThresholds array. When the implementation does not</p>	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
	support any of the settable threshold properties, the CIM_NumericSensor.SettableThresholds property shall be an empty array.	
Caption	A short textual description of an object.	Microsoft Windows, Linux
Description	A short textual description of an object.	Microsoft Windows, Linux

DCIM_Sensor

Table 30. Sensor

Property	Description
Caption	The Caption property is a short textual description (one- line string) of the object.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
CurrentState	The current state indicated by the Sensor. This is always one of the PossibleStates .
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information. <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · 5 = Not Applicable · 6 = Enabled but Offline · 7 = No Default · 9 = Quiesce · .. = DMTF Reserved · 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown

Property

Description

- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

OperationalStatus

Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory. However, a few are not and are described here in more detail.

Stressed, Predictive Failure, In Service, No Contact, Lost Communication, Stopped and **Aborted** are similar, although the former , while the latter **Dormant, Supporting Entity in Error, Completed, Power Mode, OperationalStatus** replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

Property

Description

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop.
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

PossibleStates

Enumerates the string outputs of the Sensor. For example, a **Switch** Sensor may output the states **On**, or **Off**. Another implementation of the Switch may output the states **Open**, and **Close**. Another example is a NumericSensor supporting thresholds. This Sensor can report the states like **Normal**, **Upper Fatal**, **Lower Non-Critical**, and so on. A NumericSensor that does not publish readings and thresholds, but stores this data internally, can still report its states.

PrimaryStatus

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error — Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

Property

Description

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (**Not Applicable**), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration. **Unknown (0)** indicates the last requested state for the element is unknown.

i **NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). Offline (6) indicates that the element has been requested to transition to the Enabled but Offline EnabledState. There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Reboot refers to doing a Shut Down and then moving to an Enabled state. Reset indicates that the element is first Disabled and then Enabled.**

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

SensorType

The Type of the Sensor, e.g. Voltage or Temperature Sensor. If the type is set to **Other**, then the OtherSensorType Description can be used to further identify the type, or if the Sensor has numeric readings, then the type of the Sensor can be implicitly determined by the Units. A description of the different Sensor types is as follows: A Temperature Sensor measures the environmental temperature. Voltage and Current Sensors measure electrical voltage and current readings. A Tachometer measures speed/revolutions of a Device. For example, a Fan Device can have an associated Tachometer which measures its speed. A Counter is a general purpose Sensor that measures some numerical property of a Device. A Counter value can be cleared, but it never decreases. A Switch Sensor has states like Open/Close, On/Off, or Up/Down. A Lock has states of Locked/Unlocked. Humidity, Smoke Detection and Air Flow Sensors measure the equivalent environmental characteristics. A Presence Sensor detects the presence of a PhysicalElement. A Power Consumption Sensor measures the instantaneous power consumed by a managed element. A Power Production Sensor

Property**Description**

measures the instantaneous power produced by a managed element such as a power supply or a voltage regulator. A pressure sensor is used to report pressure. Intrusion sensor reports an intrusion of an enclosure regardless whether it was authorized or not.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Temperature
- 3 = Voltage
- 4 = Current
- 5 = Tachometer
- 6 = Counter
- 7 = Switch
- 8 = Lock
- 9 = Humidity
- 10 = Smoke Detection
- 11 = Presence
- 12 = Air Flow
- 13 = Power Consumption
- 14 = Power Production
- 15 = Pressure
- 16 = Intrusion
- .. = DMTF Reserved
- 32768.65535 = Vendor Reserved

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_DeviceBay

Table 31. DeviceBay

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
Description	Defines the physical location of the device bay. Provides a textual description of the object.
DeviceBayLocation	Defines the type of Device Bay. Possible values are: <ul style="list-style-type: none">• 0 = Other• 1 = Unknown• 2 = Proprietary Bay• 3 = Standard Desktop Device Bay• 4 = Standard Mobile Device Bay• 5 = Standard Ultra-Mobile Device Bay• 6..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
DeviceBayType	Defines the type of Device Bay. Possible values are: <ul style="list-style-type: none">• 0 = Other• 1 = Unknown• 2 = Proprietary Bay• 3 = Standard Desktop Device Bay• 4 = Standard Mobile Device Bay• 5 = Standard Ultra-Mobile Device Bay• 6..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
DeviceCurrentlyAttached	An address or other identifying information used to uniquely name the LogicalDevice.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
DeviceSupported	Defines a string containing a list of devices supported in this bay separated by commas.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information. NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.
EnabledDefault	An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Property

Description

	<p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
IdentifyingDescriptions	<p>An array of free-form strings providing explanations and details behind the entries in the OtherIdentifyingInfo array. Note that each entry of this array is related to the entry in OtherIdentifyingInfo that is located at the same index.</p>
LogicalModuleType	<p>Identifies the type of LogicalModule this instance represents.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown — Indicates that the LogicalModuleType is unknown.• 1 = Other — Indicates that the value is not one of the enumerated values. OtherLogicalModuleTypeDescription should contain additional information.• 2 = Device Tray — Indicates that the device is a device or media tray, for example in a modular system.• 3 = Line Card — Indicates that the module is a line card in a switch.• 4 = Blade — Indicates the module is a blade inserted into a switch.• 5..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved

Property	Description
ModuleNumber	Logical modules are often named by the physical or logical slot that they occupy within the containing device. ModuleNumber is the number assigned to the module by its parent.
OtherIdentifyingInfo	OtherIdentifyingInfo captures data, in addition to DeviceID information, that could be used to identify a LogicalDevice. For example, you could use this property to hold the operating system's user-friendly name for the Device.
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown — Indicates the last requested state for the element is unknown. • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change • 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. • 7 = Test • 8 = Deferred • 9 = Quiesce • 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. • 11 = Reset — Indicates that the element is first Disabled and then Enabled • 12 = Not Applicable • .. = DMTF Reserved • 32768.65535 = Vendor Reserved <p>NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.</p> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).</p> <p>There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11).</p> <p>Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.</p> <p>This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.</p> <p>If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p>
SystemCreationClassName	The CreationClassName of the scoping system.
SystemName	The System Name of the scoping system.
TransitioningToState	Indicates the target state to which the instance is transitioning.

Property	Description
	<p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_VideoHead

Table 32. VideoHead

Property	Description
Caption	The Caption property is a short textual description (one- line string) of the object.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
CurrentBitsPerPixel	The number of bits used to display each pixel.
CurrentHorizontalResolution	Current number of horizontal pixels.
CurrentNumberOfColumns	If in character mode, number of columns for this DisplayController. Otherwise, enter 0.
CurrentNumberOfRows	If in character mode, number of rows for this Video Controller. Otherwise, enter 0.
CurrentScanMode	<p>Current scan mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Not Supported • 3 = Non-Interlaced Operation • 4 = Interlaced Operation
CurrentVerticalResolution	Current number of vertical pixels.
Description	Provides a textual description of the object.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.

Property	Description
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not run commands and drops any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates that the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768..65535 = Vendor Reserved <p>For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p>
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.</p>

Property

Description

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer

Property	Description
	<ul style="list-style-type: none"> 9 = Quiesce 10 = Reboot 11 = Reset 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_Button

Table 33. Button

Property	Description
ButtonPurpose	<p>The ButtonPurpose property identifies or defines the use of the button represented by the instance. If the type is set to Other, then the OtherButtonPurpose property can be used to further identify the purpose. Descriptions of the different Button purposes are as follows: A Power Button changes the power state of a device. A reset button is used to reset the state of a device. Undock is used to undock or disconnect a device or entire system from a separate device or system. An Open or Close button is used on a device that has an object that usually moves such as a drawer, door, or tray.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Power 3 = Reset 4 = Undock 5 = Open/Close 6..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
ButtonType	<p>The ButtonType property identifies or defines the type the button represented by the instance.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Momentary 3 = Toggle 4..32767 = DMTF Reserved 32768..65535 = Vendor Reserved <p>If the type is set to Other, then the OtherButtonType property can be used to further identify the type. A momentary button is one that depressed for a moment to cause the desired affect the target device or circuit A toggle type button is one that will remain in a switched or depressed position until it is depressed or switched again.</p>
CreationClassName	<p>Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.</p>

Property	Description
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · 5 = Not Applicable · 6 = Enabled but Offline · 7 = No Default · 9 = Quiesce · .. = DMTF Reserved · 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. · 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. · 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. · 5 = Not Applicable — Indicates the element does not support being enabled or disabled. · 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. · 7 = In Test — Indicates that the element is in a test state. · 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. · 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. · 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. · 11..32767 = DMTF Reserved · 32768..65535 = Vendor Reserved <p>For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p>
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown — Indicates the last requested state for the element is unknown. · 2 = Enabled · 3 = Disabled · 4 = Shut Down · 5 = No Change

Property

Description

- 6 = Offline - Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot - Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

i **NOTE:** When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

i **NOTE:** The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

Property	Description
	A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.

DCIM_LCDPanel

Table 34. LCDPanel

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
DeviceID	An address or other identifying information used to uniquely name the LogicalDevice.
DisplayDataCategory	Identifies the category of data to be displayed on the LCD Panel. Possible values are: <ul style="list-style-type: none"> • 2 = None • 3 = User Specified • 4 = Default • 5 = IPv4 Address • 6 = IDRAC MAC Address • 7 = Service Tag • 8 = System Name • 9 = IPv6 Address • 10 = Ambient • 11 = System Power
DisplayModeUserString	Contains a user configurable string to be displayed on the LCD panel if DisplayDataCategory has the value 3 .
EnabledDefault	An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. Possible values are: <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. Possible values are: <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other

Property

Description

- 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

LocalConfigurationEnabled

Indicates if the LCD panel may be used to modify the system configuration. A value of **true** indicates system configuration via the LCD panel is enabled. A value of **false** indicates system configuration via the LCD panel is disabled.

SystemCreationClassName

The CreationClassName of the scoping system.

SystemName

The System Name of the scoping system.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_NetworkPortConfigurationService

Table 35. NetworkPortConfigurationService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not run commands and drops any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.

Property

Description

- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Name

The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Possible values are:

- 0 = Unknown — Indicates that the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

Note that when EnabledState is set to **5 (Not Applicable)**, then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 (Not Applicable)**.

SystemCreationClassName

The CreationClassName of the scoping System.

Property	Description
SystemName	The Name of the scoping System.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_TimeService

Table 36. TimeService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties. EnabledDefault An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768..65535 = Vendor Reserved

Property

Description

	By default, the element is Enabled (value = 2) .
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
Name	The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown — Indicates the last requested state for the element is unknown.• 2 = Enabled• 3 = Disabled• 4 = Shut Down• 5 = No Change• 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.• 7 = Test• 8 = Deferred• 9 = Quiesce• 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state.• 11 = Reset — Indicates that the element is first Disabled and then Enabled.• 12 = Not Applicable• .. = DMTF Reserved• 32768..65535 = Vendor Reserved <p>NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.</p>

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5). There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_AccountManagementService

Table 37. AccountManagementService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.

EnabledDefault

An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.

Possible values are:

- 2 = Enabled
- 3 = Disabled
- 5 = Not Applicable
- 6 = Enabled but Offline
- 7 = No Default
- 9 = Quiesce
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

By default, the element is **Enabled (value = 2)**.

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be executing commands, processes any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not run commands and drops any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

Name

The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Property

Description

Possible values are:

- 0 = Unknown — Indicates that the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not run or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot

Property	Description
	<ul style="list-style-type: none"> 11 = Reset 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_RoleBasedAuthorizationService

Table 38. RoleBasedAuthorizationService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>i NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
Name	The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates the last requested state for the element is unknown. 2 = Enabled 3 = Disabled

Property

Description

- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

i **NOTE:** When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

i **NOTE:** The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset

Property	Description
	<ul style="list-style-type: none"> 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_PowerManagementService

Table 39. PowerManagementService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 5 = Not Applicable 6 = Enabled but Offline 7 = No Default 9 = Quiesce .. = DMTF Reserved 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Enabled — Indicates that the element is or could be executing commands, processes any queued commands, and queues new requests. 3 = Disabled — Indicates that the element will not run commands and drops any new requests. 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. 5 = Not Applicable — Indicates that the element does not support being enabled or disabled.

Property	Description
	<ul style="list-style-type: none"> • 6 = Enabled but Offline — Indicates that the element may be completing commands, and drops any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but queues any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768..65535 = Vendor Reserved
Name	The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.
OtherEnabledState	A string that describes the enabled or disabled state of the element when the EnabledState property is set to 1 (Other) . This property must be set to null when EnabledState is any value other than 1.
PrimaryOwnerContact	A string that provides information on how the primary owner of the Service can be reached (for example, phone number, e-mail address and so on).
PrimaryOwnerName	The name of the primary owner for the service, if one is defined. The primary owner is the initial support contact for the Service.
PrimaryStatus	Provides a high-level status value, intended to align with Red-Yellow-Green type representation of status. It should be used with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents. Possible values are: <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the implementation is in general capable of returning this property, but is unable to do so now. • 1 = OK — Indicates the ManagedElement is functioning normally. • 2 = Degraded — Indicates the ManagedElement is functioning below normal. • 3 = Error — Indicates the ManagedElement is in an Error condition. • .. = DMTF Reserved • 0x8000.. = Vendor Reserved
RequestedState	An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Possible values are: <ul style="list-style-type: none"> • 0 = Unknown — Indicates that the last requested state for the element is unknown. • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change • 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. • 7 = Test • 8 = Deferred • 9 = Quiesce • 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. • 11 = Reset — Indicates that the element is first Disabled and then Enabled.

Property

Description

- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

i **NOTE:** When EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

i **NOTE:** The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not run or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_BootService

Table 40. BootService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. By default, the element is Enabled (value = 2).</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test— Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting - Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved

Property	Description
Name	<ul style="list-style-type: none"> 32768..65535 = Vendor Reserved <p>The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.</p>
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates the last requested state for the element is unknown. 2 = Enabled 3 = Disabled 4 = Shut Down 5 = No Change 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. 7 = Test 8 = Deferred 9 = Quiesce 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. 11 = Reset — Indicates that the element is first Disabled and then Enabled. 12 = Not Applicable .. = DMTF Reserved 32768..65535 = Vendor Reserved <p>NOTE: When EnabledState is set to 5 (Not Applicable) , then this property has no meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration.</p> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).</p>
SystemCreationClassName	<p>There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.</p> <p>This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.</p> <p>If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p> <p>The CreationClassName of the scoping System.</p>
SystemName	<p>The Name of the scoping System.</p>
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown

Property	Description
	<ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_IPConfigurationService

Table 41. IPConfigurationService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. By default, the element is Enabled (value = 2).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768.65535 = Vendor Reserved
EnabledState	An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.

Property**Description**

	<p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
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Name

The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

DCIM_PowerUtilizationManagementService

Table 42. PowerUtilizationManagementService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. By default, the element is Enabled (value = 2).</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting• 11..32767 = DMTF Reserved• 32768..65535 = Vendor Reserved
Name	The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.
PendingPowerUtilizationAlgorithm	This property describes the pending requested algorithm to be employed by the service for power utilization.

Property

Description

Possible values are:

- 0 = Unknown
- 2 = None — Indicates that currently the service is not employing any power utilization algorithm. If the property value is 2 (**None**), then the PowerUtilizationMode is equal to 2 (**None**).
- 3 = Custom Settings Based — Indicates that the service is employing power utilization algorithm based on a specific settings. This settings may be represented by the DCIM_PowerUtilizationSettingData instance associated
- 4 = Maximum Performance — Indicates that the service is employing a power utilization that yields the maximum performance for the affected managed elements. If the property value is 4 (**Maximum Performance**), then the PowerUtilizationMode is equal to 4 (**Static**).
- 5 = Minimum Performance — Indicates that the service is employing a power utilization that yields the minimum power consumption for the affected managed elements. If the property value is 5 (**Minimum Performance**), then the PowerUtilizationMode is equal to 4 (**Static**).
- 6 = OS Specific — Indicates that the service is employing a power utilization defined by the operating system. If the property value is 6 (**OS Specific**), then the PowerUtilizationMode is equal to 3 (**Dynamic**).
- 7 = Active Power Utilization — Indicates that the service is employing a specific algorithm to yield the best power consumption and performance for the affected managed elements. If the property value is 7 (**Active Power Utilization**), then the PowerUtilizationMode is equal to 3 (**Dynamic**).

PowerUtilizationAlgorithm

Describes the algorithm employed by the service for power utilization. Depending on the performance and power needs of the managed element, the selection could be made for the appropriate algorithm to be deployed for the power utilization.

Possible values are:

- 0 = Unknown(**Dynamic**).
- 2 = None — Indicates that currently the service is not employing any power utilization algorithm. If the property value is 2 (**None**), then the PowerUtilizationMode is equal to 2 (**None**).
- 3 = Custom Settings Based — Indicates that the service is employing power utilization algorithm based on a specific settings. This settings may be represented by the DCIM_PowerUtilizationSettingData instance associated
- 4 = Maximum Performance — Indicates that the service is employing a power utilization that yields the maximum performance for the affected managed elements. If the property value is 4 (**Maximum Performance**), then the PowerUtilizationMode is equal to 4 (**Static**).
- 5 = Minimum Performance — Indicates that the service is employing a power utilization that yields the minimum power consumption for the affected managed elements. If the property value is 5 (**Minimum Performance**), then the PowerUtilizationMode is equal to 4 (**Static**).
- 6 = OS Specific — Indicates that the service is employing a power utilization defined by the operating system. If the property value is 6 (**OS Specific**), then the PowerUtilizationMode is equal to 3 (**Dynamic**).
- 7 = Active Power Utilization — Indicates that the service is employing a specific algorithm to yield the best power consumption and performance for the affected managed elements. If the property value is 7 (**Active Power Utilization**), then the PowerUtilizationMode is equal to 3

PowerUtilizationMode

Indicates the current power utilization mode implemented by the service. The mode selection is a generally made infrequently as part of element configuration.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change

Property

Description

- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot - Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

NOTE: When EnabledState is set to 5 (Not Applicable), then this property has no meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 **Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

Property	Description
SystemName	The Name of the scoping System.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — Indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_BIOSService

Table 43. BIOSService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element. By default, the element is Enabled (value = 2).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved

Property

Description

EnabledState

An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = **4**) and starting (value = **10**) are transient states between enabled and disabled.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Enabled — Indicates that the element is or could be running commands, will process any queued commands, and queues new requests.
- 3 = Disabled — Indicates that the element will not run commands and will drop any new requests.
- 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.
- 5 = Not Applicable — Indicates the element does not support being enabled or disabled.
- 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.
- 7 = In Test — Indicates that the element is in a test state.
- 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.
- 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.
- 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.
- 11..32767 = DMTF Reserved
- 32768..65535 = Vendor Reserved

Name

The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested. The actual state of the element is represented by EnabledState.

Possible values are:

- 0 = Unknown — Indicates that the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to **5 (Not Applicable)**, then this property has no

meaning. See the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 Not Applicable**.

SystemCreationClassName

The CreationClassName of the scoping System.

SystemName

The Name of the scoping System.

TransitioningToState

Indicates the target state to which the instance is transitioning.

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates that the implementation does not support representing ongoing transitions.

A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.

SetBIOSAttributes (Method)

This method is called to modify a group of BIOSAttribute instances associated with this BIOSService. The method may return the following errors:

- **0 (Success)** — If the method is completed successfully.
- **1 (Failure)** — If
 - the possible value is out of range. For example, trying to set value other than 0 to 23 for the attribute Autoon Hour.
 - it is an unsupported BIOS operation. For example, trying to enable TPM when TPM is disabled.
- **2 (Authentication failure)** — If the BIOS password is incorrect.
- **4294967295 (Invalid Possible Value)** — If the possible value is invalid; or read-only.

The method may return an instance of CIM_Error.

Property	Description
RemoteBIOSUpdate (Method)	This method is called to remotely update the BIOS image. It takes the hdr file of the BIOS image as the only parameter.

DCIM_SoftwareInstallationService

Table 44. SoftwareInstallationService

Property	Description
CreationClassName	Indicates the name of the class or the subclass that is used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768.65535 = Vendor Reserved

Property	Description
Name	The Name property uniquely identifies the Service and provides an indication of the functionality that is managed. This functionality is described in more detail in the Description property of the object.
PrimaryOwnerContact	A string that provides information on how the primary owner of the Service can be reached (for example, phone number, e-mail address, and so on).
PrimaryOwnerName	The name of the primary owner for the service, if one is defined. The primary owner is the initial support contact for the Service.
PrimaryStatus	<p>Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time. 1 = OK — Indicates the ManagedElement is functioning normally. 2 = Degraded — Indicates the ManagedElement is functioning below normal. 3 = Error — Indicates the ManagedElement is in an Error condition. .. = DMTF Reserved 0x8000.. = Vendor Reserved
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown — Indicates the last requested state for the element is unknown. 2 = Enabled 3 = Disabled 4 = Shut Down 5 = No Change 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState. 7 = Test 8 = Deferred 9 = Quiesce 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. 11 = Reset — Indicates that the element is first Disabled and then Enabled. 12 = Not Applicable .. = DMTF Reserved 32768.65535 = Vendor Reserved <p>The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.</p> <p>NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).</p> <p>There are two new values in RequestedState that build on the statuses of EnabledState. These are Reboot (10) and Reset (11). Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The</p>

Property	Description
	<p>Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.</p> <p>This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.</p> <p>If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable.</p>
SystemCreationClassName	The CreationClassName of the scoping System.
SystemName	The Name of the scoping System.
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 2 = Enabled · 3 = Disabled · 4 = Shut Down · 5 = No Change — Indicates that no transition is in progress. · 6 = Offline · 7 = Test · 8 = Defer · 9 = Quiesce · 10 = Reboot · 11 = Reset · 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_ComputerSystem

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
Dedicated	<p>Enumeration indicating the purpose(s) for which the ComputerSystem is dedicated, if any, and the functionality provided. For example, one could specify that the System is dedicated to Print (value = 11) or acts as a Hub (value = 8).</p> <p>Also, a value = 0 indicates this is a general purpose system, Not Dedicated but that it also hosts Print (value = 11) or mobile phone Mobile User Device (value = 17) services.</p> <p>A clarification is needed with respect to the value 17 (Mobile User Device). An example of a dedicated user device is a mobile phone or a barcode scanner in a store that communicates via radio frequency. These systems are quite limited in functionality and programmability, and are not considered general purpose computing platforms. Alternately, an example of a mobile system that is general purpose (that is, is NOT dedicated) is a hand-held computer.</p>

Although limited in its programmability, new software can be downloaded and its functionality expanded by the user.

The management scope of a **Management Controller** is typically a single managed system in which it is contained.

Possible values are:

- 0 = Not Dedicated
- 1 = Unknown
- 2 = Other
- 3 = Storage
- 4 = Router
- 5 = Switch
- 6 = Layer 3 Switch
- 7 = Central Office Switch
- 8 = Hub
- 9 = Access Server
- 10 = Firewall
- 11 = Print
- 12 = I/O
- 13 = Web Caching
- 14 = Management — Indicates this instance is dedicated to hosting system management software.
- 15 = Block Server
- 16 = File Server
- 17 = Mobile User Device
- 18 = Repeater
- 19 = Bridge/Extender
- 20 = Gateway
- 21 = Storage Virtualizer
- 22 = Media Library
- 23 = ExtenderNode
- 24 = NAS Head
- 25 = Self-contained NAS
- 26 = UPS
- 27 = IP Phone
- 28 = Management Controller — Indicates this instance represents specialized hardware dedicated to systems management (i.e., a Baseboard Management Controller (BMC) or service processor).
- 29 = Chassis Manager — Indicates this instance represents a system dedicated to management of a blade chassis and its contained devices. This value would be used to represent a Shelf Controller. A **Chassis Manager** is an aggregation point for management and may rely on subordinate management controllers for the management of constituent parts.
- 30 = Host-based RAID controller — Indicates this instance represents a RAID storage controller contained within a host computer.
- 31 = Storage Device Enclosure — Indicates this instance represents an enclosure that contains storage devices.
- 32 = Desktop
- 33 = Laptop
- 34 = Virtual Tape Library — Is the emulation of a tape library by a Virtual Library System.
- 35 = Virtual Library System — Uses disk storage to emulate tape libraries.
- 36..32567 = DMTF Reserved
- 32568..65535 = Vendor Reserved

Property	Description
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 5 = Not Applicable • 6 = Enabled but Offline • 7 = No Default • 9 = Quiesce • .. = DMTF Reserved • 32768.65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode. • 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. • 11..32767 = DMTF Reserved • 32768.65535 = Vendor Reserved
HealthState	<p>Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.</p> <p>DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.</p>

Property

Description

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

IdentifyingDescriptions

An array of free-form strings providing explanations and details behind the entries in the OtherIdentifyingInfo array. Note, each entry of this array is related to the entry in OtherIdentifyingInfo that is located at the same index.

Name

The inherited Name serves as the key of a system instance in an enterprise environment.

OperationalStatus

Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed - Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop.
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.

Property	Description
	<ul style="list-style-type: none"> · .. = DMTF Reserved · 0x8000.. = Vendor Reserved <p>OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.</p>
OtherIdentifyingInfo	<p>Captures additional data, beyond System Name information, that could be used to identify a ComputerSystem. One example would be to hold the Fibre Channel World-Wide Name (WWN) of a node.</p> <p>NOTE: If only the Fibre Channel name is available and is unique (able to be used as the System key), then this property would be NULL and the WWN would become the System key, its data placed in the Name property.</p>
PrimaryStatus	<p>Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time. · 1 = OK — Indicates the ManagedElement is functioning normally. · 2 = Degraded — Indicates the ManagedElement is functioning below normal. · 3 = Error — Indicates the ManagedElement is in an Error condition. · .. = DMTF Reserved · 0x8000.. = Vendor Reserved
RequestedState	<p>An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown — Indicates the last requested state for the element is unknown. · 2 = Enabled · 3 = Disabled · 4 = Shut Down · 5 = No Change · 6 = Offline · 7 = Test · 8 = Deferred · 9 = Quiesce · 10 = Reboot — Refers to doing a Shut Down and then moving to an Enabled state. · 11 = Reset — Indicates that the element is first Disabled and then Enabled. · 12 = Not Applicable · .. = DMTF Reserved · 32768..65535 = Vendor Reserved <p>The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (Not Applicable), then this property has no meaning. Refer to the</p>

EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is **Unknown (0)**. If the last requested or desired state is unknown, RequestedState should have the value **Unknown (0)**, but may have the value **No Change (5)**. **Offline (6)** indicates that the element has been requested to transition to the **Enabled but Offline EnabledState**.

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 Not Applicable**.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions

A value other than **5** or **12** identifies the state to which the element is in the process of transitioning.

RequestStateChange (Method)

Requests that the state of the element be changed to the value specified in the RequestedState parameter. When the requested state change takes place, the EnabledState and RequestedState of the element will be the same. Invoking the RequestStateChange method multiple times could result in earlier requests being overwritten or lost.

A return code of 0 shall indicate the state change was successfully initiated.

A return code of 3 shall indicate that the state transition cannot complete within the interval specified by the TimeoutPeriod parameter.

A return code of 4096 (0x1000) shall indicate the state change was successfully initiated, a ConcreteJob has been created, and its reference returned in the output parameter Job. Any other return code indicates an error condition.

DCIM_RecordLog

Table 45. RecordLog

Property	Description
ElementName	<p>ElementName A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 5 = Not Applicable• 6 = Enabled but Offline• 7 = No Default• 9 = Quiesce• .. = DMTF Reserved• 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
EnabledState	<p>An integer enumeration that indicates the enabled and disabled states of an element. It can also indicate the transitions between these requested states. For example, shutting down (value = 4) and starting (value = 10) are transient states between enabled and disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests.• 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests.• 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state.• 5 = Not Applicable — Indicates the element does not support being enabled or disabled.• 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests.• 7 = In Test — Indicates that the element is in a test state.• 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests.• 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.• 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued.• 11..32767 = DMTF Reserved

Property

Description

HealthState

Indicates the current health of the element. This attribute expresses the health of this element but not necessarily that of its subcomponents.

DMTF has reserved the unused portion of the continuum for additional HealthStates in the future.

Possible values are:

- 0 = Unknown — The implementation cannot report on HealthState at this time.
- 5 = OK — The element is fully functional and is operating within normal operational parameters and without error.
- 10 = Degraded/Warning — The element is in working order and all functionality is provided. However, the element is not working to the best of its abilities. For example, the element may not be operating at optimal performance or it may be reporting recoverable errors.
- 15 = Minor failure — All functionality is available but some may be degraded.
- 20 = Major failure — The element is failing. It is possible that some or all of the functionality of this component is degraded or not working.
- 25 = Critical failure — The element is non-functional and recovery may not be possible.
- 30 = Non-recoverable error — The element has completely failed, and recovery is not possible. All functionality provided by this element has been lost.
- .. = DMTF Reserved

InstanceID

Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following **preferred** algorithm:

<OrgID> : <LocalID>

Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above **preferred** algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the **preferred** algorithm must be used with the <OrgID>set to CIM.

LogState

LogState is an integer enumeration that indicates the current state of a log represented by CIM_Log subclasses. LogState is to be used in conjunction with the EnabledState property to fully describe the current state of the log.

Possible values are:

- 0 = Unknown — Indicates the state of the log is unknown.
- 2 = Normal — Indicates that the log is or could be executing logging commands, will process any queued log entries, and will queue new logging requests.
- 3 = Erasing — Indicates that the log is being erased.
- 4 = Not Applicable — Indicates the log does not support representing a log state.
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

MaxNumberOfRecords

Maximum number of records that can be captured in the Log. If undefined, a value of zero should be specified.

Property

Description

OperationalStatus

Indicates the current statuses of the element. Various operational statuses are defined. Many of the enumeration's values are self-explanatory.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = OK
- 3 = Degraded
- 4 = Stressed — Indicates that the element is functioning, but needs attention. Examples of **Stressed** states are overload, overheated, and so on.
- 5 = Predictive Failure — Indicates that an element is functioning nominally but predicting a failure in the near future.
- 6 = Error
- 7 = Non-Recoverable Error
- 8 = Starting
- 9 = Stopping
- 10 = Stopped — Implies a clean and orderly stop
- 11 = In Service — Describes an element being configured, maintained, cleaned, or otherwise administered.
- 12 = No Contact — Indicates that the monitoring system has knowledge of this element, but has never been able to establish communications with it.
- 13 = Lost Communication — Indicates that the ManagedSystem Element is known to exist and has been contacted successfully in the past, but is currently unreachable.
- 14 = Aborted — Implies an abrupt stop where the state and configuration of the element may need to be updated.
- 15 = Dormant — Indicates that the element is inactive or quiesced.
- 16 = Supporting Entity in Error — Indicates that this element may be **OK** but that another element, on which it is dependent, is in error. An example is a network service or endpoint that cannot function due to lower-layer networking problems.
- 17 = Completed — Indicates that the element has completed its operation. This value should be combined with either OK, Error, or Degraded so that a client can tell if the complete operation Completed with OK (passed), Completed with Error (failed), or Completed with Degraded (the operation finished, but it did not complete OK or did not report an error).
- 18 = Power Mode — Indicates that the element has additional power model information contained in the Associated PowerManagementService association.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

OperationalStatus replaces the Status property on ManagedSystemElement to provide a consistent approach to enumerations, to address implementation needs for an array property, and to provide a migration path from today's environment to the future. This change was not made earlier because it required the deprecated qualifier. Due to the widespread use of the existing Status property in management applications, it is strongly recommended that providers or instrumentation provide both the Status and OperationalStatus properties. Further, the first value of OperationalStatus should contain the primary status for the element. When instrumented, Status (because it is single-valued) should also provide the primary status of the element.

OverwritePolicy

OverwritePolicy is an integer enumeration that indicates whether the log, represented by the CIM_Log subclasses, can overwrite its entries.

Possible values are:

- 0 = Unknown — Indicates the log's overwrite policy is unknown.
- 2 = Wraps When Full — Indicates that the log overwrites its entries with new entries when the log has reached its maximum capacity.
- 7 = Never Overwrites — Indicates that the log never overwrites its entries by the new entries

Property

Description

PrimaryStatus

- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

Provides a high level status value, intended to align with Red-Yellow-Green type representation of status. It should be used in conjunction with DetailedStatus to provide high level and detailed health status of the ManagedElement and its subcomponents.

Possible values are:

- 0 = Unknown — Indicates the implementation is in general capable of returning this property, but is unable to do so at this time.
- 1 = OK — Indicates the ManagedElement is functioning normally.
- 2 = Degraded — Indicates the ManagedElement is functioning below normal.
- 3 = Error — Indicates the ManagedElement is in an Error condition.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset — Indicates that the element is first **Disabled** and then **Enabled**.
- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to 5 (**Not Applicable**), then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

NOTE: The value **No Change (5)** has been deprecated instead of indicating the last requested state is **Unknown (0)**. If the last requested or desired state is unknown, RequestedState should have the value **Unknown (0)**, but may have the value **No Change (5)**.

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**. Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

Property	Description
	If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value 12 Not Applicable .
TransitioningToState	<p>Indicates the target state to which the instance is transitioning.</p> <ul style="list-style-type: none"> • 0 = Unknown • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 5 = No Change — indicates that no transition is in progress. • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset • 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions. <p>A value other than 5 or 12 identifies the state to which the element is in the process of transitioning.</p>

DCIM_OperatingSystem

Table 46. OperatingSystem

Property	Description
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
CSCreationClassName	The scoping ComputerSystem's CreationClassName.
CSName	The scoping ComputerSystem's Name.
EnabledDefault	<p>An enumerated value indicating an administrator's default or startup configuration for the Enabled State of an element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 2 = Enabled — Indicates that the element is or could be executing commands, will process any queued commands, and queues new requests. • 3 = Disabled — Indicates that the element will not execute commands and will drop any new requests. • 4 = Shutting Down — Indicates that the element is in the process of going to a Disabled state. • 5 = Not Applicable — Indicates the element does not support being enabled or disabled. • 6 = Enabled but Offline — Indicates that the element may be completing commands, and will drop any new requests. • 7 = In Test — Indicates that the element is in a test state. • 8 = Deferred — Indicates that the element may be completing commands, but will queue any new requests. • 9 = Quiesce — Indicates that the element is enabled but in a restricted mode.

Property	Description
	<ul style="list-style-type: none"> 10 = Starting — Indicates that the element is in the process of going to an Enabled state. New requests are queued. 11..32767 = DMTF Reserved 32768..65535 = Vendor Reserved <p>By default, the element is Enabled (value = 2).</p>
LastBootUpTime	Time when the operating system was last booted.
LocalDateTime	Operating system's notion of the local date and time of day.
Name	The inherited Name serves as key of an operating system instance within a computer system.
OSType	<p>A integer indicating the type of operating system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = MACOS 3 = ATTUNIX 4 = DGUX 5 = DECNT 6 = Tru64 UNIX 7 = OpenVMS 8 = HPUX 9 = AIX 10 = MVS 11 = OS400 12 = OS/2 13 = JavaVM 14 = MSDOS 15 = WIN3x 16 = WIN95 17 = WIN98 18 = WINNT 19 = WINCE 20 = NCR3000 21 = NetWare 22 = OSF 23 = DC/OS 24 = Reliant UNIX 25 = SCO UnixWare 26 = SCO OpenServer 27 = Sequent 28 = IRIX 29 = Solaris 30 = SunOS 31 = U6000 32 = ASERIES 33 = HP NonStop OS 34 = HP NonStop OSS

Property**Description**

- 35 = BS2000
- 36 = LINUX
- 37 = Lynx
- 38 = XENIX
- 39 = VM
- 40 = Interactive UNIX
- 41 = BSDUNIX
- 42 = FreeBSD
- 43 = NetBSD
- 44 = GNU Hurd
- 45 = OS9
- 46 = MACH Kernel
- 47 = Inferno
- 48 = QNX
- 49 = EPOC
- 50 = IxWorks
- 51 = VxWorks
- 52 = MiNT
- 53 = BeOS
- 54 = HP MPE
- 55 = NextStep
- 56 = PalmPilot
- 57 = Rhapsody
- 58 = Windows 2000
- 59 = Dedicated
- 60 = OS/390
- 61 = VSE
- 62 = TPF
- 63 = Windows (R) Me
- 64 = Caldera Open UNIX
- 65 = OpenBSD
- 66 = Not Applicable
- 67 = Windows XP
- 68 = z/OS
- 69 = Microsoft Windows Server 2003
- 70 = Microsoft Windows Server 2003 64-Bit
- 71 = Windows XP 64-Bit
- 72 = Windows XP Embedded
- 73 = Windows Vista
- 74 = Windows Vista 64-Bit
- 75 = Windows Embedded for Point of Service
- 76 = Microsoft Windows Server 2008
- 77 = Microsoft Windows Server 2008 64-Bit
- 78 = FreeBSD 64-Bit
- 79 = RedHat Enterprise Linux
- 80 = RedHat Enterprise Linux 64-Bit
- 81 = Solaris 64-Bit
- 82 = SUSE
- 83 = SUSE 64-Bit
- 84 = SLES

Property**Description**

- 85 = SLES 64-Bit
- 86 = Novell OES
- 87 = Novell Linux Desktop
- 88 = Sun Java Desktop System
- 89 = Mandriva
- 90 = Mandriva 64-Bit
- 91 = TurboLinux
- 92 = TurboLinux 64-Bit
- 93 = Ubuntu
- 94 = Ubuntu 64-Bit
- 95 = Debian
- 96 = Debian 64-Bit
- 97 = Linux 2.4.x
- 98 = Linux 2.4.x 64-Bit
- 99 = Linux 2.6.x
- 100 = Linux 2.6.x 64-Bit
- 101 = Linux 64-Bit
- 102 = Other 64-Bit
- 103 = Microsoft Windows Server 2008 R2
- 104 = VMware ESXi
- 105 = Microsoft Windows 7
- 106 = CentOS 32-bit
- 107 = CentOS 64-bit
- 108 = Oracle Enterprise Linux 32-bit
- 109 = Oracle Enterprise Linux 64-bit
- 110 = eComStation 32-bitx
- 111 = Microsoft Windows Server 2011
- 113 = Microsoft Windows Server 2012
- 114 = Microsoft Windows 8
- 115 = Microsoft Windows 8 64-bit
- 116 = Microsoft Windows 8.1
- 117 = Microsoft Windows 8.1 64-bit
- 118 = Microsoft Windows 10
- 119 = Microsoft Windows 10 64-bit

RequestedState

An integer enumeration that indicates the last requested or desired state for the element, irrespective of the mechanism through which it was requested.

Possible values are:

- 0 = Unknown — Indicates the last requested state for the element is unknown.
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change
- 6 = Offline — Indicates that the element has been requested to transition to the Enabled but Offline EnabledState.
- 7 = Test
- 8 = Deferred
- 9 = Quiesce
- 10 = Reboot — Refers to doing a **Shut Down** and then moving to an **Enabled** state.
- 11 = Reset - Indicates that the element is first **Disabled** and then **Enabled**.

Property

Description

- 12 = Not Applicable
- .. = DMTF Reserved
- 32768..65535 = Vendor Reserved

The actual state of the element is represented by EnabledState. This property is provided to compare the last requested and current enabled or disabled states. Note that when EnabledState is set to **5 (Not Applicable)**, then this property has no meaning. Refer to the EnabledState property description for explanations of the values in the RequestedState enumeration.

i **NOTE: The value No Change (5) has been deprecated instead of indicating the last requested state is Unknown (0). If the last requested or desired state is unknown, RequestedState should have the value Unknown (0), but may have the value No Change (5).**

There are two new values in RequestedState that build on the statuses of EnabledState. These are **Reboot (10)** and **Reset (11)**.

Shut Down requests an orderly transition to the Disabled state, and may involve removing power, to completely erase any existing state. The Disabled state requests an immediate disabling of the element, such that it will not execute or accept any commands or processing requests.

This property is set as the result of a method invocation (such as Start or StopService on CIM_Service), or can be overridden and defined as WRITEable in a subclass. The method approach is considered superior to a WRITEable property, because it allows an explicit invocation of the operation and the return of a result code.

If knowledge of the last RequestedState is not supported for the EnabledLogicalElement, the property is NULL or has the value **12 (Not Applicable)**.

TransitioningToState

Indicates the target state to which the instance is transitioning.

Possible values are:

- 0 = Unknown
- 2 = Enabled
- 3 = Disabled
- 4 = Shut Down
- 5 = No Change — Indicates that no transition is in progress.
- 6 = Offline
- 7 = Test
- 8 = Defer
- 9 = Quiesce
- 10 = Reboot
- 11 = Reset
- 12 = Not Applicable — Indicates the implementation does not support representing ongoing transitions.

Version

A string describing the Operating System's version number. The format of the version information is as follows: <Major Number>.<Minor Number>.<Revision> or <Major Number>.<Minor Number>.<Revision Letter>.

DCIM_SoftwareIdentity

Table 47. OperatingSystem

Property	Description
ClassificationDescriptions	An array of free-form strings providing more detailed explanations for any of the entries in the Classifications array. Note that each entry is related to one in the Classifications array located at the same index.
Classifications	<p>An array of enumerated integers that classify this software. For example, the software MAY be instrumentation (value = 5) or firmware and diagnostic software (10 and 7). The use of value 6, Firmware/BIOS, is being deprecated. Instead, either the value 10 (Firmware) and/or 11 (BIOS/FCode) SHOULD be used. The value 13, Software Bundle, identifies a software package consisting of multiple discrete software instances that can be installed individually or together.</p> <p>Each contained software instance is represented by an instance of SoftwareIdentity that is associated to this instance of SoftwareIdentityinstance via a Component association.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Driver• 3 = Configuration Software• 4 = Application Software• 5 = Instrumentation• 6 = Firmware/BIOS• 7 = Diagnostic Software• 8 = Operating System• 9 = Middleware• 10 = Firmware• 11 = BIOS/FCode• 12 = Support/Service Pack• 13 = Software Bundle• .. = DMTF Reserved• 0x8000..0xFFFF = Vendor Reserved
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity</p>

Property	Description
	that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.
IsEntity	The IsEntity property is used to indicate whether the SoftwareIdentity corresponds to a discrete copy of the software component or is being used to convey descriptive and identifying information about software that is not present in the management domain. A value of TRUE indicates that the SoftwareIdentity instance corresponds to a discrete copy of the software component. A value of FALSE indicates that the SoftwareIdentity instance does not correspond to a discrete copy of the Software.
Manufacturer	Manufacturer of this software.
ReleaseDate	The date the software was released.
RevisionNumber	The revision or maintenance release component of the software's version information. For example, 3 from version 12.1(3)T. This property is defined as a numeric value to allow the determination of newer versus older releases. A newer revision is indicated by a larger numeric value.
TargetTypes	An array of strings that describes the compatible installer(s). The purpose of the array elements is to establish compatibility between a SoftwareIdentity and a SoftwareInstallationService that can install the SoftwareIdentity by comparing the values of the array elements of this property to the values of SoftwareInstallationServiceCapabilities.SupportedTargetTypes[] property's array elements.
VersionString	A string representing the complete software version information. For example, 12.1(3)T . This string and the numeric major/minor/revision/build properties are complementary. Since vastly different representations and semantics exist for versions, it is not assumed that one representation is sufficient to permit a client to perform computations (i.e., the values are numeric) and a user to recognize the software's version (i.e., the values are understandable and readable). Hence, both numeric and string representations of version are provided.

DCIM_BIOSElement

Table 48. BIOSElement

Property	Description
Manufacturer	The name used to identify this SoftwareElement. Manufacturer of this SoftwareElement.
Name	The name used to identify this SoftwareElement.
ReleaseDate	Date that this BIOS was released.
SoftwareElementID	This is an identifier for the SoftwareElement and is designed to be used in conjunction with other keys to create a unique representation of the element.
SoftwareElementState	The SoftwareElementState is defined in this model to identify various states of a SoftwareElement's life cycle.

Property

Description

Possible values are:

- 0 = Deployable — Describes the details necessary to successfully distribute it and the details (Checks and Actions) required to move it to the installable state (i.e, the next state).
- 1 = Installable — Describes the details necessary to successfully install it and the details (Checks and Actions) required to create an element in the executable state (i.e., the next state).
- 2 = Executable — Describes the details necessary to successfully start it and the details (Checks and Actions) required to move it to the running state (i.e., the next state).
- 3 = Running — Describes the details necessary to manage the started element.

TargetOperatingSystem

The TargetOperatingSystem property specifies the element's operating system environment. The value of this property does not ensure that it is binary executable. Two other pieces of information are needed. First, the version of the OS needs to be specified using the class, CIM_OSVersion Check. The second piece of information is the architecture that the OS runs on. This information is verified using CIM_ArchitectureCheck. The combination of these constructs clearly identifies the level of OS required for a particular SoftwareElement.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = MACOS
- 3 = ATTUNIX
- 4 = DGUX
- 5 = DECNT
- 6 = Tru64 UNIX
- 7 = OpenVMS
- 8 = HPUX
- 9 = AIX
- 10 = MVS
- 11 = OS400
- 12 = OS/2
- 13 = JavaVM
- 14 = MSDOS
- 15 = WIN3x
- 16 = WIN95
- 17 = WIN98
- 18 = WINNT
- 19 = WINCE
- 20 = NCR3000
- 21 = NetWare
- 22 = OSF
- 23 = DC/OS
- 24 = Reliant UNIX
- 25 = SCO UnixWare
- 26 = SCO OpenServer
- 27 = Sequent
- 28 = IRIX
- 29 = Solaris
- 30 = SunOS
- 31 = U6000
- 32 = ASERIES
- 33 = HP NonStop OS

Property**Description**


- 34 = HP NonStop OSS
- 35 = BS2000
- 36 = LINUX
- 37 = Lynx
- 38 = XENIX
- 39 = VM
- 40 = Interactive UNIX
- 41 = BSDUNIX
- 42 = FreeBSD
- 43 = NetBSD
- 44 = GNU Hurd
- 45 = OS9
- 46 = MACH Kernel
- 47 = Inferno
- 48 = QNX
- 49 = EPOC
- 50 = IxWorks
- 51 = VxWorks
- 52 = MiNT
- 53 = BeOS
- 54 = HP MPE
- 55 = NextStep
- 56 = PalmPilot
- 57 = Rhapsody
- 58 = Windows 2000
- 59 = Dedicated
- 60 = OS/390
- 61 = VSE
- 62 = TPF
- 63 = Windows (R) Me
- 64 = Caldera Open UNIX
- 65 = OpenBSD
- 66 = Not Applicable
- 67 = Windows XP
- 68 = z/OS
- 69 = Microsoft Windows Server 2003
- 70 = Microsoft Windows Server 2003 64-Bit
- 71 = Windows XP 64-Bit
- 72 = Windows XP Embedded
- 73 = Windows Vista
- 74 = Windows Vista 64-Bit
- 75 = Windows Embedded for Point of Service
- 76 = Microsoft Windows Server 2008
- 77 = Microsoft Windows Server 2008 64-Bit

Version

Displays the version of the BIOS.

DCIM_ConcreteJob


Table 49. ConcreteJob

Property	Description
Description	Provides a textual description of the object.
ErrorCode	A vendor-specific error code. The value must be set to zero if the Job completed without error. Note that this property is also present in the JobProcessingStatistics class. This class is necessary to capture the processing information for recurring Jobs, because only the 'last' run error can be stored in this single-valued property.
ErrorDescription	A free-form string that contains the vendor error description. Note that this property is also present in the JobProcessingStatistics class. This class is necessary to capture the processing information for recurring Jobs, because only the last run error can be stored in this single-valued property.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <pre><OrgID> : <LocalID></pre> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
JobRunTimes	The number of times that the Job should be run. A value of 1 indicates that the Job is not recurring, while any non-zero value indicates a limit to the number of times that the Job will recur. Zero indicates that there is no limit to the number of times that the Job can be processed, but that it is terminated either after the UntilTime or by manual intervention. By default, a Job is processed once.
JobStatus	A free-form string that represents the status of the job. The primary status is reflected in the inherited OperationalStatus property. JobStatus provides additional, implementation-specific details.
Name	<p>The user-friendly name for this instance of a Job. In addition, the user-friendly name can be used as a property for a search or query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
Priority	Indicates the urgency or importance of execution of the Job. The lower the number, the higher the priority. Note that this property is also present in the JobProcessingStatistics class. This class is necessary to capture the setting information that would influence the results of a job.
TimeBeforeRemoval	The amount of time that the Job is retained after it has finished executing, either succeeding or failing in that execution. The job must remain in existence for some period of

Property	Description
	time regardless of the value of the DeleteOnCompletion property. The default is five minutes.

DCIM_BootSourceSetting


Table 50. ConcreteJob

Property	Description
BIOSBootString	A string identifying the boot source which corresponds to the string used by the BIOS to uniquely name the boot source. For example, in systems which implement the BIOS Boot Specification, the string could correspond to the descString string for entries in the IPL Table or BCV Table.
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
FailThroughSupported	<p>An enumeration indicating the behavior when the attempt to boot using the boot source fails (no media, timeout).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Is Supported — Indicates that next boot source the boot order is used. 2 = Not Supported — Indicates that the boot order is terminated and no other boot sources associated to the same CIM_BootConfigSetting are used). <p>The default value is 1 (is supported).</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
StructuredBootString	<p>A string identifying the boot source using the format <OrgID>:<identifier>:<index>, in which neither <OrgID>, <identifier> or <index> contains a colon (:). The value of <OrgID> is a copyrighted, trademarked or otherwise unique name that is owned by the entity defining the <identifier>, or is a registered ID that is assigned to the entity by a recognized global authority. For DMTF defined identifiers, the <OrgID> is set to CIM.</p> <p>The <identifiers> are:</p> <ul style="list-style-type: none"> Floppy Hard-Disk CD/DVD Network

Property	Description
	<ul style="list-style-type: none"> · PCMCIA · USB <p>The value of <index> is a non-zero integer.</p>

DCIM_BootConfigSetting


Table 51. BootConfigSetting

Property	Description
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name>structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
ChangeBootOrder (Method)	<p>This method is called to change the boot order within a boot configuration. An ordered array of BootSourceSetting instances is passed to this method. Each BootSourceSetting instance MUST already be associated with this BootConfigSetting instance via an instance of OrderedComponent. If not, the implementation MUST return a value of Invalid Parameter. Upon execution of this method, the value of the AssignedSequence property on each instance of OrderedComponent will be updated such that the values are monotonically increasing in correlation with the position of the referenced BootSourceSetting instance in the source input parameter. That is, the first position in the array will have the lowest value for AssignedSequence. The second position will have the second lowest value, and so on. For BootSourceSetting instances which are associated with the BootConfigSetting instance via OrderedComponent and not present in the input array, the AssignedSequence property on the OrderedComponent association will be assigned a value of 0.</p>

DCIM_IPAssignmentSettingData


Table 52. IPAssignmentSettingData

Property	Description
AddressOrigin	<p>AddressOrigin identifies the method by which the IP Address, Subnet Mask, and Gateway were assigned to the IPProtocolEndpoint.</p>

Property	Description
	<p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Unknown • 1 = Other • 2 = Not Applicable — Indicates that the application of the IPAssignmentSettingData instance does not affect these properties. • 3 = Static — Indicates that values for the properties are contained in the IPAssignmentSettingData instance. • 4 = DHCP — Indicates that the values will be assigned via DHCP. • 5 = BOOTP — Indicates that the values will be assigned via BOOTP. • 6..32767 = DMTF Reserved • 32768.. = Vendor Reserved
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>

DCIM_PowerAllocationSettingData

Table 53. PowerAllocationSettingData


Property	Description
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the</p>

Property	Description
	<p><Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
Limit	<p>This property specifies the upper bound, or maximum amount of resource that is granted for this allocation. For example, a system which supports memory paging may support setting the Limit of a Memory allocation below that of the VirtualQuantity, thus forcing paging to occur for this allocation.</p>
PowerAllocationSettingPurpose	<p>When power is consumed by or allocated to a ManagedSystemElement, there may be well-known or meaningful levels of allocation or consumption for the ManagedSystemElement. The PowerAllocationSettingPurpose property may be used to identify the well known level or provide context for the interpretation of the other values of the PowerAllocationSettingData instance. A value of MaxConAuxiliary indicates that the instance provides information about the maximum power allocated or consumed by the ManagedSystemElement as currently configured, while the ManagedSystemElement is turned off and drawing auxiliary power. Note that an alternate name for auxiliary power is trickle power.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 2 = MaxConAuxiliary • 3 = MinWhenOn — Indicates the instance provides information about the minimum value for power consumption for which a configuration of the ManagedSystemElement exists such that when it is powered on and operating in that configuration, the power consumption of the ManagedSystemElement is guaranteed not to exceed the specified amount. • 4 = MaxAsConfigured — Indicates that the instance provides information about the maximum power that may be allocated to or consumed by the ManagedSystemElement as currently configured while powered on. The actual power consumed may be less. • 5 = MaxIfAllHotPlug — Indicates that the instance provides information about the maximum power allocated or consumed by the ManagedSystemElement if all components that could be added to the ManagedSystemElement without requiring a power cycle of the ManagedSystemElement were added to the ManagedSystemElement. • 6 = MaxIfAllColdPlug — Indicates that the instance provides information about the maximum power allocated or consumed by the ManagedSystemElement if all components that could be added to the ManagedSystemElement, including those that require a power cycle of the ManagedSystemElement, were added to the ManagedSystemElement. • 7 = Allocated — Indicates that the instance provides information about the current power allocated to the ManagedSystemElement. • 8 = MinWithoutDegradation — Indicates that the instance provides information about the minimum power allocated or consumed by the ManagedSystemElement without causing performance degradation. • .. = DMTF Reserved • 32768..65535 = Vendor Reserved
ResourceType	<p>The type of resource this allocation setting represents.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other • 2 = Computer System • 3 = Processor • 4 = Memory • 5 = IDE Controller

Property	Description
	<ul style="list-style-type: none"> · 6 = Parallel SCSI HBA · 7 = FC HBA · 8 = iSCSI HBA · 9 = IB HCA · 10 = Ethernet Adapter · 11 = Other Network Adapter · 12 = I/O Slot · 13 = I/O Device · 14 = Floppy Drive · 15 = CD Drive · 16 = DVD drive · 17 = Disk Drive · 18 = Tape Drive · 19 = Storage Extent · 20 = Other storage device · 21 = Serial port · 22 = Parallel port · 23 = USB Controller · 24 = Graphics controller · 25 = IEEE 1394 Controller · 26 = Partitionable Unit · 27 = Base Partitionable Unit · 28 = Power · 29 = Cooling Capacity · 30 = Ethernet Switch Port · 31 = Logical Disk · 32 = Storage Volume · 33 = Ethernet Connection · .. = DMTF reserved · 0x8000..0xFFFF = Vendor Reserved

DCIM_AssetAcquisition


Table 54. AssetAcquisition

Property	Description
CostCenter	Identifying information for the accounting unit within the purchasing company that authorized the purchase.
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstallationDate	Date the system was put into service by the purchasing company.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:

Property	Description
	<p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> .<LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
PurchaseCost	<p>The Purchase Cost field accepts whole numbers only. Entering commas, decimal points, or dollar signs results in an error message. Value expressed in currency unit that was paid for the system, for example, 25000.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
PurchaseDate	Date the transaction for acquiring the system was completed.
ReferenceToDeliverySlip	<p>Identifying information for the waybill or delivery slip, such as a waybill number.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
ReferenceToPONumber	<p>Number of the purchase order that authorized buying the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved

DCIM_AssetExtendedWarrantyInformation


Table 55. AssetExtendedWarrantyInformation

Property	Description
Cost	<p>Displays the total cost of the warranty service on a system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>

Property	Description
EndDate	Displays the date that extended warranty service ends.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
ProviderName	Displays the name of the business that is providing warranty service to the system owner.
StartDate	Displays the date that extended warranty service begins. This date usually follows the standard warranty service.

DCIM_AssetOwnerInformation


Table 56. AssetOwnerInformation

Property	Description
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
InsuranceCompany	The company that insures the system against theft or other loss.
OwnerName	The individual or business entity that holds legal title to the system.

Property	Description
Type	<p>The individual or business entity that holds legal title to the system. Type Whether the system is owned, rented, leased, managed by transfer, or off-lease.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Owned · 1 = Leased · 3 = Rented · 4 = Off Lease · 5..32767 = Transfer · 32768..65535 = DMTF Reserved
SetAssetOwnerInformation (Method)	This method allows the user to change the Insurance Company and Owner Name of the system.

DCIM_AssetSupportInformation


Table 57. AssetSupportInformation

Property	Description
AutomaticFix	Method used to fix the problem.
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
HelpDesk	Name of the help desk that provides technical support for your system;information provided by the help desk.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID>:<LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
Outsourced	Indicates whether you have contracted with an outside business entity to provide technical support for your system.
Type	<p>Indicates whether a support request is for a problem with your system's network connectivity or with a particular system component.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Network

Property	Description
	<ul style="list-style-type: none"> 1 = Storage 2..32767 = DMTF Reserved 32768..65535 = Vendor Reserved

DCIM_AssetWarrantyInformation


Table 58. AssetWarrantyInformation

Property	Description
Cost	<p>The total cost of the warranty service on a system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
Duration	<p>The number of days or months that the warranty is to be in force.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0..32767 = DMTF Reserved 32768..65535 = Vendor Reserved
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
EndDate	<p>The date that extended warranty service ends.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
UnitType	<p>Indicates whether the length of the warranty is measured in days or months.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Days 1 = Months 2..32767 = DMTF Reserved

Property	Description
	<ul style="list-style-type: none"> 32768..65535 = Vendor Reserved

DCIM_AssetSystemInformation

Table 59. AssetSystemInformation

Property	Description
ChassisAssetTag	Chassis Asset Tag of the system.
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name>structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
PrimaryUserName	Text that provides the name for the person responsible for managing the system.
PrimaryUserPhone	Telephone number for the person responsible for managing the system.
SystemLocation	Alphanumeric text that specifies where the system is, such as building and room.
SystemName	Alphanumeric text that uniquely identifies the system.

DCIM_AMTSettings

Table 60. AMTSettings

Property	Description
AMTSupported	Defines if Intel AMT is supported.
Description	Provides a textual description of the object.
IDEREnabled	Defines if IDE redirection is enabled.

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
SOLEnabled	Defines if Serial Over LAN capability is enabled.


DCIM_ASFSettings

Table 61. ASFSettings

Property	Description
ASFEnabled	Defines if Intel ASF is enabled.
Description	Provides a textual description of the object.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID>:<LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
StructureVersion	Defines the version of the Intel ASF structure.

DCIM_VProSettings

Table 62. VProSettings


Property	Description
BIOSupportedMaximumVAVersion	Defines the maximum VA version supported by the BIOS. A value of 0 means the the highest version supported by BIOS is VA 2.6. A value of 1 means the the highest version supported by BIOS is VA 3.0.
Description	Provides a textual description of the object.
ElementName	The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.  NOTE: The name does not have to be unique within a namespace.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.
LTTXTEnabledState	Defines CPU LT/TXT enabled state for vPro brand. Possible values are: <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
SMXState	Defines CPU SMX state for vPro brand. Possible values are: <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• .. = DMTF Reserved• 32768..65535 = Vendor Reserved
SPIFlashhasPlatformDataRegionReserved	Defines if SPI flash has a platform data region reserved. Possible values are: <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled

Property	Description
SupportedBIOSsetup	<ul style="list-style-type: none"> · .. = DMTF Reserved · 32768..65535 = Vendor Reserved <p>SupportedBIOSsetup defines if BIOS setup properties are supported.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = SupportsMEinBIOSSetup — Defines if ME is supported in BIOS setup. · 3 = SupportsTPMinBIOSSetup — Defines if TPM is supported in BIOS setup. · 4 = SupportsTXTinBIOSSetup — Defines if TXT is supported in BIOS setup. · 5 = SupportsVAExtensions — Defines if VA extensions are supported by the BIOS. · 6 = SupportsVTdinBIOSSetup — Defines if VT-d is supported in BIOS setup. · 7 = SupportsVTxinBIOSSetup — Defines if VT-x is supported in BIOS setup · .. = DMTF Reserved · 32768..65535 = Vendor Reserved
TXTStateInMCHState	<p>Defines TXT state in MCH for vPro brand.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · .. = DMTF Reserved · 32768..65535 = Vendor Reserved
VMXState	<p>Defines CPU VMX state for vPro brand.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · .. = DMTF Reserved · 32768..65535 = Vendor Reserved
VProCharacteristics	<p>VProCharacteristics defines if VPro setup properties are supported.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = CPUSupportsVTx — CPUSupportsVTx:Defines if the CPU supports VT-x for vPro brand. · 3 = MCHSupportForVTd — MCHSupportForVTd:Defines if the MCH supports TXT for vPro brand. · 4 = LTTXTCapability — LTTXTCapability:Defines CPU LT/TXT capability for vPro brand. · 5 = SupportsTPMOnBoard — SupportsTPMOnBoard:Defines if an on board TPM is supported for vPro brand. · .. = DMTF Reserved · 32768..65535 = Vendor Reserved
VTdState	<p>Defines VT-d state for vPro brand.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Enabled · 3 = Disabled · .. = DMTF Reserved · 32768..65535 = Vendor Reserved

Property	Description
VTxEnabledState	<p>Defines CPU VT-x state for vPro brand.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • .. = DMTF Reserved • 32768..65535 = Vendor Reserved

DCIM_AlertIndicationSettingData

Table 63. AlertIndicationSettingData

Property	Description
AlertCategory	<p>The identifying information of the entity (instance) for which this Indication is generated. The property contains the path of an instance, encoded as a string parameter — if the instance is modeled in the CIM Schema. If not a CIM instance, the property contains some identifying string that names the entity for which the Alert is generated. The path or identifying string is formatted per the AlertingElementFormat property.</p>
AlertType	<p>Primary classification of the Indication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Other — The Indication's OtherAlertType property conveys its classification. Use of Other in an enumeration is a standard CIM convention. It means that the current Indication does not fit into the categories described by this enumeration. • 2 = Communications Alert — An Indication of this type is principally associated with the procedures and/or processes required to convey information from one point to another. • 3 = Quality of Service Alert — An Indication of this type is principally associated with a degradation or errors in the performance or function of an entity. • 4 = Processing Error — An Indication of this type is principally associated with a software or processing fault. • 5 = Device Alert — An Indication of this type is principally associated with an equipment or hardware fault. • 6 = Environmental Alert — An Indication of this type is principally associated with a condition relating to an enclosure in which the hardware resides, or other environmental considerations. • 7 = Model Change — The Indication addresses changes in the Information Model. For example, it may embed a Lifecycle Indication to convey the specific model change being alerted. • 8 = Security Alert — An Indication of this type is associated with security violations, detection of viruses, and similar issues.
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
EventID	<p>The identification number for events of this type.</p>
IndicationIdentifier	<p>An identifier for the Alert indication. This property is similar to a key value in that it can be used for identification, when correlating Alert indications (see the Correlated indications array). Its value should be unique as long as Alert correlations are reported, but may be reused or left NULL if no future Alert indications will reference it in their Correlated indications array.</p>

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.LocalOnly.</p>
LocalOnly	This property shows if the events from this the event source should be reported to the local indication consumer only or should be reported to CIMOM as an indication. TRUE for reporting to local consumer only, and FALSE for reporting as an indication.
MaxDisplayNotifications	The maximum number of indications of this type that will be sent to the local display.
MaxNTEventLogNotifications	The maximum number of indications of this type that will be sent to the local display.
Name	The label by which the Configuration object is known.
OtherAlertType	A string describing the Alert type - used when the Alert type property is set to 1, Other State Change .
PollEnabled	This property shows if status-polling of the event source is enabled or not. TRUE for enable, and FALSE for disabled.
PollingInterval	The polling interval for event source, in seconds.
ProbableCause	<p>An enumerated value that describes the probable cause of the situation which resulted in the AlertIndication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = Unknown · 1 = Other · 2 = Adapter/Card Error · 3 = Application Subsystem Failure · 4 = Bandwidth Reduced · 5 = Connection Establishment Error · 6 = Communications Protocol Error · 7 = Communications Subsystem Failure · 8 = Configuration/Customization Error · 9 = Congestion · 10 = Corrupt Data · 11 = CPU Cycles Limit Exceeded · 12 = Dataset/Modem Error · 13 = Degraded Signal · 14 = DTE-DCE Interface Error · 15 = Enclosure Door Open · 16 = Equipment Malfunction

Property**Description**

- 17 = Excessive Vibration
- 18 = File Format Error
- 19 = Fire Detected
- 20 = Flood Detected
- 21 = Framing Error
- 22 = HVAC Problem
- 23 = Humidity Unacceptable
- 24 = I/O Device Error
- 25 = Input Device Error
- 26 = LAN Error
- 27 = Non-Toxic Leak Detected
- 28 = Local Node Transmission Error
- 29 = Loss of Frame
- 30 = Loss of Signal
- 31 = Material Supply Exhausted
- 32 = Multiplexer Problem
- 33 = Out of Memory
- 34 = Output Device Error
- 35 = Performance Degraded
- 36 = Power Problem
- 37 = Pressure Unacceptable
- 38 = Processor Problem (Internal Machine Error)
- 39 = Pump Failure
- 40 = Queue Size Exceeded
- 41 = Receive Failure
- 42 = Receiver Failure
- 43 = Remote Node Transmission Error
- 44 = Resource at or Nearing Capacity
- 45 = Response Time Excessive
- 46 = Retransmission Rate Excessive
- 47 = Software Error
- 48 = Software Program Abnormally Terminated
- 49 = Software Program Error (Incorrect Results)
- 50 = Storage Capacity Problem
- 51 = Temperature Unacceptable
- 52 = Threshold Crossed
- 53 = Timing Problem
- 54 = Toxic Leak Detected
- 55 = Transmit Failure
- 56 = Transmitter Failure
- 57 = Underlying Resource Unavailable
- 58 = Version MisMatch
- 59 = Previous Alert Cleared
- 60 = Login Attempts Failed
- 61 = Software Virus Detected
- 62 = Hardware Security Breached
- 63 = Denial of Service Detected
- 64 = Security Credential MisMatch
- 65 = Unauthorized Access
- 66 = Alarm Received


Property**Description**

- 67 = Loss of Pointer
- 68 = Payload Mismatch
- 69 = Transmission Error
- 70 = Excessive Error Rate
- 71 = Trace Problem
- 72 = Element Unavailable
- 73 = Element Missing
- 74 = Loss of Multi Frame
- 75 = Broadcast Channel Failure
- 76 = Invalid Message Received
- 77 = Routing Failure
- 78 = Backplane Failure
- 79 = Identifier Duplication
- 80 = Protection Path Failure
- 81 = Sync Loss or Mismatch
- 82 = Terminal Problem
- 83 = Real Time Clock Failure
- 84 = Antenna Failure
- 85 = Battery Charging Failure
- 86 = Disk Failure
- 87 = Frequency Hopping Failure
- 88 = Loss of Redundancy
- 89 = Power Supply Failure
- 90 = Signal Quality Problem
- 91 = Battery Discharging
- 92 = Battery Failure
- 93 = Commercial Power Problem
- 94 = Fan Failure
- 95 = Engine Failure
- 96 = Sensor Failure
- 97 = Fuse Failure
- 98 = Generator Failure
- 99 = Low Battery
- 100 = Low Fuel
- 101 = Low Water
- 102 = Explosive Gas
- 103 = High Winds
- 104 = Ice Buildup
- 105 = Smoke
- 106 = Memory Mismatch
- 107 = Out of CPU Cycles
- 108 = Software Environment Problem
- 109 = Software Download Failure
- 110 = Element Reinitialized
- 111 = Timeout
- 112 = Logging Problems
- 113 = Leak Detected
- 114 = Protection Mechanism Failure
- 115 = Protecting Resource Failure
- 116 = Database Inconsistency

Property	Description
	<ul style="list-style-type: none"> • 117 = Authentication Failure • 118 = Breach of Confidentiality • 119 = Cable Tamper • 120 = Delayed Information • 121 = Duplicate Information • 122 = Information Missing • 123 = Information Modification • 124 = Information Out of Sequence • 125 = Key Expired • 126 = Non-Repudiation Failure • 127 = Out of Hours Activity • 128 = Out of Service • 129 = Procedural Error • 130 = Unexpected Information
StartDelay	The start delay before polling the event source, in seconds.

DCIM_HDDAlertIndicationSettingData

Table 64. HDDAlertIndicationSettingData

Property	Description
ElementName	<p>The user-friendly name for this instance of SettingData. In addition, the user-friendly name can be used as an index property for a search or query.</p> <p> NOTE: The name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>

DCIM_BaseMetricValue

Table 65. BaseMetricValue

Property	Description
Duration	Property that represents the time duration over which this metric value is valid. This property should not exist for timestamps that apply only to a point in time but should be defined for values that are considered valid for a certain time period (ex. sampling). If the Duration property exists and is non null, the TimeStamp is to be considered the end of the interval.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
MetricDefinitionId	The key of the BaseMetricDefinition instance for this CIM_BaseMetricValue instance value.
MetricValue	The value of the metric represented as a string. Its original data type is specified in CIM_BaseMetricDefinition.
TimeStamp	Identifies the time when the value of a metric instance is computed. Note that this is different from the time when the instance is created. For a given CIM_BaseMetricValue instance, the TimeStamp changes whenever a new measurement snapshot is taken if Volatile is true. A management application may establish a time series of metric data by retrieving the instances of CIM_BaseMetricValue and sorting them according to their TimeStamp.
Volatile	If true, Volatile indicates that the value for the next point in time may use the same object and just change its properties (such as the value or timestamp). If false, the existing objects remain unchanged and a new object is created for the new point in time.

DCIM_LogEntry

Table 66. LogEntry

Property	Description
CreationTimeStamp	A LogEntry may include a timestamp for the entry.
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.

Property	Description
	<p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
RecordData	<p>A string containing LogRecord data. If the corresponding RecordFormat property is <empty>, or cannot be parsed according to the recommended format, RecordData should be interpreted as a free-form string. If the RecordFormat property contains parseable format information (as recommended in the RecordFormat Description qualifier), the RecordData string SHOULD be parsed in accordance with this format. In this case, RecordData SHOULD begin with the delimiter character and this character SHOULD be used to separate substrings in the manner described. The RecordData string can then be parsed by the data consumer and appropriately typed.</p>
RecordFormat	<p>A string describing the data structure of the information in the property, RecordData. If the RecordFormat string is <empty>, RecordData should be interpreted as a free-form string.</p> <p>To describe the data structure of RecordData, the RecordFormat string should be constructed as follows:</p>
RecordID	<p>RecordID may be used to provide a representation of log entry ordering or pointers/handles for log entries.</p>

DCIM_IndicatorLEDCapabilities

Table 67. IndicatorLEDCapabilities

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned</p>

Property

Description

to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above **preferred** algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the **preferred** algorithm must be used with the <OrgID>set to CIM.

SupportedActivationStates

SupportedActivationStates indicates the supported activation states for the associated IndicatorLED. See CIM_IndicatorLED.ActivationState for descriptions of the values.

Possible values are:

- 2 = Lit
- 3 = Blinking
- 4 = Off
- 5 = Control Pattern
- .. = DMTF Reserved
- 32768.65535 = Vendor Reserved

SupportedColors

This property indicates the colors supported by the associated instance of CIM_IndicatorLED.

Possible values are:

- 1 = Other
- 3 = White
- 4 = Red
- 5 = Green
- 6 = Blue
- 7 = Orange
- 8 = Yellow
- 9 = Black
- .. = DMTF Reserved
- 32768.65535 = Vendor Reserved

SupportedControlModes

SupportedControlModes indicates the control modes supported for the LED. See CIM_IndicatorLED.CurrentControlMode for more information.

Possible values are:

- 2 = Automatic
- 3 = Manual
- 4 = Test
- .. = DMTF Reserved
- 32768.65535 = Vendor Reserved

SupportedControlPatterns

SupportedControlPatterns describes the control patterns supported by the associated LED. The values of SupportedControlPatterns may be an exact match for values allowed for CIM_IndicatorLED.ControlPatterns or may indicate general categories of behavior. The interpretation of value is specific to the business entity identified by <OrgID>. Each value of SupportedControlPatterns is constructed using the following **preferred** algorithm: <OrgID>::<Pattern>Where <OrgID> and < Pattern> are separated by two colons (::), and where <OrgID> includes a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the ControlPattern or that is a registered ID assigned to the business entity by a recognized global authority. <Pattern> is chosen by the business entity and is not reused to identify different underlying (real-world)

Property	Description
	behaviors. If the behavior specified for the LED adheres to a standard or proprietary specification, <Pattern> is a uniquely assigned value identifying the behavior. If the behavior for the LED is described using a standard or proprietary grammar, <Pattern> is prefixed with a uniquely assigned identifier for the grammar.
SupportedIndicatedConditions	<p>The conditions that may be indicated by the LED. See CIM_IndicatorLED.IndicatedCondition for a description of the values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 1 = Other · 3 = Location · 4 = Attention · 5 = Activity · 6 = Powered On · 7 = Fault · .. = DMTF Reserved · 32768..65535 = Vendor Reserved

DCIM_ProcessorCapabilities

Table 68. ProcessorCapabilities

Property	Description
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
ElementNameMask	This string expresses the restrictions on ElementName. The mask is expressed as a regular expression. See DMTF standard ABNF with the Profile Users Guide, appendix C for the regular expression syntax permitted. Since the ElementNameMask can describe the maximum length of the ElementName, then the requirements expressed in this property takes precedence of any length expressed in MaxElementNameLen.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID> set to CIM.</p>
NumberOfHardwareThreads	Number of hardware threads available for the processor. May be obtained from SMBIOS v2.5 4 offset 25h.
NumberOfProcessorCores	Number of processor cores available for processor. This number would not include cores disabled by hardware and may be obtained from SMBIOS 2.5 Type 4 offset 23h.

DCIM_AccountManagementCapabilities


Table 69. AccountManagementCapabilities

Property	Description
AccountManagementCapabilitiesElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm:</p> <p><OrgID>:<LocalID></p> <p>Where <OrgID> and <LocalID>are separated by a colon '!', and where MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema_Name>_<Class_Name>structure of Schema class names.) In addition, to ensure uniqueness MUST NOT contain a colon ('!'). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the <OrgID>set to 'CIM'.</p>
OperationsSupported	<p>OperationsSupported describes the type of operations that are supported for an Account associated with the AccountManagementService.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Create — Indicates the AccountManagementService may be used to create new accounts.• 3 = Modify — Indicates that the associated Accounts may be modified.• 4 = Delete — Indicates that associated Accounts may be deleted.• .. = DMTF Reserved• 0x8000..0xFFFF = Vendor Reserved

DCIM_BootServiceCapabilities


Table 70. BootServiceCapabilities

Property	Description
BootStringsSupported	<p>An enumeration indicating the boot string properties in the CIM_BootSourceSetting which are supported. If the array contains a value, then all the BootSourceSetting instances managed by the service are guaranteed to have a non-null value for the corresponding property. Since this is an array, multiple values may be specified.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = BootString• 3 = BIOSBootString

Property	Description
	<ul style="list-style-type: none"> 4 = StructuredBootString
ElementName	<p>The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon ':'; and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (':'). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the <OrgID> set to 'CIM'.</p>

DCIM_PlatformWatchdogServiceCapabilities


Table 71. PlatformWatchdogServiceCapabilities

Property	Description
ActionOnExpirationSupported	<p>ActionOnExpirationSupported indicates the actions which can be performed when the watchdog timer expires. See CIM_PlatformWatchdogService.ActionOnExpiration for a description of the values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = None - Status Only 3 = System Reset 4 = System Power Off 5 = System Power Off, then On 6 = Generate System NonMaskableInterrupt (NMI) 7 = Generate System Management Interrupt (SMI) 8 = Reset Monitored Entity
ElementName	<p>The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p>

Property	Description
	Where <OrgID> and <LocallD> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocallD> . <LocallD> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.
LastExpirationDataSupported	LastExpirationDataSupported indicates the data which is provided on the last expiration of the watchdog timer. The values in the enumeration are: A value set to 2 (Time) indicates that the time of the last expiration is provided.
RequestedStatesSupported	RequestedStatesSupported indicates the possible states that can be requested when using the method RequestStateChange on the EnabledLogicalElement. Possible values are: <ul style="list-style-type: none"> • 2 = Enabled • 3 = Disabled • 4 = Shut Down • 6 = Offline • 7 = Test • 8 = Defer • 9 = Quiesce • 10 = Reboot • 11 = Reset
WatchdogTimerDataSupported	WatchdogTimerDataSupported indicates the data which is provided on the value of the watchdog timer. Possible values are: <ul style="list-style-type: none"> • 2 = Current Value — Indicates that the time of the current value of the timer is provided. • 3 = Timer Resolution — Indicates that the timer resolution for the last expiration is provided.

DCIM_DHCPCapabilities

Table 72. DHCPCapabilities

Property	Description
ElementName	The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as an index property for a search of query.  NOTE: Name does not have to be unique within a namespace.
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:

Property

Description

<OrgID> : <LocalID>

Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above **preferred** algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the **preferred** algorithm must be used with the <OrgID>set to CIM.

DCIM_PowerUtilizationManagementCapabilities

Table 73. PowerUtilizationManagementCapabilities

Property

Description

InstanceID

Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following **preferred** algorithm:

<OrgID> : <LocalID>

Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above **preferred** algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the **preferred** algorithm must be used with the <OrgID>set to CIM.

RequiredCustomSettings

Array of custom power utilization algorithm settings required by the RequestPowerUtilizationAlgorithm and RequestPowerUtilizationAlgorithmEl methods' CustomSettingNames parameter, if the RequestedAlgorithm parameter has value of 2 (**Custom Settings Based**).

Possible values are:

- 0 = Unknown
- 2 = CPUPowerMode
- 3 = MemoryPowerMode
- 4 = OtherMemoryPowerMode
- 5 = FanPowerMode

SupportedMethods

Each enumeration corresponds to support for the like-named method of the MetricService.


Possible values are:

- .. = DMTF Reserved
- 32768 = RequestPowerUtilizationLimit
- 32769 = RequestPowerUtilizationAlgorithm

Property	Description
	<ul style="list-style-type: none"> 32770 = RequestPowerUtilizationAlgorithmEl 32771.65535 = Vendor Specific
SupportedRequestedAlgorithms	Array of power utilization algorithms supported by the RequestPowerUtilizationAlgorithm and RequestPowerUtilizationAlgorithmEl methods RequestedAlgorithm parameter of the associated Service.
SupportedUtilizationLimitUnits	Array of programmatic units for power utilization limit supported by the RequestPowerUtilizationLimit method's UtilizationLimit parameter.

DCIM_EnabledLogicalElementCapabilities

Table 74. EnabledLogicalElementCapabilities

Property	Description
ElementName	<p>The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
RequestedStatesSupported	<p>RequestedStatesSupported indicates the possible states that can be requested when using the method RequestStateChange on the EnabledLogicalElement.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 2 = Enabled 3 = Disabled 4 = Shut Down 6 = Offline 7 = Test 8 = Defer 9 = Quiesce 10 = Reboot 11 = Reset

DCIM_ButtonCapabilities

Table 75. ButtonCapabilities

Property	Description
ElementNameEditSupported	Boolean indicating whether the ElementName can be modified.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
RequestedStatesSupported	<p>RequestedStatesSupported indicates the possible states that can be requested when using the method RequestStateChange on the EnabledLogicalElement.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 2 = Enabled• 3 = Disabled• 4 = Shut Down• 6 = Offline• 7 = Test• 8 = Defer• 9 = Quiesce• 10 = Reboot• 11 = Reset

DCIM_LCDPanelCapabilities


Table 76. LCDPanelCapabilities

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity</p>

Property	Description
	that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.
SupportedDisplayDataCategories	Identifies the category of data to be displayed on the LCD Panel. Possible values are: <ul style="list-style-type: none"> · 2 = None · 3 = User Specified · 4 = Default · 5 = IPv4 Address · 6 = IDRAC MAC Address · 7 = Service Tag · 8 = System Name · 9 = IPv6 Address · 10 = Ambient · 11 = System Power

DCIM_PowerManagementCapabilities

Table 77. PowerManagementCapabilities

Property	Description
ElementName	The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.  NOTE: Name does not have to be unique within a namespace.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.

Property

Description

PowerChangeCapabilities

An enumeration indicating the specific power-related capabilities of a managed element. Since this is an array, multiple values may be specified.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Power Saving Modes Entered Automatically — Indicates that a managed element can change its power state based on usage or other criteria
- 3 = Power State Settable — Indicates that the RequestPowerStateChange method is supported
- 4 = Power Cycling Supported — Indicates that the RequestPowerStateChange method can be invoked with the PowerState input variable set to **Power Cycle (Off Soft)**
- 5 = Timed Power On Supported — Indicates that the RequestPowerStateChange method can be invoked with the PowerState input variable set to 'Power On' and the Time parameter set to a specific date and time, or interval, for power on.
- 6 = Off Hard Power Cycling Supported
- 7 = HW Reset Supported
- 8 = Graceful Shutdown Supported — Indicates that the managed element can be sent a hardware signal requesting an orderly shutdown prior to the requested power state change.


PowerStatesSupported

An enumeration that indicates the power states supported by a managed element. Because this is an array, multiple values can be specified. The current values in the enumeration are:

- 2 = On — Corresponds to ACPI state G0 or S0 or D0.
- 3 = Sleep - Light — Corresponds to ACPI state G1, S1/S2, or D1.
- 4 = Sleep - Deep — Corresponds to ACPI state G1, S3, or D2.
- 5 = Power Cycle (Off - Soft) — Corresponds to ACPI state G2, S5, or D3, but where the managed element is set to return to power state **On** at a pre-determined time.
- 6 = Off — Hard, corresponding to ACPI state G3, S5, or D3.
- 7 = Hibernate (Off - Soft) — Corresponds to ACPI state S4, where the state of the managed element is preserved and will be recovered upon powering on.
- 8 = Off — Soft, corresponding to ACPI state G2, S5, or D3.
- 9 = Power Cycle (Off-Hard) — Corresponds to the managed element reaching the ACPI state G3 followed by ACPI state S0.
- 10 = Master Bus Reset, corresponds to the system reaching ACPI state S5 followed by ACPI state S0. This is used to represent system master bus reset.
- 11 = Diagnostic Interrupt (NMI) — Corresponds to the system reaching ACPI state S5 followed by ACPI state S0. This is used to represent system non-maskable interrupt.
- 12 = Off - Soft Graceful — Equivalent to Off Soft but preceded by a request to the managed element to perform an orderly shutdown.
- 13 = Off - Hard Graceful — Equivalent to Off Hard but preceded by a request to the managed element to perform an orderly shutdown.
- 14 = Master Bus Rest Graceful — Equivalent to Master Bus Reset but preceded by a request to the managed element to perform an orderly shutdown.
- 15 = Power Cycle (Off - Soft Graceful) — Equivalent to Power Cycle (Off - Soft) but preceded by a request to the managed element to perform an orderly shutdown.
- 16 = Power Cycle (Off - Hard Graceful) — Equivalent to Power Cycle (Off - Hard) but preceded by a request to the managed element to perform an orderly shutdown.
- .. = DMTF Reserved.
- 0x7FFF..0xFFFF = Vendor Specific.


DCIM_PhysicalAssetCapabilities

Table 78. PhysicalAssetCapabilities

Property	Description
ElementName	<p>The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
FRUInfoSupported	<p>Boolean indicating whether the PartNumber, Serial Number, Model, Manufacturer, and SKU properties of PhysicalElement are non-null, non-blank values, and the availability of the complete FRU information.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>

DCIM_RoleBasedManagementCapabilities


Table 79. RoleBasedManagementCapabilities

Property	Description
ElementName	<p>The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.</p> <p> NOTE: Name does not have to be unique within a namespace.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen</p>

Property	Description
	by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.
SharedPrivilegeSupported	Set to TRUE if this PrivilegeManagementService supports association of multiple subjects or targets to a particular Privilege. If False, the AssignAccess method supports at most one entry each in the Subjects and Targets parameters.

DCIM_AllocationCapabilities

Table 80. AllocationCapabilities

Property	Description
ElementName	The user friendly name for this instance of Capabilities. In addition, the user friendly name can be used as a index property for a search of query.  NOTE: Name does not have to be unique within a namespace.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon ':', and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name> _<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (':'). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the 'preferred' algorithm MUST be used with the <OrgID> set to 'CIM'.
ResourceType	The type of resource this allocation setting represents. Possible values are: <ul style="list-style-type: none"> • 1 = Other • 2 = Computer System • 3 = Processor • 4 = Memory • 5 = IDE Controller • 6 = Parallel SCSI HBA • 7 = FC HBA • 8 = iSCSI HBA • 9 = IB HCA • 10 = Ethernet Adapter • 11 = Other Network Adapter • 12 = I/O Slot • 13 = I/O Device

Property	Description
	<ul style="list-style-type: none"> • 14 = Floppy Drive • 15 = CD Drive • 16 = DVD drive • 17 = Disk Drive • 18 = Tape Drive • 19 = Storage Extent • 20 = Other Storage Device • 21 = Serial port • 22 = Parallel port • 23 = USB Controller • 24 = Graphics controller • 25 = IEEE 1394 Controller • 26 = Partitionable Unit • 27 = Base Partitionable Unit • 28 = Power • 29 = Cooling Capacity • 30 = Ethernet Switch Port • 31 = Logical Disk • 32 = Storage Volume • 33 = Ethernet Connection • .. = DMTF reserved • 0x8000..0xFFFF = Vendor Reserved

SharingMode

Indicates how access to underlying resource is granted.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = Dedicated — Exclusive access to underlying resource
- 3 = Shared — Shared use of underlying resource.
- .. = DMTF reserved
- 0x8000..0xFFFF = Vendor Reserved

Actual quantity is controlled by min, max size, weights, and so on.

DCIM_BIOSServiceCapabilities

Table 81. BIOSServiceCapabilities

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the Namespace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <OrgID> and <LocalID> are separated by a colon ':', and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (':'). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>. <LocalID> is chosen by</p>

Property	Description
	the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the <OrgID> set to 'CIM'.
MethodsSupported	<p>This property advertises the methods that are supported by the service .</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 0 = SetBIOSAttribute · 1 = RestoreBIOSDefaults · 2 = SetBIOSAttributeEmbeddedInstance · 3 = ReadRawBIOSData · 4 = WriteRawBIOSData · 5 = SetBIOSAttributes · 6.65535 = DMTF Reserved · 65536..4294967295 = Vendor Specified

DCIM_SoftwareInstallationServiceCapabilities

Table 82. SoftwareInstallationServiceCapabilities

Property	Description
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
SupportedAsynchronousActions	<p>Enumeration indicating what operations will be executed as asynchronous jobs. If an operation is included in both this and SupportedSynchronousActions then the underlying implementation is indicating that it may or may not create a job. If a Job is created, then the methods in SoftwareInstallationService return a reference to that Job as the Job parameter.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Defer target/system reset · 3 = Force installation · 4 = Install · 5 = Update · 6 = Repair · 7 = Reboot · 8 = Password

Property	Description
SupportedInstallOptions	<ul style="list-style-type: none"> · 9 = Uninstall · 10 = Log · 11 = SilentMode · 12 = AdministrativeMode · .. = DMTF Reserved · 32768.65535 = Vendor Specific <p>An enumeration indicating the specific install related options supported by this service. Since this is an array, multiple values may be specified. See the InstallOptions parameter of the SoftwareInstallationService.InstallFromSoftwareIdentity method for the description of these values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = Defer target/system reset · 3 = Force installation · 4 = Install · 5 = Update · 6 = Repair · 7 = Reboot · 8 = Password · 9 = Uninstall · 10 = Log · 11 = SilentMode · 12 = AdministrativeMode · .. = DMTF Reserved · 32768.65535 = Vendor Specific
SupportedTargetTypes	<p>An array containing a list of SoftwareIdentity.TargetType properties that this service 'knows' how to install. TargetType is an application specific string which is invariant across version or name changes of the SoftwareIdentity and so can be used by a client to select Software Identities compatible with this service. If the service is generic (for example an OS installer), this array will be empty.</p>
SupportedURISchemes	<p>This property lists the URI schemes supported by the SoftwareInstallationService.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · 2 = data · 3 = file · 4 = ftp · 5 = http · 6 = https · 7 = nfs · 8 = tftp · .. = DMTF Reserved · 0x8000.0xFFFF = Vendor Specific

DCIM_ConcreteCollection

Table 83. ConcreteCollection

Property	Description
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>

DCIM_RedundancySet

Table 84. RedundancySet

Property	Description
ElementName	<p>ElementName A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p>

Property

Description

Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above **preferred** algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the Namespace of this instance. For DMTF-defined instances, the **preferred** algorithm must be used with the <OrgID>set to CIM.

MinNumberNeeded

MinNumberNeeded indicates the smallest number of elements that MUST be operational in order to function. For example, in an N+1 redundancy relationship, the MinNumberNeeded property is set equal to N. In a 'LimitedSparing' environment, this property is meaningless and SHOULD be set to zero.

RedundancyStatus

RedundancyStatus provides information on the state of the RedundancyGroup.

Possible values are:

- 0 = Unknown
- 1 = DMTF Reserved
- 2 = Fully Redundant — Indicates that all of the configured redundancy is still available
- 3 = Degraded Redundancy — Indicates that some configured elements are degraded, missing or failed but that the number of elements in the set is still greater than the minimum required (**MinNumberNeeded**);
- 4 = Redundancy Lost — Indicates that sufficient configured elements are missing or failed that no redundancy is available and the next failure experienced will cause overall failure.
- 5 = Overall Failure — Indicates that there has been an overall failure of the RedundancySet.

TypeOfSet

TypeOfSet provides information on the type of redundancy. - N+1 (=2) indicates all members are active, are unaware and function independent of one another. However, there exist at least one extra member to achieve functionality. **Sparing** is implied (i.e. each member can be a spare for the other(s)). An example of N+1 is a system that has 2 power supplies, but needs only 1 power supply to functioning properly.

Possible values are:

- 0 = Unknown
- 1 = Other
- 2 = N+1
- 3 = Load Balanced — Indicates all members are active. However, their functionality is not independent of each other. Their functioning is determined by some sort of load balancing algorithm (implemented in hardware and/or software). **Sparing** is implied (i.e. each member can be a spare for the other(s)).
- 4 = Sparing — Indicates that all members are active and are aware of each others. However, their functionality is independent until failover. Each member can be a spare for the other(s).
- 5 = Limited Sparing — Indicates that all members are active, and they may or may not be aware of each and they are not spares for each other. Instead, their redundancy is indicated by the IsSpare relationship.
- .. = DMTF Reserved
- 0x8000.. = Vendor Reserved

DCIM_Role

Table 85. Role

Property	Description
CommonName	A Common Name is a (possibly ambiguous) name by which the role is commonly known in some limited scope (such as an organization) and conforms to the naming conventions of the country or culture with which it is associated.
CreationClassName	Indicates the name of the class or the subclass used in the creation of an instance. When used with the other key properties of this class, this property allows all instances of this class and its subclasses to be uniquely identified.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
Name	The Name property defines the label by which the object is known. In the case of an LDAP-derived instance, the Name property value may be set to the distinguished name of the LDAP-accessed object instance.
RoleCharacteristics	<p>RoleCharacteristics provides descriptive information about the intended usage of the Role.</p> <p>Possible values are:</p> <ul style="list-style-type: none">· 2 = Static· 3 = Opaque· .. = DMTF Reserved· 32000..65535 = Vendor Specific <p>When the value 2 Static is specified, no modification to the role is allowed. Any requests by client to change the privileges or the scope of the role by modifying the associated instances of CIM_Privilege or referencing associations fails.</p> <p>When the value 2 Static is not specified, the instance of CIM_Role may be modified by a client. The modification may include changing the scope of the role or rights granted. When the value 3 Opaque is specified, the rights granted by the CIM_Role instance is not explicitly modeled through aggregation of instances of CIM_Privilege.</p> <p>When the value 3 Opaque is not specified, the rights granted by the instance of CIM_Role is explicitly modeled through aggregation of instances of CIM_Privilege.</p>

DCIM_IndicationSettingCollection

Table 86. IndicationSettingCollection

Property	Description
ElementName	Human user oriented identifier for this instance.
InstanceID	<p>Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. To ensure uniqueness within the NameSpace, the value of InstanceID should be constructed using the following preferred algorithm:</p> <p><OrgID> : <LocalID></p> <p>Where <OrgID> and <LocalID> are separated by a colon (:), and where <OrgID> must include a copyrighted, trademarked, or otherwise unique name that is owned by the business entity that is creating or defining the InstanceID or that is a registered ID assigned to the business entity by a recognized global authority. (This requirement is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness, <OrgID> must not contain a colon (:). When using this algorithm, the first colon to appear in InstanceID must appear between <OrgID> and <LocalID> . <LocalID> is chosen by the business entity and should not be reused to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity must assure that the resulting InstanceID is not reused across any InstanceIDs produced by this or other providers for the NameSpace of this instance. For DMTF-defined instances, the preferred algorithm must be used with the <OrgID>set to CIM.</p>
Name	The name of the product-defined event sources.
OccurrencesCount	Defines TXT state in MCH for vPro brand (on/off).

DCIM_ConfigurationCapacity

Table 87. ConfigurationCapacity

Property	Description
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
Increment	Increment in which Elements must be added or removed.
MaximumCapacity	Maximum number of Elements of type, ObjectType, that may be installed.
Name	The inherited Name serves as a part of the Configuration Capacity object key.
ObjectType	The type of object (power supply, fan, disk drive, ...) whose capacities are indicated. This information is part of the class' key.

Property

Description

Possible values are:

- 0 = Other
- 1 = Processors
- 2 = Power Supplies
- 3 = Fans
- 4 = Batteries
- 5 = I/O Slots
- 6 = Memory Slots
- 7 = MediaAccessDevices (Drives)
- 8 = StorageMediaLocation Slots
- 9 = StorageMediaLocation Magazines
- 10 = StorageMediaLocation Panels
- 11 = StorageMediaLocation InterLibrary Ports
- 12 = StorageMediaLocation Limited Access Ports
- 13 = Doors
- 14 = MediaTransferDevice Pickers
- 15 = MediaTransferDevice Changers
- 16 = LabelReaders
- 17 = Contained Chassis
- 18 = Connected Chassis
- 19 = Connected Frames
- 20 = Front Side I/O Slots
- 21 = Back Side I/O Slots
- 22 = Cache Memory
- 23 = NVS Memory
- 24 = Volatile Memory
- 25 = Multi-Purpose

UsedCapacity

This property defines the total capacity in use.

VendorCompatibilityStrings

An array of strings that identifies the compatibility of the elements within the configuration capacity. This allows vendors to provide information to the system administrators by providing sufficient information to request the appropriate hardware that can populate the configuration. In order to ensure uniqueness within the NameSpace, each value defined by the vendor for use in the VendorCompatibilityStrings property SHOULD be constructed using the following **preferred** algorithm:

<OrgID>:<LocalID>

Where <OrgID> and <LocalID> are separated by a colon ':', and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (':'). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID>and <LocalID>. <LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements.

DCIM_Location

Table 88. Location

Property	Description
Address	Address is a free-form string indicating a street, building, or other type of address for the location of the PhysicalElement.
Altitude	The altitude at which the managed resource is located.
Building	Free form string identifying the building in which the managed element resides.
Campus	Free form string identifying the campus in which the managed element resides.
ChangeableType	Enumeration indicating intended usage of the DCIM_Location instance. Possible values are: <ul style="list-style-type: none">· 0 = Not Changeable — Persistent — Indicates the instance of DCIM_Location reports read only location information and is not modifiable.· 1 = Changeable — Transient — Indicates the DCIM_Location reports location information that may be modified by the client but is not persisted.· 2 = Changeable — Persistent — Indicates the DCIM_Location reports location information that may be modified by the client that is persisted.· 3 = Not Changeable — Transient — Indicates the instance of DCIM_Location reports read only location information and is not modifiable.
City	Free form string identifying the city in which the managed element resides.
Country	Free form string identifying the Country in which the managed element resides.
ElementName	Human user oriented identifier for this instance.
Floor	Free form string identifying the floor in which the managed element resides.
GPSLatitude	The latitude at which the managed resource is located.
GPSLongitude	The longitude at which the managed resource is located.
MaxStringLength	If ChangeableType has the value 1 or 2 , MaxStringLength specifies the maximum length for any property that may be modified by a client.
Name	Name is a free-form string defining a label for the Location. It is a part of the key for the object.
PhysicalPosition	Position is a free-form string that indicates the placement of a PhysicalElement. It can specify slot information on a HostingBoard, mounting site in a Cabinet, or latitude and longitude information, for example, from a GPS. It is part of the key of the Location object.
PostalCode	Free form string specifying postal code in which the managed element resides.
Province	Free form string identifying the province in which the managed element resides.
Rack	Free form string identifying the rack in which the managed element resides.
RackCluster	Free form string identifying the rack cluster in which the managed element resides.

Property	Description
RackTheta	Free form string identifying the rack theta.
RackUnit	A rack unit is a standard measurement of height used to denote the amount of space a physical component occupies in a rack. Rack capacity may be expressed in terms rack units. When used to indicate location, rack units indicate an offset from the bottom of rack. Thus RackUnit identifies a particular offset from the bottom of the rack that is occupied by the managed resource. It is implementation-specific whether the rack unit reported is the highest, lowest, or intermediate rack unit occupied by the managed resource.
Row	Free form string identifying the row in which the managed element resides.
State	Free form string identifying the state in which the managed element resides.
StreetAddressOne	Free form string for the first line of a street address.
StreetAddressTwo	Free form string for the second line of a street address. Uses of this property include consistency with form based address entry, or if the number of characters in the street address exceed MaxStringLength.
SetLocation (Method)	This method allows you to change the physical location of the system.

DCIM_BIOSEnumeration

Table 89. BIOSEnumeration

Property	Description
AttributeName	A string identifying the structured element name for a BIOS attribute using the format <OrgID> : <identifier> in which <OrgID>, does contain a colon (:). The value of <OrgID> is a copyrighted, trademarked or otherwise unique name that is owned by the entity defining the <identifier>, or is a registered ID that is assigned to the entity by a recognized global authority. For DMTF defined identifiers, the <OrgID> is set to DMTF and the <identifier> is specified in the BIOS Attribute Registry. <identifier>
CurrentValue	An array of strings representing the current value or values of the BIOS Attribute.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: <OrgID> : <LocalID> Where <LocalID> and <OrgID> are separated by a colon :, and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (:). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>. <LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the <OrgID> set to CIM .
IsReadOnly	This property specifies if the underlying system BIOS or BIOSService will not allow the Attribute to be modified through calls to the methods CIM_BIOSService.SetBIOSAttribute or CIM_BIOSService.SetBIOSDefaults. This does not mean the Attribute can not be modified through other means. Only that the CIM interface is not capable of making a change.

Property	Description
PossibleValues	An array of strings containing possible value definitions for the Attribute. The first element SHOULD not be NULL and there SHOULD be no NULL or empty string elements intermixed with populated array element values. A Value of NULL indicates an element's value is unknown.
PossibleValuesDescription	An array of free-form strings providing explanations and details behind the entries in the CIM_BIOSEnumeration.PossibleValues array. Note that each entry of this array is related to the entry in PossibleValues array that is located at the same index.

DCIM_BIOSPassword

Table 90. BIOSPassword

Property	Description	Supported Operating System(s)
AttributeName	A string identifying the structured element name for a BIOS attribute using the format <OrgID> : <identifier> in which <OrgID> , does contain a colon (:). The value of <OrgID> is a copyrighted, trademarked or otherwise unique name that is owned by the entity defining the <identifier>, or is a registered ID that is assigned to the entity by a recognized global authority. For DMTF defined identifiers, the <OrgID> is set to DMTF and the <identifier> is specified in the BIOS Attribute Registry.	Microsoft Windows, Linux
CurrentValue	CurrentValue returns an empty array.	Microsoft Windows, Linux
ElementName	A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.	Microsoft Windows, Linux
	<p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>	
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: <OrgID> : <LocalID>Where <OrgID> and <LocalID> are separated by a colon ' ; ',and where <OrgID> MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the <Schema Name>_<Class Name> structure of Schema class names.) In addition, to ensure uniqueness <OrgID> MUST NOT contain a colon (:). When using this algorithm, the first colon to appear in InstanceID MUST appear between <OrgID> and <LocalID>.<LocalID> is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the<OrgID> set to CIM .	Microsoft Windows, Linux
MaxLength	This property specifies the maximum string length allowed when modifying this BIOS attribute. A value of NULL defines the maximum length is unknown. A value of 0 defines the maximum length as 18446744073709551615, the limitation of the property definition as uint64.	Microsoft Windows, Linux

Property	Description	Supported Operating System(s)
MinLength	This property specifies the minimum string length allowed when modifying this BIOS attribute. A value of NULL is defined as zero.	Microsoft Windows, Linux
PendingValue	PendingValue returns an empty array.	Microsoft Windows

DCIM_BIOSString

Table 91. BIOSString

Property	Description
AttributeName	A string identifying the structured element name for a BIOS attribute using the format (:) in which , does contain a colon (:). The value of is a copyrighted, trademarked or otherwise unique name that is owned by the entity defining the , or is a registered ID that is assigned to the entity by a recognized global authority. For DMTF defined identifiers, the is set to DMTF and the is specified in the BIOS Attribute Registry.
CurrentValue	An array of strings representing the current value or values of the BIOS Attribute.
InstanceID	Within the scope of the instantiating Namespace, InstanceID opaquely and uniquely identifies an instance of this class. In order to ensure uniqueness within the NameSpace, the value of InstanceID SHOULD be constructed using the following preferred algorithm: :Where and are separated by a colon (:), and where MUST include a copyrighted, trademarked or otherwise unique name that is owned by the business entity creating/ defining the InstanceID, or is a registered ID that is assigned to the business entity by a recognized global authority (This is similar to the _ structure of Schema class names.) In addition, to ensure uniqueness MUST NOT contain a colon (:). When using this algorithm, the first colon to appear in InstanceID MUST appear between and . is chosen by the business entity and SHOULD not be re-used to identify different underlying (real-world) elements. If the above preferred algorithm is not used, the defining entity MUST assure that the resultant InstanceID is not re-used across any InstanceIDs produced by this or other providers for this instance's NameSpace. For DMTF defined instances, the preferred algorithm MUST be used with the set to CIM .
MaxLength	This property specifies the maximum string length allowed when modifying this BIOS attribute. A value of NULL defines the maximum length is unknown. A value of 0 defines the maximum length as 18446744073709551615, the limitation of the property definition as uint64.
StringType	The StringType property provides management applications with information defining implementation's capabilities regarding string values. A value of ASCII indicates a plain text formatting with no tabs formatting or bolds, plain text. A value of hex indicates a simple encoding of the numerals 0 to 9 and the letters A to F and is not case sensitive. A value of unicode indicates fully multi-lingual text support. A string BIOS Attribute with value of regex is a regular expression and the CIM_BIOSString.ValueExpression is applied to values represented and any value that is attempted to be set by invoking SetBIOSAttribute(). Possible values are: <ul style="list-style-type: none"> · 0 = Unknown · 2 = ASCII · 3 = hex · 4 = unicode · 5 = regex .. = DMTF Reserved · 65536..4294967295 = Vendor Reserved

DCIM_MemoryError

Table 92. MemoryError

Property	Description
DeviceCreationClassName	The scoping StorageExtent's CreationClassName.
DeviceID	The scoping StorageExtent's DeviceID.
ElementName	<p>A user-friendly name for the object. This property allows each instance to define a user-friendly name in addition to its key properties, identity data, and description information.</p> <p>NOTE: The Name property of ManagedSystemElement is also defined as a user-friendly name. But, it is often subclassed to be a Key. It is not reasonable that the same property can convey both identity and a user-friendly name, without inconsistencies. Where Name exists and is not a Key (such as for instances of LogicalDevice), the same information can be present in both the Name and ElementName properties.</p>
ErrorInfo	<p>An integer enumeration describing the type of error that occurred most recently. For example, single (value = 6) or double bit errors (7) can be specified using this property. The values, 12 – 14, are undefined in the CIM Schema since in DMI, they mix the semantics of the type of error and whether it was correctable or not. The latter is indicated in the property, CorrectableError.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = OK• 3 = Bad Read• 4 = Parity Error• 5 = Single-Bit Error• 6 = Double-Bit Error• 7 = Multi-Bit Error• 8 = Nibble Error• 9 = Checksum Error• 10 = CRC Error• 32768 = DIMM Disabled via Spare Activation
StartingAddress	Specifies the address of the memory error. The type of error is described by the ErrorInfo property. If the ErrorInfo property is equal to 3, OK , then this property has no meaning.
SystemCreationClassName	The scoping System's CreationClassName.
SystemName	The scoping System's Name.

DCIM_IdentityContext

Table 93. IdentityContext

Property	Description
ElementInContext	An Identity whose context is defined.
ElementProvidingContext	The ManagedElement that provides context or scope for the Identity.

DCIM_OrderedComponent

Table 94. OrderedComponent

Property	Description
AssignedSequence	<p>AssignedSequence is an unsigned integer n that indicates the relative order of ManagedElement instances. When n is a positive integer, it indicates a place in the sequence of members, with smaller integers indicating earlier positions in the sequence. The special value 0 indicates don't care. If two or more members have the same non-zero sequence number, then the ordering between those members is irrelevant, but they must all be ordered at the appropriate place in the overall sequence. A series of examples will make ordering of members clearer: If all members have the same sequence number, regardless of whether it is 0 or non-zero, any order is acceptable. o The values: 1:MEMBER A 2:MEMBER B 1:MEMBER C 3:MEMBER D indicate two acceptable orders: A,C,B,D or C,A,B,D, since A and C can be ordered in either sequence, but only at the 1 position.</p> <p>NOTE: The non-zero sequence numbers need not start with 1, and they need not be consecutive. All that matters is their relative magnitude.</p>
GroupComponent	The parent element in the association.
PartComponent	The child element in the association.

DCIM_Container

Table 95. Container

Property	Description
GroupComponent	The PhysicalPackage that contains other PhysicalElements, including other Packages.
LocationWithinContainer	A free-form string representing the positioning of the PhysicalElement within the PhysicalPackage. Information relative to stationary elements in the Container (for example, second drive bay from the top), angles, altitudes and other data may be recorded in this property. This string could supplement or be used in place of instantiating the CIM_Location object.
PartComponent	The PhysicalElement which is contained in the Package.

DCIM_ConcreteComponent

Table 96. ConcreteComponent

Property	Description
GroupComponent	The parent element in the association.
PartComponent	The child element in the association.

DCIM_SystemDevice

Table 97. SystemDevice

Property	Description
GroupComponent	The aggregating system also provides name scoping for the Account.
PartComponent	The subordinate Account.

DCIM_AccountOnSystem

Table 98. AccountOnSystem

Property	Description
GroupComponent	The aggregating system also provides name scoping for the Account.
PartComponent	The subordinate Account.

DCIM_InstalledOS

Table 99. InstalledOS

Property	Description
GroupComponent	The ComputerSystem.
PartComponent	The OperatingSystem installed on the ComputerSystem.
PrimaryOS	Boolean indicating that the OperatingSystem is the default OS for the ComputerSystem.

DCIM_SystemBIOS

Table 100. SystemBIOS

Property	Description
GroupComponent	The ComputerSystem that boots from the BIOS.
PartComponent	The System's BIOS.

DCIM_SystemComponent

Table 101. SystemComponent

Property	Description
GroupComponent	The parent System in the Association.
PartComponent	The child element that is a component of a System.

DCIM_SettingsDefineCapabilities

Table 102. SettingsDefineCapabilities

Property	Description
GroupComponent	The Capabilities instance.
PartComponent	A Setting used to define the associated Capabilities instance.
PropertyPolicy	<p>PropertyPolicy defines whether or not the non-null, non-key properties of the associated SettingData instance are treated independently or as a correlated set. For instance, an independent set of maximum properties may be defined, when there is no relationship between each property. On the other hand, several correlated sets of maximum properties may need to be defined when the maximum values of each are dependent on some of the others.</p> <p>Possible values are:</p> <ul style="list-style-type: none">· 0 = Independent· 1 = Correlated· 2.. = DMTF Reserved
ValueRange	<p>The ValueRange property indicates further semantics on the interpretation of all non-null, non-key properties of the Component SettingData. Minimums, Maximums, and Increments, are only evaluated against non-null, non-key, non-enumerated, non-boolean, numeric properties of the SettingData instance. Each property of that set is mathematically comparable to other instances of that property.</p> <p>Possible values are:</p> <ul style="list-style-type: none">· 0 = Point — Indicates that this SettingData instance provides a single set of values.· 1 = Minimums — Indicates that this SettingData instance provides minimum values for evaluated properties. When used with PropertyPolicy = Independent, only one such

Property	Description
	<p>setting per particular SettingData instance is specified for any Capabilities. Unless restricted by a Maximums on the same set of properties, all values that compare higher than the specified values are also considered to be supported by the associated capabilities instance.</p> <ul style="list-style-type: none"> 2 = Maximums — Indicates that this SettingData instance provides maximum values for evaluated properties. When used with PropertyPolicy = Independent, only one such setting per particular SettingData instance is specified for any Capabilities. Unless restricted by a Minimums on the same set of properties, all values that compare lower than the specified values are also considered to be supported by the associated capabilities instance. 3 = Increments — Indicates that this SettingData instance provides increment values for evaluated properties. For the associated Capabilities, if an evaluated property currently has no corresponding minimums or maximums, then the property has no affect. Otherwise, for each evaluated property: its value x is between the minimum and maximum, inclusively, and has the property that both the result of maximum minus x and the result of x minus minimum are each an integer multiple of the increment. If either minimum or maximum is not specified and the other is, then the missing value is respectively assumed to be the lowest or highest supported value for the property's data-type. Additionally, if both a minimum and a maximum are specified for an evaluated property, then the result of maximum minus minimum is an integer multiple of the increment. 4.. = DMTF Reserved

ValueRole

The ValueRole property indicates further semantics on the interpretation of the non-null, non-key properties of the Component SettingData.

Possible values are:

- 0 = Default — Indicates that property values of the component SettingData instance will be used as default values, when a new SettingData instance is created for elements whose capabilities are defined by the associated Capabilities instance. Across instances of settingdata, for particular properties having the same semantic purpose, at most one such settingdata instance is specified as a default.
- 1 = Optimal — Indicates that the SettingData instance represents optimal setting values for elements associated with the associated capabilities instance. Multiple component SettingData instances may be declared as optimal.
- 2 = Mean — Indicates that the non-null, non-key, non-enumerated, non-boolean, numeric properties of the associated SettingData instance represents an average point along some dimension. For different combinations of SettingData properties, multiple component SettingData instances may be declared as **Mean**.
- 3 = Supported — Indicates that the non-null, non-key properties of the Component SettingData instance represents a set of supported property values that are not otherwise qualified.
- 4.. = DMTF Reserved

DCIM_DeviceSAPImplementation

Table 103. DeviceSAPImplementation

Property	Description
Antecedent	The LogicalDevice.
Dependent	The ServiceAccessPoint implemented using the LogicalDevice.

DCIM_HostedAccessPoint

Table 104. HostedAccessPoint

Property	Description
Antecedent	The hosting System.
Dependent	The SAPs that are hosted on this System.

DCIM_HostedCollection

Table 105. HostedCollection

Property	Description
Antecedent	The scoping system.
Dependent	The collection defined in the context of a system.

DCIM_HostedService

Table 106. HostedService

Property	Description
Antecedent	The hosting System.
Dependent	The Service hosted on the System.

DCIM_VideoHeadOnController

Table 107. VideoHeadOnController

Property	Description
Antecedent	The video device that includes the head.
Dependent	The head on the video device.

DCIM_SAPSAPDependency

Table 108. SAPSAPDependency

Property	Description
Antecedent	The required ServiceAccessPoint.
Dependent	The ServiceAccessPoint that is dependent on an underlying SAP.

DCIM_ReferencedProfile

Table 109. ReferencedProfile

Property	Description
Antecedent	The RegisteredProfile that is referenced by the Dependent Profile.
Dependent	A RegisteredProfile that references other profiles.

DCIM_MetricDefForME

Table 110. MetricDefForME

Property	Description
Antecedent	The CIM_ManagedElement that can have metrics of this type associated with it.
Dependent	A CIM_BaseMetricDefinition for a CIM_ManagedElement.
MetricCollectionEnabled	<p>MetricCollectionEnabled indicates whether the metric defined by the referenced CIM_BaseMetricDefinition is being collected for the referenced CIM_ManagedElement.</p> <p>Possible values are:</p> <ul style="list-style-type: none">· 2 = Enabled — Indicates the metric is being collected.· 3 = Disabled — Indicates the metric is not being collected.· 4 = Reserved .. = DMTF Reserved· 32768..65535 = Vendor Reserved <p>When collection of a metric is reenabled, the metric is re-initialized such that any values for a current access metric reflect data collected after the time at which collection was reenabled.</p>
RecordedSince	<p>If a metric is being collected for an instance of CIM_ManagedElement, the RecordedSince indicates when the capturing of the metric began. If MetricCollectionEnabled is 3 (Disabled), the RecordedSince property has a value of 99990101000000.000000+000. A value of NULL indicates the beginning of the metric capture period is unknown.</p>

DCIM_MetricForME

Table 111. MetricForME

Property	Description
Antecedent	ManagedElement to which the metric values belong.
Dependent	A metric value for the ManagedElement.

DCIM_MetricInstance

Table 112. MetricInstance

Property	Description
Antecedent	The CIM_BaseMetricDefinition for this particular CIM_BaseMetricValue.
Dependent	A CIM_BaseMetricValue instance holding the Value.

DCIM_ElementInConnector

Table 113. ElementInConnector

Property	Description
Antecedent	The Connector into which the Element is inserted.
Dependent	The Element in the Connector.

DCIM_Docked

Table 114. Docked

Property	Description	Supported Operating System(s)
Antecedent	The Docking Station Chassis.	Microsoft Windows, Linux
Dependent	The System Chassis.	Microsoft Windows, Linux

DCIM_ConcreteDependency

Table 115. ConcreteDependency

Property	Description
Antecedent	Antecedent represents the independent object in this association.
Dependent	Dependent represents the object that is dependent on the Antecedent.

DCIM_Realizes

Table 116. Realizes

Property	Description
Antecedent	The physical component that implements the Device.
Dependent	The LogicalDevice.

DCIM_ComputerSystemPackage

Table 117. ComputerSystemPackage

Property	Description
Antecedent	Antecedent The PhysicalPackage(s) that realize a Unitary ComputerSystem.
Dependent	The UnitaryComputerSystem.
PlatformGUID	A Globally Unique Identifier for the System's Package.

DCIM_RunningOS

Table 118. RunningOS

Property	Description
Antecedent	The OperatingSystem currently running on the ComputerSystem.
Dependent	The ComputerSystem.

DCIM_UseOfLog

Table 119. UseOfLog

Property	Description
Antecedent	The Log.
Dependent	The ManagedSystemElement whose information is recorded in the Log.
RecordedData	A free-form string describing the use of the Log by the ManagedSystemElement.

DCIM_AssociatedIndicatorLED

Table 120. AssociatedIndicatorLED

Property	Description
Antecedent	The ManagedSystemElement that has an associated LED.
Dependent	The LED.

DCIM_AssociatedCacheMemory

Table 121. AssociatedCacheMemory

Property	Description
Antecedent	Memory installed on or associated with a Device.
Associativity	<p>An integer enumeration defining the system cache associativity. For example, 5 indicates a fully associative cache.</p> <p>Possible values are:</p> <ul style="list-style-type: none">0 = Unknown1 = Other2 = Direct Mapped3 = 2-way Set-Associative4 = 4-way Set-Associative5 = Fully Associative6 = 8-way Set-Associative7 = 16-way Set-Associative
CacheType	<p>Defines whether this is for instruction caching (value = 2), data caching (value = 3) or both (value = 4, Unified). Also, Other (1) and Unknown (0) can be defined.</p> <p>Possible values are:</p> <ul style="list-style-type: none">0 = Unknown1 = Other2 = Instruction

Property	Description
	<ul style="list-style-type: none"> 3 = Data 4 = Unified
Dependent	The LogicalElement.
ReadPolicy	<p>Policy that is employed by the Cache for handling read requests. For example, Read, Read-Ahead or both can be specified using the values, 2, 3 or 4, respectively. If the read policy is determined individually (ie, for each request), then the value 5 (Determination per I/O) should be specified. Other (1) and Unknown (0) are also valid values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Read 3 = Read-Ahead 4 = Read and Read-Ahead 5 = Determination Per I/O
WritePolicy	<p>Defines whether this is write-back (value = 2) or write-through (value = 3) Cache, or whether this information Varies with Address (4) or is defined individually for each I/O (5). Also, Other and Unknown (0) can be specified.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = Read 3 = Read-Ahead 4 = Read and Read-Ahead 5 = Determination Per I/O

DCIM_AssociatedSensor

Table 122. AssociatedSensor

Property	Description
Antecedent	The Sensor.
Dependent	The ManagedSystemElement for which information is measured by the Sensor.

DCIM_RemoteAccessAvailableToElement

Table 123. RemoteAccessAvailableToElement

Property	Description
Antecedent	The remote server or system.
Dependent	The EnabledLogicalElement which has knowledge of the remote server or system.

Property	Description
IsDefault	Indicates that this access information is defined as a default configuration for the system.
OrderOfAccess	When an element is accessing remote services and systems, it MAY be necessary to order those accesses. This property defines that ordering — where lower numbers indicate a higher priority for access. A value of 0 (default) indicates that ordering does not apply. If multiple RemoteAccessPoint instances have the same value for OrderOfAccess, then these AccessPoints MAY be used in any sequence defined by the implementation.

DCIM_ServiceServiceDependency

Table 124. ServiceServiceDependency

Property	Description
Antecedent	The required Service
Dependent	The Service that is dependent on an underlying Service.

DCIM_DeviceConnection

Table 125. DeviceConnection

Property	Description
Antecedent	A LogicalElement's Software Asset.
Dependent	The ManagedElement that requires or uses the software.

DCIM_ElementSoftwareIdentity

Table 126. ElementSoftwareIdentity

Property	Description
Antecedent	A LogicalElement's Software Asset.
Dependent	The ManagedElement that requires or uses the software.

DCIM_ElementCapabilities

Table 127. ElementCapabilities

Property	Description
Capabilities	The Capabilities object associated with the element.
ManagedElement	The managed element.

DCIM_ElementSettingData

Table 128. ElementSettingData

Property	Description
IsCurrent	<p>An enumerated integer that indicates that the referenced SettingData represents the last requested values for attributes of the Managed Element or that this information is unknown. Attributes of the SettingData itself indicate whether it represents the last configuration applied to the ManagedElement or is a transient snapshot of the requested settings. Current operational characteristics of a ManagedElement should be represented with properties of the ManagedElement. element or that this information is unknown. For a given ManagedElement and all instances of a SettingData subclass, there is at most one instance of ElementSettingData which references the ManagedElement and an instance of the SettingData sub-class where there is a specified non-null, non-key property of the SettingData sub-class, and the IsMaximum property on the referencing ElementSettingData instance has a value of Is Maximum or the IsMinimum property on the referencing ElementSettingData instance has a value of Is Minimum and the IsCurrent property on the referencing ElementSettingData instance has a value of Is Current. There is at most one instance of ElementSettingData which references a ManagedElement and an instance of a SettingData sub-class where the IsCurrent property has a value of Is Current and the IsMinimum property does not have a value of Is Minimum and the IsMaximum property does not have a value of Is Maximum.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Is Current• 2 = Is Not Current
IsDefault	<p>An enumerated integer that indicates that the referenced setting is a default setting for the element or that this information is unknown.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Is Default• 2 = Is Not Default
IsMaximum	<p>This property affects the interpretation of all non-null, non-enumerated, non-binary, numeric, non-key properties of the associated SettingData instance. All other properties of the associated SettingData instance are not affected by this property.</p> <p>(i) NOTE: It is assumed that the semantics of each property of this set are designed to be compared mathematically. When IsMaximum = Is Maximum, this property indicates that the affected property values specified in the associated SettingData instance defines desired maximum setting values. The operational maximum values should be modeled as a properties of the CIM_ManagedElement instance. When IsMaximum = Is Not Maximum, this property indicates that the affected property values specified in the associated SettingData instance does not define desired maximum setting values. When IsMaximum = Unknown, this property indicates that the affected property values specified in the associated SettingData instance may correspond to maximum desired setting values. When IsMaximum = Not Applicable, this property indicates that the affected property values specified in the associated SettingData instance is not interpreted with respect to whether each defines a desired maximum.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Not Applicable

Property

Description

- 2 = Is Maximum
- 3 = Is Not Maximum

IsMinimum

This property affects the interpretation of all non-null, non-enumerated, non-binary, numeric, non-key properties of the associated SettingData instance. All other properties of the associated SettingData instance are not affected by this property.

i **NOTE:** It is assumed that the semantics of each property of this set are designed to be compared mathematically. When IsMinimum = Is Minimum, this property indicates that the affected property values specified in the associated SettingData instance defines desired minimum setting values. The operational minimum values should be modeled as a properties of the CIM_ManagedElement instance. When IsMinimum = Is Not Minimum, this property indicates that the affected property values specified in the associated SettingData instance does not define desired minimum setting values. When IsMinimum = Unknown, this property indicates that the affected property values specified in the associated SettingData instance may correspond to minimum desired setting values. When IsMinimum = Not Applicable, this property indicates that the affected property values specified in the associated SettingData instance is not interpreted with respect to whether each defines a desired minimum.

Possible values are:

- 0 = Unknown
- 1 = Not Applicable
- 2 = Is Minimum
- 3 = Is Not Minimum

IsNext

An enumerated integer indicating whether or not the referenced setting is the next setting to be applied. For example, the application could take place on a re-initialization, reset, reconfiguration request. This could be a permanent setting, or a setting used only one time, as indicated by the flag. If it is a permanent setting then the setting is applied every time the managed element reinitializes, until this flag is manually reset. However, if it is single use, then the flag is automatically cleared after the settings are applied. Also note that if this flag is specified (i.e. set to value other than **Unknown**), then this takes precedence over any SettingData that may have been specified as Default. For example: If the managed element is a computer system, and the value of this flag is **Is Next**, then the setting will be effective next time the system resets. And, unless this flag is changed, it will persist for subsequent system resets. However, if this flag is set to **Is Next For Single Use**, then this setting will only be used once and the flag would be reset after that to **Is Not Next**. So, in the above example, if the system reboots in a quick succession, the setting will not be used at the second reboot.

Possible values are:

- 0 = Unknown
- 1 = Is Next
- 2 = Is Not Next
- 3 = Is Next For Single Use

IsPending

An enumerated integer that indicates whether or not the referenced CIM_SettingData instance represents outstanding changes to the configuration of the referenced CIM_ManagedElement that are known to be pending and are in the process of being applied. A value of 0 **Unknown** indicates that the referenced instance of CIM_SettingData may represent the last configuration applied to the referenced CIM_ManagedElement. A value of **2 (Is Pending)** indicates that the referenced instance of CIM_SettingData represents outstanding changes to the configuration of the referenced CIM_ManagedElement that are known to be pending. A value of **3 (Is Not Pending)** indicates that the referenced instance of CIM_SettingData does not represent outstanding changes to the configuration of the referenced CIM_ManagedElement.

Property	Description
	Possible values are: <ul style="list-style-type: none"> 0 = Unknown 2 = Is Pending 3 = Is Not Pending .. = DMTF Reserved 32768.. = Vendor Reserved
ManagedElement	The managed element.
SettingData	The SettingData object that is associated with the element.

DCIM_OrderedMemberOfCollection

Table 129. OrderedMemberOfCollection

Property	Description
AssignedSequence	AssignedSequence is an unsigned integer n that indicates the relative position of members within a Collection. When n is a positive integer, it indicates a place in the sequence of members, with smaller integers indicating earlier positions in the sequence. The special value 0 indicates don't care . If two or more members have the same non-zero sequence number, then the ordering between those members is irrelevant, but they must all be ordered at the appropriate place in the overall sequence. A series of examples will make ordering of members clearer: If all members have the same sequence number, regardless of whether it is 0 or non-zero, any order is acceptable. The values are: 1:MEMBER A 2:MEMBER B 1:MEMBER C 3:MEMBER D indicate two acceptable orders: A,C,B,D or C,A,B,D, because A and C can be ordered in either sequence, but only at the 1 position. <p>NOTE: The non-zero sequence numbers do not need to start with 1, and they do not need to be consecutive. However, the sequence numbers must reflect their relative magnitude.</p>
Collection	The Collection that aggregates members.
Member	The aggregated member of the Collection.

DCIM_MemberOfCollection

Table 130. MemberOfCollection

Property	Description
Collection	The Collection that aggregates members.
Member	The aggregated member of the Collection.

DCIM_OwningCollectionElement

Table 131. OwningCollectionElement

Property	Description
OwnedElement	The Collection owned or controlled by the ManagedElement.
OwningElement	The ManagedElement acting as the 'owner' or object that is responsible for the control of the Collection.

DCIM_ElementConformsToProfile

Table 132. ElementConformsToProfile

Property	Description
ConformantStandard	The RegisteredProfile to which the ManagedElement conforms.
ManagedElement	The ManagedElement that conforms to the RegisteredProfile.

DCIM_RoleLimitedToTarget

Table 133. RoleLimitedToTarget

Property	Description
DefiningRole	The Role whose target set is explicitly defined.
TargetElement	Reference to the target set that can be accessed from the Role.

DCIM_ElementCapacity

Table 134. ElementCapacity

Property	Description
Capacity	PhysicalCapacity describes the minimum and maximum requirements, and ability to support different types of hardware for a PhysicalElement.
Element	The PhysicalElement being described.

DCIM_ServiceAffectsElement

Table 135. ServiceAffectsElement

Property	Description
AffectedElement	The Managed Element that is affected by the Service.
AffectingElement	The Service that is affecting the ManagedElement.
AssignedSequence	<p>AssignedSequence is an unsigned integer 'n' that indicates the relative sequence in which order the ManagedElement instances are affected by the Service, which is associated to the ManagedElement instances through this class. The implementation of the Service uses the relative sequence to order all the managed elements represented by ManagedElements associated through this class for servicing or prioritizing. When n is a positive integer, it indicates a place in the sequence of affected elements, with smaller integers indicating earlier positions in the sequence. NULL or the special value 0 indicates don't care. If two or more affected elements have the same non-zero sequence number, then the ordering between those elements is irrelevant, but they must all be serviced in the appropriate order in the overall sequence. A series of examples will make order of elements clearer: If all elements affected have the same sequence number, regardless of whether it is 0 or non-zero, any order is acceptable. The values, 1:ELEMENT A 2:ELEMENT B 1:ELEMENT C 3:ELEMENT D, indicate two acceptable orders: A,C,B,D or C,A,B,D, since A and C can be ordered in either sequence, but only at the 1 position.</p> <p>i NOTE: The non-zero sequence numbers need not start with 1, and they need not be consecutive. All that matters is their relative magnitude.</p>
ElementEffects	<p>An enumeration that describes the effect on the ManagedElement. This array corresponds to the OtherElementEffectsDescriptions array, where the latter provides details that are related to the high-level effects enumerated by this property. Additional detail is required if the ElementEffects array contains the value 1 (Other).</p> <p>Possible values are:</p> <ul style="list-style-type: none">• 0 = Unknown• 1 = Other• 2 = Exclusive Use — Indicates that no other Service may have this association to the element.• 3 = Performance Impact — Deprecated in favor of Consumes, Enhances Performance, or Degrades Performance. Execution of the Service may enhance or degrade the performance of the element. This may be as a side-effect of execution or as an intended consequence of methods provided by the Service.• 4 = Element Integrity — Deprecated in favor of Consumes, Enhances Integrity, or Degrades Integrity. Execution of the Service may enhance or degrade the integrity of the element. This may be as a side-effect of execution or as an intended consequence of methods provided by the Service.• 5 = Manages — The Service manages the element.• 6 = Consumes — Execution of the Service consumes some or all of the associated element as a consequence of running the Service. For example, the Service may consume CPU cycles, which may affect performance, or Storage which may affect both performance and integrity. (For instance, the lack of free storage can degrade integrity by reducing the ability to save state.) Consumes may be used alone or in conjunction with other values, in particular, Degrades Performance and Degrades Integrity. Manages and not Consumes should be used to reflect allocation services that may be provided by a Service.• 7 = Enhances Integrity — The Service may enhance integrity of the associated element.• 8 = Degrades Integrity — The Service may degrade integrity of the associated element.• 9 = Enhances Performance — The Service may enhance performance of the associated element.• 10 = Degrades Performance — The Service may degrade performance of the associated element.

Property	Description
	<ul style="list-style-type: none"> .. = DMTF Reserved 0x8000..0xFFFF = Vendor Reserved
OtherElementEffectsDescriptions	Provides details for the effect at the corresponding array position in ElementEffects. This information is required if ElementEffects contains the value 1 (Other).

DCIM_AssociatedPowerManagementService

Table 136. AssociatedPowerManagementService

Property	Description
OtherPowerState	A string describing the additional power management state of the element, used when the PowerState is set to the value 1, Other .
OtherRequestedPowerState	A string describing the additional power management state of the element, used when the RequestedPowerState is set to the value 1, Other .
PowerOnTime	The time when the element will be powered on again, used when the RequestedPowerState has the value 2, On, 5, Power Cycle (Off - Soft) or 6, Power Cycle (Off - Hard) .
PowerState	<p>The current power state of the associated Managed System Element.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 = Other 2 = On 3 = Sleep - Light 4 = Sleep - Deep 5 = Power Cycle (Off - Soft) 6 = Off - Hard 7 = Hibernate (Off - Soft) 8 = Off - Soft 9 = Power Cycle (Off-Hard) 10 = Master Bus Reset 11 = Diagnostic Interrupt (NMI) 12 = Off - Soft Graceful 13 = Off - Hard Graceful 14 = Master Bus Reset Graceful 15 = Power Cycle (Off - Soft Graceful) 16 = Power Cycle (Off - Hard Graceful) .. = DMTF Reserved 0x7FFF..0xFFFF = Vendor Specific
RequestedPowerState	<p>The desired or the last requested power state of the associated Managed System Element, irrespective of the mechanism through which the request was made. If the requested power state is unknown, then the property has the value of 0 Unknown. If the property has no meaning or is not supported, then the property has the value 12 Not Applicable.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 = Unknown 1 = Other 2 = On

Property	Description
	<ul style="list-style-type: none"> · 3 = Sleep - Light · 4 = Sleep -_Deep · 5 = Power Cycle (Off - Soft) · 6 = Off - Hard · 7 = Hibernate (Off - Soft) · 8 = Off - Soft · 9 = Power Cycle (Off-Hard) · 10 = Master Bus Reset · 11 = Diagnostic Interrupt (NMI) · 12 = Not Applicable · 13 = Off - Soft Graceful · 14 = Off - Hard Graceful · 15 = Master Bus Reset Graceful · 16 = Power Cycle (Off - Soft Graceful) · 17 = Power Cycle (Off - Hard Graceful) · .. = DMTF Reserved · 0x7FFF..0xFFFF = Vendor Specific
ServiceProvided	The Service that is available.
UserOfService	The ManagedElement that can use the Service.

DCIM_ServiceAvailableToElement

Table 137. ServiceAvailableToElement

Property	Description
ServiceProvided	The Service that is available.
UserOfService	The ManagedElement that can use the Service.

DCIM_LogManagesRecord

Table 138. LogManagesRecord

Property	Description
Log	The Log.
Record	The record managed by the Log.

DCIM_InstalledSoftwareIdentity

Table 139. InstalledSoftwareIdentity

Property	Description
InstalledSoftware	The SoftwareIdentity that is installed.
System	The system on which the software is installed.

DCIM_ConcretIdentity

Table 140. ConcretIdentity

Property	Description
SameElement	SameElement Another aspect of the ManagedElement.
SystemElement	One aspect of the ManagedElement. The use of 'System' in the name does not limit the scope of the association. This name is an artifact of the original definition of the association.

DCIM_SMARTAttributeInfo

Table 141. SMARTAttributeInfo

Property	Description
AttributeID	AttributeID represents the relative reliability of individual performance or calibration attributes. The valid range of attribute values begins from 1–253 decimal.
AttributeName	Name defined for the corresponding AttributeID.
CurrentValue	Current value of an attribute which represents the relative reliability of individual performance or calibration attributes.
CustomThresholdValue	Each attribute has a corresponding Custom Threshold Value which is used for direct comparison to the Current Value to indicate the existence of a degrading or faulty condition. The numerical value of the Custom Threshold Value is determined by the IT administrator and set the value lesser than the Threshold Value set by the Manufacturer. The valid range for Attribute Thresholds is from 1–253 decimal.
DiskID	Disk ID of the HDD/SSD.
FirmwareVersion	Firmware Version of the HDD/SSD.
Manufacturer	HDD/SSD Manufacturer.
ModelNumber	HDD/SSD Model Number.
RawDataContent	Raw data content in hexadecimal for the corresponding AttributeID (6 bytes).
SerialNumber	HDD/SSD Serial Number.

Property	Description
StatusFlag	A 2-byte number which represents the status of the corresponding <code>AttributeID</code> : <ul style="list-style-type: none"> Bit 0: Prefail/Advisory bit Bit 1: Online data collection bit Bit 2–5: Vendor-specific Bit 6–15: Reserved
ThresholdValue	The (failure) limit of the attribute.
WorstValue	The worst (smallest) value ever found in the previous lifetime of the storage device.
SetCustomThreshold (Method)	This property represents the success or failure of the SMART operation. The method may return the following errors: <ul style="list-style-type: none"> 0 (Success) - If the method is completed successfully. 1 (Failure) - If the Input parameter is out of range or IO operation fails.

DCIM_SettingsDefineState

Table 142. SettingsDefineState

Property	Description
ManagedElement	The managed element.
SettingData	The SettingData object that provides additional information about the current state and configuration of the ManagedElement.

DCIM_ElementLocation

Table 143. ElementLocation

Property	Description
Element	The ManagedElement whose location is specified.
PhysicalLocation	The location of the element.

DCIM_CredentialContext

Table 144. CredentialContext

Property	Description
ElementInContext	A Credential whose context is defined.
ElementProvidingContext	The ManagedElement that provides context or scope for the Credential.

DCIM_OwningJobElement

Table 145. OwningJobElement

Property	Description
OwnedElement	The Job created by the ManagedElement.
OwningElement	The ManagedElement responsible for the creation of the Job.

BIOS settings supported in Dell Command | Monitor 10.2

Following is the list of BIOS settings supported in Dell Command | Monitor.

Table 146. BIOS settings supported in Dell Command | Monitor 10.2


BIOS Settings Name	Description	Supported Operating System(s)
Absolute	<p>Sets the value to the Absolute interface and controls the Absolute service.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enable - If enabled, then the Absolute service is activated or deactivated. • Disable - If disabled, then the Absolute service does not run. • Permanently Disabled - If the Absolute interface is permanently disabled, then the Absolute feature can be enabled by using the factory reset feature. 	Microsoft Windows, Linux
Active State Power Management	<p>Set the ASPM (Active State Power Management) level.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Auto — There is handshaking between the device and PCI Express hub to determine the best ASPM mode supported by the device. • Disabled — ASPM power management is turned off always. • L1 Only — ASPM power management is set to use L1. 	Microsoft Windows, Linux
Activity LED	<p>Sets the Network Activity Light Emitting Diode (LED) to any of the following:</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = EnableACPIOSControl — Sets the Activity LED controlled by an Advanced Configuration and Power Interface (ACPI) operating system and driver. • 2 = WirelessLANIndicator — Sets the Activity LED as a wireless Local Area Network (LAN) radio on/off indicator. • 3 = Off — Sets the Activity LED to off. 	Microsoft Windows, Linux
AGP Slot	<p>Enables or disables the on-board AGP slot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
AC Power Recovery Mode	<p>Sets AC Power Recovery Mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Last 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Adjacent Cache Line Prefetch	<ul style="list-style-type: none"> On <p>If sets to Disable then the CPU will only fetch the cache line that contains the data currently required by the CPU.</p> <p>If sets to Enable then it enables the CPU to fetch the adjacent cache line in the other half of the sector.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Admin Setup Lockout	<p>If the value of Admin Setup Lockout is Enabled and the Admin Password is set, users will not be allowed to see any part of the Setup screens unless they enter the correct Admin Password. If the Admin password is NOT set and Admin Setup Lockout is Enabled, users will be able to access Setup normally.</p> <p>If the value of Admin Setup Lockout is Disabled and the Admin Password is or is not set, users will be allowed to enter Setup normally. However, many fields may still be inaccessible, depending on how other Setup security settings are configured.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Adv Battery Charge Cfg	<p>Configures the days settings based on BeginningOfDay and workperiod. Advanced Battery charge mode uses standard charging algorithm and other methods during working hours to maximize battery health. During working hours, express charge is used to charge the batteries faster. You can configure the days and the work period during which the battery has to be charged. To enable advanced battery charging, provide the day, and set the following:</p> <p>Possible values are:</p> <ul style="list-style-type: none"> BeginningOfDay — To configure the AdvanceBatteryCharge start time in 24 hours format. The value of hour must be in the range 0–23 and minute must be 0, 15, 30, or 45. Workperiod — To configure the duration of charging. 	Microsoft Windows, Linux
Advanced Battery Charging Mode	<p>Configures all the batteries in the systems with Advance Battery Charging Mode to maximize the battery health.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 — Disable 2 — Enable <p>NOTE: If Advanced Battery Charging Mode is disabled, Dell Command Monitor shows the instances for Adv Battery Charge Cfg with all '0' values. User cannot set the values in Adv Battery Charge Cfg. When the Advanced Battery Charging Mode is enabled, instances for Adv Battery Charge Cfg reports the data retrieved from BIOS.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Adv Battery Charge Cfg Sun	<p>Configures the Advanced Battery charging configuration for Sunday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Sun BodHour • Adv Battery Charge Cfg Sun BodMin • Adv Battery Charge Cfg Sun WpHour • Adv Battery Charge Cfg Sun WpMin <p>i NOTE: The values defined for Minute field are 0, 15 ,30 and 45. In case you set any other value, the value is round to the lower defined value.</p>	Microsoft Windows
Adv Battery Charge Cfg Mon	<p>Configures the Advanced Battery charging configuration for Monday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Mon BodHour • Adv Battery Charge Cfg Mon BodMin • Adv Battery Charge Cfg Mon WpHour • Adv Battery Charge Cfg Mon WpMin 	Microsoft Windows
Adv Battery Charge Cfg Tue	<p>Configures the Advanced Battery charging configuration for Tuesday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Tue BodHour • Adv Battery Charge Cfg Tue BodMin • Adv Battery Charge Cfg Tue WpHour • Adv Battery Charge Cfg Tue WpMin 	Microsoft Windows
Adv Battery Charge Cfg Wed	<p>Configures the Advanced Battery charging configuration for Wednesday.</p>	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Adv Battery Charge Cfg Thu	<p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Wed BodHour • Adv Battery Charge Cfg Wed BodMin • Adv Battery Charge Cfg Wed WpHour • Adv Battery Charge Cfg Wed WpMin 	Microsoft Windows
Adv Battery Charge Cfg Fri	<p>Configures the Advanced Battery charging configuration for Thursday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Thu BodHour • Adv Battery Charge Cfg Thu BodMin • Adv Battery Charge Cfg Thu WpHour • Adv Battery Charge Cfg Thu WpMin 	Microsoft Windows
Adv Battery Charge Cfg Sat	<p>Configures the Advanced Battery charging configuration for Friday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Beginning of day Hour • 0 — 59 — Beginning of day Minute • 0 — 23 — Work Period Hour • 0 — 59 — Work Period Minute <p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Fri BodHour • Adv Battery Charge Cfg Fri BodMin • Adv Battery Charge Cfg Fri WpHour • Adv Battery Charge Cfg Fri WpMin 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
	<p>BIOS setting name for Set operation:</p> <ul style="list-style-type: none"> • Adv Battery Charge Cfg Sat BodHour • Adv Battery Charge Cfg Sat BodMin • Adv Battery Charge Cfg Sat WpHour • Adv Battery Charge Cfg Sat WpMin 	
Always Allow Dell Docks	<p>Allows or restricts Dell Type-C Thunderbolt docks to function when the Thunderbolt is disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Restricts the Dell Type-C Thunderbolt docks to function when the Thunderbolt is disabled. • Enable — Allows the Dell Type-C Thunderbolt docks to function even when the Thunderbolt is disabled. 	Microsoft Windows, Linux
Ambient Light Sensor	<p>Enables or Disables the Ambient Light Sensor.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Intel AMT Capability	<p>Set the Intel Active Management Technology (AMT) capability.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enabled - If Intel Active Management Technology is enabled, MEBx is available through the F12 menu and you can provision AMT. MEBx may not be not accessible if OROM Keyboard Access is disabled. • Disabled - If Intel Active Management Technology is disabled, MEBx is not available in pre-boot. Once disabled, Intel Active Management Technology can only be enabled through the BIOS interface. If the Intel AMT is already provisioned, AMT cannot be disabled. Un-provisioning AMT is required to disable AMT. • Restrict MEBx Access - If Intel Active Management Technology is enabled, MEBx is not available in pre-boot but you can provision AMT from the operating system. 	Microsoft Windows, Linux
Enable AMD SmartShift	<p>Sets the AMD SmartShift.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enable - On a discrete GPU system, AMD SmartShift allows the system's CPU and discrete GPU to share the power limits. AMD SmartShift allows the potential performance that increases within the systems power or thermal limitation. • Disable - AMD SmartShift feature is disabled. 	Microsoft Windows, Linux
AMD TSME	<p>Sets the AMD Transparent Secure Memory Encryption (TSME).</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enabled - AMD Transparent Secure Memory Encryption (TSME) allows encryption of contents during residing on the memory DIMMS. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Analog Digital Interface Mode Channel 1	<p data-bbox="667 184 1211 289">  NOTE: For best results while diagnosing potential memory DIMM issues, turn off this feature prior to running diagnostic functions or tools. </p> <ul data-bbox="580 300 1211 348" style="list-style-type: none"> • Disabled - AMD Transparent Secure Memory Encryption (TSME) does not allow encryption on the memory DIMMS. <p data-bbox="580 380 1211 407">Sets the defined Analog/Digital Interface mode for channel 1.</p> <p data-bbox="580 432 775 459">Possible values are:</p> <ul data-bbox="580 485 1211 743" style="list-style-type: none"> • 0 — Unused — Channel is unused. • 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. • 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. • 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. • 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 2	<p data-bbox="580 774 1211 802">Sets the defined Analog/Digital Interface mode for channel 2.</p> <p data-bbox="580 827 775 854">Possible values are:</p> <ul data-bbox="580 879 1211 1140" style="list-style-type: none"> • 0 — Unused — Channel is unused. • 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. • 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. • 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. • 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 3	<p data-bbox="580 1171 1211 1199">Sets the defined Analog/Digital Interface mode for channel 3.</p> <p data-bbox="580 1224 775 1251">Possible values are:</p> <ul data-bbox="580 1276 1211 1537" style="list-style-type: none"> • 0 — Unused — Channel is unused. • 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. • 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. • 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. • 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 4	<p data-bbox="580 1568 1211 1596">Sets the defined Analog/Digital Interface mode for channel 4.</p> <p data-bbox="580 1621 775 1648">Possible values are:</p> <ul data-bbox="580 1673 1211 1871" style="list-style-type: none"> • 0 — Unused — Channel is unused. • 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. • 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. • 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	
Analog Digital Interface Mode Channel 5	<p>Sets the defined Analog/Digital Interface mode for channel 5.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Unused — Channel is unused. 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 6	<p>Sets the defined Analog/Digital Interface mode for channel 6.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Unused — Channel is unused. 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 7	<p>Sets the defined Analog/Digital Interface mode for channel 7.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Unused — Channel is unused. 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux
Analog Digital Interface Mode Channel 8	<p>Sets the defined Analog/Digital Interface mode for channel 8.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Unused — Channel is unused. 1 — ADC Input — Sets the channel mode as Analog-to-Digital Converter (ADC) input. 2 — DAC Output — Sets the channel mode as Digital-to-Analog Converter (DAC) output. 3 — DAC and ADC — Sets the channel mode as DAC output, but can be monitored through ADC input. 8 — GPIO — Sets the channel mode as General Purpose Input or Output. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Attempt Legacy Boot	<p>Determines if BIOS should attempt to boot from the legacy boot list when the UEFI boot list fails.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enabled — If the UEFI boot list fails, then BIOS attempts to boot from the Legacy boot list. Disabled — BIOS discontinues the booting process if the UEFI boot list fails. 	Microsoft Windows, Linux
AudioMode	<p>Onboard audio mode. Disabled mode completely un-assigns the onboard hardware resources. Half duplex mode allows only record or playback. Full duplex mode can record and play back sounds simultaneously.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Half Duplex Full Duplex 	Microsoft Windows
Auto Fan Speed Intensity	<p>Configures the fan speed control if the fan speed is set to Auto using fanspeed BIOS setting.</p> <p>Possible values are: 0 to 100</p> <ul style="list-style-type: none"> 0 — sets the fanspeed to the optimal speed level, and higher percentage provides enhanced cooling. 	Microsoft Windows, Linux
Auto On	<p>This property defines the auto-on configuration: disabled, everyday or weekdays (Monday — Friday).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Everyday Weekdays Select days 	Microsoft Windows, Linux
Auto On Hour	Defines the hour when to turn on the system (0–23).	Microsoft Windows, Linux
Auto On Minute	Defines the minutes when to turn on the system (0–59).	Microsoft Windows, Linux
Auto on Sunday	Defines that the system must be automatically turned on Sundays.	Microsoft Windows, Linux
Auto on Monday	Defines that the system must be automatically turned on Mondays.	Microsoft Windows, Linux
Auto on Tuesday	Defines that the system must be automatically turned on Tuesdays.	Microsoft Windows, Linux
Auto on Wednesday	Defines that the system must be automatically turned on Wednesdays.	Microsoft Windows, Linux
Auto on Thursday	Defines that the system must be automatically turned on Thursdays.	Microsoft Windows, Linux
Auto on Friday	Defines that the system must be automatically turned on Fridays.	Microsoft Windows, Linux
Auto on Saturday	Defines that the system must be automatically turned on Saturdays.	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Auto OS Recovery Threshold	<p>Sets the threshold value for auto OS recovery. Controls the automatic boot flow for SupportAssist System Resolution console and for Dell OS Recovery Tool. The system boots to the SupportAssist System Resolution console and for Dell OS Recovery Tool if,</p> <ul style="list-style-type: none"> the primary operating system fails to boot consecutively the count of boot failure is greater than or equal to the value of the Auto OS Recovery threshold setup option the SupportAssist OS Recovery option is enabled <p>Possible values are: 0 to 3</p> <p>NOTE: If the Auto OS Recovery threshold is set to 0, then all automatic boot flow for SupportAssist System Resolution console and for Dell OS Recovery Tool is disabled.</p>	Microsoft Windows, Linux
Auto Switch	<p>Enable, Disable</p> <p>Possible values are: 1,2</p>	Microsoft Windows, Linux
Auto Wake Period	<p>Defines the time in minutes after which the system should automatically wake up from Standby, Hibernate, or Switched off mode.</p> <p>Possible values are: 0, integers ranging from 1 to 254</p> <p>NOTE: The system wakes up from Sleep, Hibernate, or Switched off mode only if the Auto On option is enabled for everyday of the week.</p>	Microsoft Windows, Linux
BIOS Auto Recovery	<p>Enables or disables the BIOS auto recovery feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enabled — If BIOS corruption is detected, the system automatically recovers BIOS without any user interaction. Disabled — Disables BIOS auto recovery feature. 	Microsoft Windows, Linux
Back Camera	<p>Enables or disables the rearward facing camera.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable — Disables the rearward facing camera. Enable — Enables the rearward facing camera. 	Microsoft Windows, Linux
Battery Slice Charge Configuration	<p>Configures the battery slice charging</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 - Adaptive 2 - Standard 3- Express 4- PrimAcUse 5- Custom 	Microsoft Windows, Linux
BIOS Connect	<p>Enables or disables the BIOS Connect feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> Disable 	
BIOS Connect Activation	<p>Configures the state of the available BiosConnect boot paths.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Deactivate — BIOS setup options are not available and all BiosConnect boot paths are disabled. 1 — Full Activation — BIOS Setup options are enabled and all BiosConnect boot paths are enabled. 2 — Launchpad Activation Only — BIOS setup options are enabled and only launchpad code path is enabled. 	Microsoft Windows, Linux
BIOS Enumeration Mode	<p>BIOS Assist Enumeration, Native Enumeration</p> <p>Possible values are: 0,1</p>	Microsoft Windows, Linux
Bios Integrity Check	<p>Enables or disables the BIOS integrity check during the booting process.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> enable — BIOS checks the BIOS image integrity during every booting process. disable — BIOS checks the BIOS image integrity only if the previous booting process did not complete. <p>NOTE: BIOS checks the BIOS image integrity only if the biosautorecovery option is enabled.</p>	Microsoft Windows, Linux
BIOS Recovery	<p>Enables or disables the system BIOS Recovery option. This feature saves a recovery image to a primary hard disk drive storage, or to an external USB, and uses this recovery image to recover BIOS image when system BIOS fails.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable — BIOS stores the recovery image on primary hard disk drive storage. So BIOS recovery image is available both from primary hard disk drive permanent storage and via an external USB. Disable — BIOS does not store the recovery image on primary hard disk drive storage. So BIOS recovery image is available only via an external USB. 	Microsoft Windows, Linux
Bitsmart	<p>Enables or disable the Bitsmart.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Bluetooth Devices	<p>Enable or disable Bluetooth Devices</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
BlinkPSULED1	<p>Provides the alert for the PSU 1. The Power Supply Unit(PSU) 1 LED starts to blink when it is enabled.</p>	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible value:</p> <ul style="list-style-type: none"> • Enable 	
BlinkPSULED2	<p>Provides the alert for the PSU 2. The Power Supply Unit(PSU) 2 LED starts to blink when it is enabled.</p> <p>Possible value:</p> <ul style="list-style-type: none"> • Enable 	Microsoft Windows
BlockS3	<p>Enables or disables the Block S3 sleep state. If this option is Disabled, the system BIOS supports OSPM/ACPI S3 (suspend to RAM) operation. This moves the system authentication into the operating system and bypasses any Preboot Authentication on resume.</p> <p>If this option is Enabled, the system BIOS blocks all OSPM/ACPI S3 (suspend to RAM) requests and enforces Preboot Authentication on all non-S3 resumes.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Boot Mode	<p>Determines the system's boot mode. Enables booting to Unified Extensible Firmware Interface (UEFI) capable operating systems. This ensures compatibility with operating systems that do not support UEFI.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • UEFI — Enables booting to Unified Extensible Firmware Interface (UEFI) capable operating systems. • BIOS — Ensures compatibility with operating systems that do not support UEFI. <p>NOTE: Legacy boot mode is not allowed when secure boot is enabled or legacy option ROM is disabled.</p>	Microsoft Windows, Linux
Boot-time Video	<p>Sets the Primary Video source.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • On board • Add-in 	Microsoft Windows, Linux
Boot Speed	<p>Sets CPU speed to default or compatible (low speed). This feature is implementation-dependent. There is no set speed for Compatible, only that it is slower than default. Some platforms implement this by turning off cache and others by STPCLK throttling.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Default • Compatible 	Microsoft Windows
Broadcom ASF	<p>Sets the ASF (Alert Standard Format) mode.</p>	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • Alert only • Dash and ASF 	
Broadcom TruManage	<p>Sets the Broadcom TruManage.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
Bus Ratio	<p>Sets Bus Ratio.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Max • 6.0 • 7.0 • 7.5 • 8.0 • 8.5 • 9.0 • 9.5 	Microsoft Windows
Camera	<p>Enables or disables the camera.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
CAN Bus	<p>Enables or disables the Controller Area Network (CAN) Bus.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Cellular Radio	<p>Enables or Disables the cellular radio, that is, the WWAN module.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Charger	<p>Defines the charger details.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Chassis Intrusion	<p>Enables the system to detect and report the Chassis Intrusion events to the system display on boot-up.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Chassis Intrusion Status	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • Silent <p>This property shows the status of the system with regards to Chassis Intrusion (Detected or Not Detected). A value of Unknown indicates one of two things: either Chassis Intrusion is not supported by this system, or Chassis Intrusion event reporting has been disabled by the user. If the value is Detected, the user may set it to Not Detected to enable the system to receive the next event and to stop generating events for now.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Tripped • Door open • Door closed • Trip reset 	Microsoft Windows, Linux
Clear BIOS Log	<p>Prevents or allows the BIOS event log to be cleared on the next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Does not clear the BIOS event log on the next boot. • Enable — Clears the BIOS event log on the next boot. 	Microsoft Windows, Linux
Clear Power Log	<p>Prevents or allows the Power log to be cleared on the next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Does not clear the Power log on the next boot. • Enable — Clears the Power log on the next boot. 	Microsoft Windows, Linux
Clear System Event Log	<p>Prevents or causes the system event log to be cleared on the next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Clear Thermal Log	<p>Prevents or allows the Thermal log to be cleared on the next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Does not clear the Thermal log on the next boot. • Enable — Clears the Thermal log on the next boot. 	Microsoft Windows
Cool and Quiet	<p>Enables or disables the AMD Cool and Quiet processor feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Adjacent Cache Line Prefetch	<p>Enables or disables the AdjacentCacheLinePrefetch feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enabled — CPU fetches the adjacent cache line in the other half of the sector. Disabled — CPU only fetches the cache line that contains the data currently required by the CPU. 	Microsoft Windows, Linux
CPU RSA	<p>Enables or disables the Reliability Availability Serviceability (RSA) support on CPUs.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
CPU Snoop Mode	<p>Configures the CPU snoop mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Early snoop — Enables early snoop mode. Use this mode for latency-sensitive applications that do not require high remote bandwidth. Home snoop — Enables home snoop mode. Use this mode for applications that require high memory bandwidth. Cluster on Die — Enables cluster on die mode. Dell recommends this mode for NUMA-optimized applications to achieve lowest local memory latency, and highest local memory bandwidth. Opportunistic Snoop — Enables opportunistic snoop mode. Directory with Opportunistic Snoop Broadcast (OSB) offers a good balance of latency and bandwidth. No snoop — Enables no snoop mode. 	Microsoft Windows, Linux
CPU Virtualization Technology	<p>Enables or disables CPU Virtualization.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Deep Sleep Control	<p>Configures the system power mode when the system is in S4 and S5 state. If set to S5only, the system moves to the lowest-Power Off mode only in S5 state. If set to S4 and S5 state, the system moves to the lowest-Power Off mode in both S4 and S5 states. When the system is in low-power mode, it turns off most of the power-consuming circuitry, to meet the 1 W power limit. It disables PME, USB power, etc.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> S5 only S4 and S5 Disable 	Microsoft Windows, Linux
Dell Reliable Memory Technology	<p>Configures the system to detect and correct the software errors in a block of RAM. When enabled, the system detects and corrects the software errors.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> Enable 	
Dell Wyse P25 Bios Access	<p>Turns on or off the access to the BIOS setup through Dell Wyse P25 PCoIP client.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> On Off 	Microsoft Windows
dGPU External Display	<p>Enables or disables discrete Graphics Procession (GPU) Unit external display.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Diskette	<p>This property defines whether the built-in Floppy controller is enabled, auto or read-only.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Auto Read Only USB Internal 	Microsoft Windows
Dock Display Port 1 Video Source	<p>The Dock Display Port through Integrated Graphics feature enables the docking station DVI no1 or Display Port no1 interface to drive an external video display when Switchable Graphics is enabled and running from the integrated graphics controller.</p> <p>Possible values:</p> <ul style="list-style-type: none"> Enable — Uses the integrated video controller as video source. Disable — Uses the external video controller as video source. 	Microsoft Windows, Linux
Dock Support On Battery	<p>Enabling this option allows you to use the docking station, when AC power is absent, but only when the battery is preceding a certain charge percentage. The percentage may change per battery and per platform. For example, the dock may only be powered when the battery is at 60 percent charge or higher, and when the battery drops below this level (without AC power) the dock loses power.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
DRAM Prefetcher	<p>Prevents DRAM references from triggering DRAM prefetch requests./Turns on the DRAM prefetch unit in the Northbridge.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Dust Filter Maintenance	<p>Disabled, 15days, 30days, 60days, 90days, 120days, 150days, 180days</p> <p>Possible values are: 0, 1, 2, 3, 4, 5, 6, 7</p>	Microsoft Windows, Linux
Dynamic Backlight Control	<p>Enables or disables the Dynamic Backlight Control (DBC) feature within the BIOS.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Dynamic Privacy Screen	<p>Always On, enables, or disables the dynamic privacy screen.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enable - The Dynamic Privacy Screen is applied to the embedded display panel and can be toggled between public mode and privacy mode using the Fn+F9 key combination on the embedded keyboard. • Disable - The Dynamic Privacy Screen is not applied to the embedded display panel. • Always On - The Dynamic Privacy Screen is always on and cannot be turned off. 	Microsoft Windows, Linux
Embedded SATA Controller	<p>Sets the Integrated SATA Controller.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Combined • ATA • AHCI • RAID • QDMA 	Microsoft Windows, Linux
Internal SD Card	<p>Enables/disables the embedded SD Card port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Embedded Video Controller	<p>Enables or disables the embedded video controller.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
eMMC	<p>Embedded Multi-Media Controller</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Expansion Bay 1	<p>Enables or disables Expansion Bay 1.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	
Expansion Bay 2	<p>Enables or disables Expansion Bay 2.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Expansion Bay 3	<p>Enables or disables Expansion Bay 3.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Instant ON	<p>Enables or disables the Instant ON feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Enable Block SID	<p>Enables or disables Block SID feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Enable Legacy Option ROMs	<p>Enables or disables detecting the BIOS and using the legacy expansion ROMs. This mode cannot be enabled with Secure Boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Enable Tablet Button LED Sign of Life	<p>Enables or disables Tablet Button LED Sign of Life.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> • Enable • Disable 	
Enclave Memory Size	<p>Displays the Intel(R) Software Guard Extensions(TM) (SGX) Enclave Processor Reserved Memory Size.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 32MB • 64MB • 128MB • 256MB 	Microsoft Windows, Linux

 **NOTE: Enclave Memory Size option can be set from the BIOS setup screen only.**

BIOS Settings Name	Description	Supported Operating System(s)
Energy Star Logo	<p>Displays or hides the Energy Star logo during POST.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
e-SATA Ports	<p>Enable/disable e-SATA Ports</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Express Card	<p>This setting will enable the express card port, which allows the user to insert an express card into the slot and it will be configured.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Express Charge	<p>Define the express charging.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • Enable once 	Microsoft Windows
Extend Post Time	<p>Delays the time of action taken by the system after pressing function keys such as F2,F12, etc. during post time.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — Does not delay the time of action. • 5 — Delays the time of action by 5 seconds. • 10 — Delays the time of action by 10 seconds. 	Microsoft Windows, Linux
External Hotkey	<p>Sets the External Hotkey to Scroll Lock or Disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Scroll lock 	Microsoft Windows, Linux
External USB Ports	<p>Enable/disable external USB ports.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
External WLAN Activity LED	<p>Enables or disables the external (lid-mounted) WLAN indicator LED.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — LED does not display the state of the WLAN source activity. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> Enable — LED displays the state of the WLAN source activity. 	
F12 POST Display	<p>Enables or disables the F12 key at POST.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
F2 POST Display	<p>Enables or disables the F2 key at POST.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Fan Control Override	<p>Controls the speed of the fan. When enabled the fan runs at full speed. When disabled, the fan controller uses the system environmental data to set the fan at its optimal speed.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Fan Speed	<p>Sets the system fan speed.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Auto High Medium High Medium Low Low 	Microsoft Windows, Linux
Fan Speed Auto Level on Psu Zone	<p>Sets the system to Fan Speed Auto Level on Psu Zone.</p> <p>Possible values are: 0 – 100</p> <ul style="list-style-type: none"> Minimum Value Minimum Value 	Microsoft Windows, Linux
Fan Speed Auto Level on Cpu Zone	<p>Sets the system to Fan Speed Auto Level on Cpu Zone.</p> <p>Possible values are: 0 – 100</p> <ul style="list-style-type: none"> Minimum Value Minimum Value 	Microsoft Windows, Linux
Fan Speed Auto Level on Flex Bay Zone	<p>Sets the system to Fan Speed Auto Level on Flex Bay Zone.</p> <p>Possible values are: 0 – 100</p> <ul style="list-style-type: none"> Minimum Value Minimum Value 	Microsoft Windows, Linux
Fan Speed Auto Level on Upper PCIe Zone	<p>Sets the system to Fan Speed Auto Level on Upper PCIe Zone.</p>	Microsoft Windows, Linux


BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible values are: 0 – 100</p> <ul style="list-style-type: none"> Minimum Value Minimum Value 	
Enable Fingerprint Reader Device	<p>Enables or disables the Fingerprint Reader device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable - Fingerprint Reader device is enabled. Disable - Fingerprint Reader device is disabled. 	Microsoft Windows, Linux
Enable Fingerprint Reader Single Sign On	<p>Enables or disables the Fingerprint Reader Single Sign On device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable - Fingerprint Reader Single Sign On device is enabled. Disable - Fingerprint Reader Single Sign On device is disabled. 	Microsoft Windows, Linux
Dell Reliable Memory Technology	<p>Configures the system to detect and correct the software errors in a block of RAM. When enabled, the system detects and corrects the software errors.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Fault Tolerant Memory Log Clear	<p>Enables or disables the Fault Tolerant Memory Log Clear option.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enabled — System clears fault tolerant memory log during the next boot. Disabled — Fault Tolerant Memory Log Clear option will be disabled, and no action will be taken during the next boot. <p>NOTE: Fault Tolerant Memory Log Clear option will be reset to disabled state after log gets cleared.</p>	Microsoft Windows, Linux
Fn Lock	<p>Controls the behavior of the dual-function keys (<F1> — <F12>), when <Fn> key is pressed.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable — If disabled, holding the <Fn> key enables the secondary functions associated with the particular key. Enable — If enabled, holding the <Fn> key enables the labeled functions of the keys (<F1> — <F12>). 	Microsoft Windows, Linux
Fn Lock Mode	<p>Controls the behavior of the dual-function keys (<F1> — <F12>), when <Fn> key is pressed and when it is not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable — Holding <Fn> key enables the secondary functions associated with the particular key Enable — Without holding <Fn> key, the dual-function keys behave as labeled. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Force PXE on Next Boot	Enables or disables the Force PXE on next boot in BIOS. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Front Panel USB Ports	Enables or disables the USB ports on the front of the chassis. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Front Power Button	Enables or disables the Front Power Button. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Full Screen Logo	Enables or disables the full screen logo. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
FX100 BIOS Access	Allows or blocks the remote user to access BIOS Setup via FX100 Portal. Possible values are: <ul style="list-style-type: none"> • On • Off 	Microsoft Windows
General Purpose Encryption	Enables or disables the general purpose encryption (GPE) on the system. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
GPS on WWAN Radio	Enables or disables GPS WWAN Radio. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
GPS Radio	Enables or disables the internal GPS radio. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Hard Disk Acoustic Mode	Sets the Hard Disk Acoustic Mode.	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible values are:</p> <ul style="list-style-type: none"> · Bypass · Quiet · Suggested · Performance 	
Hard-Disk Failover	<p>Specifies which devices in the Hard-Disk Drive Sequence menu are attempted in the boot sequence. When set to OFF, only the first device in the list is attempted. When set to ON, all devices are attempted in order, as listed in the Hard-Disk Drive Sequence.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Disable · Enable 	Microsoft Windows
Hardware Prefetcher	<p>Enables or disables the CPU's HW prefetcher.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Disable · Enable 	Microsoft Windows, Linux
Hard Drive Free Fall Protection	<p>Enables or disables hard drive free fall protection.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Disable · Enable 	Microsoft Windows, Linux
Hardware Prefetch Training on Software Prefetch	<p>Prevents hardware prefetcher from considering software prefetches when detecting strides for prefetch requests./ Hardware prefetcher considers software prefetches when detecting strides for prefetch requests.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Disable · Enable 	Microsoft Windows, Linux
HDD Protection	<p>If setting On, the HDD Protection OPROM will be loaded. If setting Off, the HDD Protection OPROM will be not loaded.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Off · On 	Microsoft Windows, Linux
HDD0 Fan Enable	<p>Enables or disables checking errors on the fan controller FAN_HDD0. If the fan controller detects a valid fan, it enables it automatically.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> · Enable · Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
HDD1 Fan Enable	<p>Enables or disables checking errors on the fan controller FAN_HDD1. If the fan controller detects a valid fan, it enables it automatically.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
HDD2 Fan Enable	<p>Enables or disables checking errors on the fan controller FAN_HDD2. If the fan controller detects a valid fan, it enables it automatically.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
HDD3 Fan Enable	<p>Enables or disables checking errors on the fan controller FAN_HDD3. If the fan controller detects a valid fan, it enables it automatically.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
HDD4 Fan Enable	<p>Enables or disables checking errors on the fan controller FAN_HDD4. If the fan controller detects a valid fan, it enables it automatically.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Hot Undocking	<p>Enables or disables warm and hot docking/undocking.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Hotkey to toggle WxAN Radio	<p>Enables or disables the hotkey to toggle WxAN radio.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Ignition Enable	<p>Enables or disables the external ignition pin. Disabled by default.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Ignition On Delay	<p>The delay is displayed in seconds, when the power button event is passed to the operating system to initiate the booting.</p> <p>Possible values are from (0 - 21600). By default the value is 5s.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Ignition Off Delay	<p>The delay is displayed in seconds until the power button event is passed to the operating system for shutting down the system.</p> <p>Possible values are from (0 - 21600). By default the value is 5s.</p>	Microsoft Windows, Linux
Ignition De-bounce Cycle	<p>De-Bounce Ignition Power Switch cycle time is displayed in milliseconds.</p> <p>Possible values are from (50 - 5000). By default the value is 50ms.</p>	Microsoft Windows, Linux
I/O Module	<p>Enables or disables the I/O module.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
I/O Module 2	<p>Enables or disables the I/O module 2.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
I/O Module 3	<p>Enables or disables the I/O module 3.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
I/O Module 4	<p>Enables or disables the I/O module 4.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Intel Smart Connect Technology	<p>Disables or enables the Intel Smart Connect technology.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Intel Speed Select Technology	<p>Intel Speed Select Technology allows you to choose up to two additional base frequency conditions.</p> <p>Configuration 1: TDP Level 3</p> <p>Configuration 2: TDP Level 4</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Base • Configuration 1 • Configuration 2 	Microsoft Windows, Linux
Intel Speed Shift Technology	<p>Disables or enables the Intel Speed Shift Technology.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	
Intel Platform Trust Technology	Displays or hides the Intel Platform Trust Technology (PTT) device from the operating system on the next reboot. When disabled, the PTT device is not displayed to the operating system and no changes can be made to the PTT device or its content. <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Intel Rapid Start Technology	Disables or enables the Intel Rapid Start Technology (iFFS) feature within the BIOS. <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Intel Rapid Start Technology Timer	Allows configuring the time-out value for Intel Rapid Start Technology (IRST) mode. <p>Possible value is:</p> <ul style="list-style-type: none"> • 0 — 999 	Microsoft Windows
	 NOTE: The value for IRST is a nonfixed value, which may change depending on the configuration.	
Intel Ready Mode Technology	Enables or disables Intel Ready Mode Technology (iRMT). <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Integrated RAID	Enables or disables the Integrated RAID Controller. <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Integrated SAS	Enables or disables the Integrated SAS Controller. <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Integrated USB Hub	Sets the Integrated USB Hub to Compatible or High Speed. <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Internal USB	Enables or disables the Internal USB. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Internal USB Port	Enables or disables the Internal USB port. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Internal USB Port 1	Enables or disables the Internal USB port 1. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Internal USB Port 2	Enables or disables the Internal USB port 2. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
IDE	Defines whether the IDE controller is enabled or disabled. Possible values are: <ul style="list-style-type: none"> • Disable • Auto 	Microsoft Windows
Intel Rapid Start Timer	Configures the timeout value (in minutes) for Intel Rapid Start Technology (IRST) mode. After the set timeout, the system enters IRST mode from the S3 system sleep mode. The acceptable values are in the range 0-999. Possible values are: <ul style="list-style-type: none"> • integers ranging from 0 to 999 	Microsoft Windows
Keyboard Backlight Active Color	Displays or sets an active color for the keyboard backlight for the rugged systems. Possible values are: <ul style="list-style-type: none"> • 0— White • 1— Red • 2— Green • 3— Blue • 4 — Customcolor1 • 5— Customcolor2 	Microsoft Windows, Linux
Keyboard Backlight Custom Color 1	Displays and configures the custom color 1 by specifying the Red, Green and Blue (RGB) values. The color can be selected using RGB components by mentioning it in 'R,G,B' format. Each color component value ranges from 0 to 255.	Microsoft Windows, Linux


BIOS Settings Name	Description	Supported Operating System(s)
Keyboard Backlight Custom Color 2	<p>Possible value is:</p> <ul style="list-style-type: none"> 0–255, 0–255, 0–255 — Red, Green, Blue <p>Displays and configures the custom color 2 by specifying the Red, Green and Blue (RGB) values. The color can be selected using RGB components by mentioning it in 'R,G,B' format. Each color component value ranges from 0 to 255.</p> <p>Possible value is:</p> <ul style="list-style-type: none"> 0–255, 0–255, 0–255 — Red, Green, Blue 	Microsoft Windows, Linux
Keyboard Backlight Color Enable	<p>Displays or enables the supported colors on the keyboard backlight for the rugged systems. Press Fn+C to switch among the enabled colors.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — None 1 — White 2 — Red 3 — Green 4 — Blue 5 — Customcolor1 6 — Customcolor2 <p>NOTE:</p> <ul style="list-style-type: none"> You can enable multiple colors at a time. If '0 — None' is selected, keyboard backlight color switching by pressing Fn+C will not be possible. The value '0 — None' cannot be combined with any other color. 	Microsoft Windows
Keyboard Click	<p>Enables or disables the keyboard to 'click' each time a key is pressed.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Keyboard Backlight Timeout on AC	<p>Configures the timeout value for the keyboard backlight when an AC adapter is plugged into the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 5 — Keyboard backlight stays on for 5 seconds. 10 — Keyboard backlight stays on for 10 seconds. 15 — Keyboard backlight stays on for 15 seconds. 30 — Keyboard backlight stays on for 30 seconds. 65 — Keyboard backlight stays on for 1 minute. 69 — Keyboard backlight stays on for 5 minutes. 79 — Keyboard backlight stays on for 15 minutes. 191 — keyboard backlight always stays on. 	Microsoft Windows, Linux
Keyboard Backlight Timeout on Battery	<p>Configures the timeout value for the keyboard backlight when the system is running only on battery power.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Keyboard Backlight with AC	<p>Possible values are:</p> <ul style="list-style-type: none"> • 5 — Keyboard backlight stays on for 5 seconds. • 10 — Keyboard backlight stays on for 10 seconds. • 15 — Keyboard backlight stays on for 15 seconds. • 30 — Keyboard backlight stays on for 30 seconds. • 65 — Keyboard backlight stays on for 1 minute. • 69 — Keyboard backlight stays on for 5 minutes. • 79 — Keyboard backlight stays on for 15 minutes. • 191 — keyboard backlight always stays on. 	Microsoft Windows, Linux
Keyboard Click	<p>Enables or disables the keyboard to 'click' each time a key is pressed.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Keyboard Error Reporting	<p>Enables or disables reporting of Keyboard errors by POST.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Keyboard Illumination	<p>Sets the Keyboard Illumination to Enable, Disable, or Auto.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • Auto • 25 • 50 • 75 • 100 	Microsoft Windows, Linux
Keypad	<p>Changes the means of enabling the keypad.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • By numlock • BY FN key 	Microsoft Windows, Linux

NOTE: If the keyboard backlight is disabled by pressing <Fn ><F10>, then the keyboard backlight stays off even if the AC power adapter is plugged in.

BIOS Settings Name	Description	Supported Operating System(s)
Latitude ON	<p>Enables or disables Latitude On.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Latitude ON Flash	<p>Enables or disables the ability to boot to the Latitude ON Flash module.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Launch Control Policy	<p>Set the Intel Software Guard Extensions Launch Control Policy.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Intel Locked Mode — Locks SGX to support only Intel Enclave Launch Provider. • Runtime Selectable Mode — Allows OS or Hypervisor control of Enclave Launch Provider. 	Microsoft Windows, Linux
LCD Brightness On AC	<p>Sets the panel brightness in effect when the system is using AC power.</p> <p>Possible values are: Integers ranging from 0 to 15</p>	Linux
LCD Brightness On Battery	<p>Sets the panel brightness in effect when the system is running on battery power.</p> <p>Possible values are: Integers ranging from 0 to 15</p>	Linux
Lid Switch	<p>Enables or disables the lid switch functions.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Display will not be affected when lid is closed. • Enable — OS setting determines the display behavior when lid is closed. 	Microsoft Windows, Linux
Liquid Cooler 1	<p>Enables or disables the liquid cooler 1.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable — Enables the liquid cooler 1. • Disable — Disables the liquid cooler 1. 	Microsoft Windows, Linux
Liquid Cooler 2	<p>Enables or disables the liquid cooler 2.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable — Enables the liquid cooler 2. • Disable — Disables the liquid cooler 2. 	Microsoft Windows, Linux
Limit CPUID Value	<p>Enables or disables the Limit CPUID Value feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
M2 PCIE SSD 0	<ul style="list-style-type: none"> • Enable <p>Enables or disables M2 PCIE SSD 0.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
M2 PCIE SSD 1	<p>Enables or disables M2 PCIE SSD 1.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Management Driver	<p>Sets to Present: the system-management instrumentation sets this BIOS setting when it loads to instruct that BIOS that operating system level software is handling any out-of-range management condition — if a critical threshold is passed, the driver takes responsibility for shutting down the operating system and powering off the system. The instrumentation is responsible for de-registering itself via the Absent BIOS setting when it unloads. Implementation.</p> <p>NOTE: To maintain compatibility with Dell Command Monitor, a BIOS that implements this BIOS setting via an Indexed I/O access method must ensure that an AND-mask of 0xFB and an OR-value of 0x04 maintains the present status— i.e. the status is in bit 2 of the indexed I/O location.</p> <p>Sets to Absent: this BIOS setting indicates to the system BIOS that any system-management monitoring is its responsibility. If an out-of-range management condition occurs in the system, the BIOS powers off the system to prevent hardware damage. Implementation Note: To maintain compatibility with Dell Command Monitor, a BIOS that implements of this BIOS setting via an Indexed I/O access method must ensure that an AND-mask of 0xFB and an OR-value of 0x00 maintains the absent status — i.e. the status is in bit 2 of the indexed I/O location.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Present • Absent 	Microsoft Windows
Master Password Lockout	<p>Enables or disables master password settings.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enabled — The master password cannot be used to <ul style="list-style-type: none"> – clear other passwords – unlock and access Hard Disk Drive – erase data from Hard Disk Drive • Disabled — The master password can be used to <ul style="list-style-type: none"> – clear other passwords – unlock and access Hard Disk Drive – erase data from Hard Disk Drive 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Media Card	<p>Enables or disables the media card. If disabled, the media card is hidden from the OS and not seen in the Device Manager.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Media Card and 1394	<p>Enables or disables the Media Card and 1394 devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Memory Fault Tolerance Time Limit	<p>Configures the time limit value of the memory fault tolerance. Possible values are: 0 to 36000 in 1/10th of a second.</p> <p>Possible values are: 0 to 36000</p> <p> NOTE: Memory fault tolerance feature is disabled when the value is set to 0.</p>	Microsoft Windows, Linux
Memory Performance Monitor	<p>Enables or disables the memory performance monitor feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Memory RSA	<p>Enables or disables the Reliability Availability Serviceability (RSA) support on memory modules.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
MEMs Sensors	<p>Enables or disables the Micro Electro Mechanical Sensors.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Microphone	<p>Enable or disable notebook internal or external microphone.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
MiniPCI Device	<p>Enables or disables the internal PCI device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Multiple CPU Cores	<p>Enables or disables Multiple CPU Core support on next boot. The Disabled state prevents the OS from seeing additional cores present on a single CPU package.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
MmioAbove4Gb	<p>Enables or disables the Memory mapped I/O above 4GB option.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Modern Standby Control	<p>Determines which sleep mode is used by the operating system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • OS Automatic Selection — Allows the operating system to select the appropriate sleep mode automatically. • Force S3 — Forces the operating system to use the S3 sleep mode only. 	Microsoft Windows, Linux
Module Bay Device	<p>Enables or disables the Module Bay Device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Module Bay Battery Charge Configuration	<p>Configures the module bay battery charging.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 - Standard Charge — Charges the battery over a long period of time • 2 - Express Charge — Switches the module bay battery to Express Charge mode using the express charging algorithm 	Microsoft Windows
Mouse	<p>Sets the Pointing Device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Monitor Toggling	<p>Enables or disables Monitor Toggling.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Multi Display	<p>Enables or disables the multi-display feature, that is integrated and add-in Gfx.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Near Field Computing	<ul style="list-style-type: none"> Enable <p>Enables or disables the Near Field Computing (NFC) device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
NIC 1	<p>This property defines whether the built-in NIC 1 is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable non PXE Enable Enable iSCSI Enable RPL Enable image server 	Microsoft Windows, Linux
NIC 2	<p>This property defines whether the built-in NIC 2 is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable non PXE EnabledwithoutPXE Enable iSCSI Enable RPL Enable image server 	Microsoft Windows, Linux
Network Activity LED	<p>This selection will allow the Activity LED to be controlled by an ACPI OS and driver/ set Activity LED as a wireless LAN radio on/off indicator/ force the Activity LED to be always OFF.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable ACPI OS control Wireless LAN Indicator 	Microsoft Windows, Linux
Node Interleaving	<p>Enables or disables Node Interleave.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
NMI Button	<p>Enables or disables the NMI Button.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable Disable 	Microsoft Windows
Num Lock	<p>Enables or disables Num Lock.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	
On Reader	<p>Enables or disables the Reader feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Onboard 1394	<p>Enables or disables on-board 1394 controller on next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Onboard Modem	<p>Enables or disables the Onboard Modem.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Onboard Sound Device	<p>Enables or disables the onboard sound devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Onboard Unmanaged NIC	<p>Configures the state of the Onboard Unmanaged Network Interface Card (NIC).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the secondary, unmanaged network interface card. • Enable — Enables the secondary, unmanaged network interface card. • Enabled with PXE — Enables the secondary, unmanaged network interface card and supports the preboot execution environment for network boot. 	Microsoft Windows, Linux
On-board Serial ATA 2 Controller	<p>Enable or disables on-board Serial ATA 2 controller.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
On Screen Buttons	<p>Configures the onscreen display (OSD) of the All-In-One systems.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Optical Drive Controller	<p>Enables or disables the Optical Drive Controller.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
Optimus	<p>Enables or disables the Optimus.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enabled • Disabled 	Microsoft Windows
Optional Boot Sequence	<p>Allows or prevents the installation of Windows operating system on client systems with more than one operating system volume.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enabled • Disabled 	Microsoft Windows
OpRomUIProtection	<p>Prompts you to enter the administrator password to enter the OptionROM user interface if the password has been set.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
OROM Keyboard Access	<p>Sets an option to enter the Option ROM Configuration screens using hotkeys during boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable • Onetime Enable — Allows configuring the access to Option ROM using hotkeys during system startup. 	Microsoft Windows, Linux
OS Install Mode	<p>Enables or disables OS Install Mode (Limit System Memory feature).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
Parallel Mode	<p>This property defines the parallel port mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • AT • PS2 • ECP • EPP • ECP DMA1 • ECP DMA3 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Parallel Port	<p>This property defines the parallel port configuration.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • LPT1 • LPT2 • LPT3 	Microsoft Windows, Linux
PartComponent	<p>Defines the boot sequence for the next system boot. Boot Sequence information can be found under the class DCM_OrderedComponent.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Diskette first • HD only • Device list • CDROM first 	Microsoft Windows
Password Bypass	<p>Sets the Password Bypass feature to one of the supported settings.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Reboot • Resume • Reboot and resume 	Microsoft Windows, Linux
Password Status Lock	<p>Password Status lock/unlock.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Locked • Unlocked 	Microsoft Windows, Linux
PC Card	<p>Enables or disables the PC Card.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
PC Card and 1394	<p>Enables or disables the PC Card and 1394 devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
PCI Bus	<p>Sets the maximum number of PCI bus count for the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 64 • 128 • 256 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
PCIe Bus Allocation	<p>PCIe Bus Allocation controls on how the PCIe bus resources are allocated among the PCIe SLOTS.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Default • Optimize for Thunderbolt • Option1 • Option2 • Option3 	Microsoft Windows, Linux
PCIe RSA	<p>Enables or disables the Reliability Availability Serviceability (RSA) support on PCIe devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Pci Resource Allocation Ratio	<p>Allocates PCI resources, buses, memory-mapped I/O (MMIO) space, and I/O space. If set to Allocate Evenly, equal amount of memory is allocated to all the resources when two CPUs are installed. When set to Allocate More to CPU1, larger amount of device-specific memory is allocated, which in turn reduces the usable memory on a system with a 32-bit operating system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Allocate Evenly • Allocate More to CPU1 	Microsoft Windows
Pci Mmio Space Size	<p>It allows you to reserve large or small device-specific memory regions to decrease or increase the usable memory on systems with a 32-bit operating system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Small — Allocates a small region of memory to PCI memory mapped I/O. • Large — Allocates a large region of memory to PCI memory mapped I/O. This reserves the large device-specific memory regions, but reduces the amount of usable memory in 32-bit operating system. 	Microsoft Windows, Linux
PCI Slots	<p>Enables or Disables the PC Card.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
PCIE0	<p>Enables or Disables the PCIE1 Card.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
PCIE1	<p>Enables or Disables the PCIE0 Card.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> • Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
PCIE0_CPU1	<ul style="list-style-type: none"> Enable <p>Enables or Disables the PCIE0_CPU1 Card.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
PCIE1_CPU1	<p>Enables or Disables the PCIE1_CPU1 Card.</p> <p>Possible values are: 1,2</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
PCMCIA	<p>Enables or disables the PCMCIA device slot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Pen Missing Indication	<p>Enables or disables the Missing Pen Indication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Pen Resume On	<p>Enables or disables the Resume On Pen setting.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Peak Shift	<p>Peak Shift can be used to minimize AC consumption during peak power times of day. For each weekday listed, set a start and end time to run in Peak Shift mode. During these times the system will run from the battery even if the AC is attached as long as the battery stays above the threshold specified in the Battery threshold field. After the end time specified the system will run from AC if attached but will not charge the battery. The system will again function normally using AC and recharging the battery after the Charge Start time is specified.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 — Disable 2 — Enable 	Microsoft Windows, Linux
Peak Shift Sun	<p>Cconfigures the power usage configuration for Sunday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — 23 — Start Hour 0 — 59 — Start Minute 0 — 23 — End Hour 0 — 59 — End Minute 0 — 23 — Charge Start Hour 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
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- 0 — 59 — Charge Start Min

BIOS setting names for Set operation:

- Peak Shift Sun StartHour
- Peak Shift Sun StartMin
- Peak Shift Sun EndHour
- Peak Shift Sun EndMin
- Peak Shift Sun ChargeStartHour
- Peak Shift Sun ChargeStartMin

i **NOTE:** To use Peak Shift mode, the values of Peak Shift Start Time, Peak Shift End Time, Peak Shift Charge Start Time, and Peak Shift battery threshold are necessary.

i **NOTE:** It is recommended to input values as per the following: Start Time <= End Time <= Charge Start Time. Dell Command | Monitor can set the out-of-range values. BIOS behavior is unknown at this point of time for such values.

i **NOTE:** The values defined for Minute field are 0, 15, 30 and 45. In case you set any other value, the value is round to the lower defined value.

Peak Shift Mon

Configures the power usage configuration for Monday.

Microsoft Windows

Possible values are:

- 0 — 23 — Start Hour
- 0 — 59 — Start Minute
- 0 — 23 — End Hour
- 0 — 59 — End Minute
- 0 — 23 — Charge Start Hour
- 0 — 59 — Charge Start Min

BIOS setting names for Set operation:

- Peak Shift Mon StartHour
- Peak Shift Mon StartMin
- Peak Shift Mon EndHour
- Peak Shift Mon EndMin
- Peak Shift Mon ChargeStartHour
- Peak Shift Mon ChargeStartMin

Peak Shift Tue

Configures the power usage configuration for Tuesday.

Microsoft Windows

Possible values are:


- 0 — 23 — Start Hour
- 0 — 59 — Start Minute
- 0 — 23 — End Hour
- 0 — 59 — End Minute
- 0 — 23 — Charge Start Hour
- 0 — 59 — Charge Start Min

BIOS setting names for Set operation:

BIOS Settings Name	Description	Supported Operating System(s)
Peak Shift Wed	<ul style="list-style-type: none"> • Peak Shift Tue StartHour • Peak Shift Tue StartMin • Peak Shift Tue EndHour • Peak Shift Tue EndMin • Peak Shift Tue ChargeStartHour • Peak Shift Tue ChargeStartMin <p>Configures the power usage configuration for Wednesday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Start Hour • 0 — 59 — Start Minute • 0 — 23 — End Hour • 0 — 59 — End Minute • 0 — 23 — Charge Start Hour • 0 — 59 — Charge Start Min <p>BIOS setting names for Set operation:</p> <ul style="list-style-type: none"> • Peak Shift Wed StartHour • Peak Shift Wed StartMin • Peak Shift Wed EndHour • Peak Shift Wed EndMin • Peak Shift Wed ChargeStartHour • Peak Shift Wed ChargeStartMin 	Microsoft Windows
Peak Shift Thu	<p>Configures the power usage configuration for Thursday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Start Hour • 0 — 59 — Start Minute • 0 — 23 — End Hour • 0 — 59 — End Minute • 0 — 23 — Charge Start Hour • 0 — 59 — Charge Start Min <p>BIOS setting names for Set operation:</p> <ul style="list-style-type: none"> • Peak Shift Thu StartHour • Peak Shift Thu StartMin • Peak Shift Thu EndHour • Peak Shift Thu EndMin • Peak Shift Thu ChargeStartHour • Peak Shift Thu ChargeStartMin 	Microsoft Windows
Peak Shift Fri	<p>Configures the power usage configuration for Friday.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 — 23 — Start Hour • 0 — 59 — Start Minute • 0 — 23 — End Hour • 0 — 59 — End Minute • 0 — 23 — Charge Start Hour 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> • 0 — 59 — Charge Start Min BIOS setting names for Set operation: <ul style="list-style-type: none"> • Peak Shift Fri StartHour • Peak Shift Fri StartMin • Peak Shift Fri EndHour • Peak Shift Fri EndMin • Peak Shift Fri ChargeStartHour • Peak Shift Fri ChargeStartMin 	
Peak Shift Sat	Configures the power usage configuration for Saturday. Possible values are: <ul style="list-style-type: none"> • 0 — 23 — Start Hour • 0 — 59 — Start Minute • 0 — 23 — End Hour • 0 — 59 — End Minute • 0 — 23 — Charge Start Hour • 0 — 59 — Charge Start Min BIOS setting names for Set operation: <ul style="list-style-type: none"> • Peak Shift Sat StartHour • Peak Shift Sat StartMin • Peak Shift Sat EndHour • Peak Shift Sat EndMin • Peak Shift Sat ChargeStartHour • Peak Shift Sat ChargeStartMin 	Microsoft Windows
Peak Shift Battery Threshold	If Battery stays above the threshold system will run from battery even if AC is attached during the times as configured in Start/End/Charge Start time. Possible value is based on user input. <ul style="list-style-type: none"> • >= 15% Possible Value <= 100%. BIOS setting name for Set operation: <ul style="list-style-type: none"> • Peak Shift Battery Threshold 	Microsoft Windows, Linux
Pointing Device	This property defines whether the built-in pointing device port is enabled or disabled. Possible values are: <ul style="list-style-type: none"> • External serial • External PS2 • SW TPAD 	Microsoft Windows, Linux
POST Help Desk Key	Enables or Disables POST MEBx Key. Possible values are: <ul style="list-style-type: none"> • On • Off 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
POST MEBx Key Setting	<p>Enables or Disables POST MEBx Key.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> On Off 	Microsoft Windows, Linux
POST Testing	<p>Enables or Disables fast booting.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Min Max Auto 	Microsoft Windows, Linux
Power Button	<p>Enables, disables, or Partially disables the power button.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable Partial disable 	Microsoft Windows, Linux
Power Management	<p>This property defines the power management settings.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Min Regular Max 	Microsoft Windows
Power Warning	<p>Enables or disables performance limitation messages based on power supply capacity.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Power On Lid Open	<p>Sets the Power On Lid Open feature.</p> <p>Possible values:</p> <ul style="list-style-type: none"> Enable - If the feature is set to enable, the system powers up from the off state whenever the lid is opened. This system powers on when powered either by the AC adapter or the system battery. Disable - If this feature is set to disable, the system does not power up from the off state whenever the lid is opened. 	Microsoft Windows, Linux
Power Off Intel 8260 When Engaging Stealth Mode	<p>Enables or disables the Power Off Intel 8260 When Engaging Stealth Mode feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enabled — Disconnects power from the Intel 8260 Wireless NIC when the Stealth Mode is enabled. Disabled — Does not disconnect power from the Intel 8260 Wireless NIC when the Stealth Mode is enabled. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Power Usage Mode	<p> NOTE: Disabling Stealth Mode does not automatically restore the power or functionality of the card until the next complete boot. This non-standard mode is available as an option for Stealth Mode control of the Intel 8260 card for the following use cases: pre-boot applications, Linux OS, or Windows OS without Dell recommended drivers.</p> <p>Sets the system power usage modes. Possible values:</p> <ul style="list-style-type: none"> • Power Saver - This mode reduces processor sustained power to benefit battery life depending on usage cases. This mode may reduce system performance. • Balanced - This mode balances performance, noise, temperature, and battery life. This is the default mode. • Performance - This mode uses processor typical power and utilizes discrete graphics. • High Performance - This mode increases processor sustained power to produce higher system performance and produces more noise, increases system surface temperature, and reduces the battery life. 	Microsoft Windows, Linux
PPI Bypass for Block SID Command	<p>Enables or disables the PPI Bypass for Block SID Command feature. Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
PPI Bypass for TPM Clear	<p>Enables or disables the PPI Bypass for TPM Clear feature. Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Processor CMP	<p>Rolls the number of enabled cores in each processor. By default, the maximum number of cores per processor will be enabled. Possible values are:</p> <ul style="list-style-type: none"> • All • 1 • 2 • 4 • 6 • 8 • 10 • 12 • 14 • 16 	Microsoft Windows, Linux
Processor Core Count	<p>Enables the number of cores in each processor. Possible values are:</p> <ul style="list-style-type: none"> • 0 — Enables all cores. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Processor Execute Disable	<ul style="list-style-type: none"> • 1–N — Enables the specified number of cores. Enables or disables the No Execute (NX) flag. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Processor HT Assist	Allows user to disable the Probe Filter chipset option from BIOS setup. There are some applications that may have lower performance with the chipset feature enabled. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Processor Virtualization Technology	Enables or disables processor Virtualization. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Processor C State Control	Enables or disable the C States Control. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Processor Core Based Turbo Mode	Enables or Disables Single Core Turbo Mode. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Processor Logical Processor (HyperThreading)	Enables or Disables hyperthreading on next boot. On some Dell platforms, this property will show Enabled or Disabled despite the platform not supporting hyperthreading. The platforms in question are those that support Multi-Core processor technology, but do not support hyperthreading. In this case, the property actually toggles the multi-core capability on and off, rather than hyperthreading. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Primary Battery Charge Configuration	Configures the primary battery charging. Possible values are: <ul style="list-style-type: none"> • 1 = Standard Charge — Charges the battery over a long period of time • 2 = Express Charge — Switches the primary battery to Express Charge mode using the express charging algorithm • 3 = AC Use — Recommended setting for users who primarily operate the battery when it is plugged in 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> 4 = Auto Charge — The battery places itself in a mode based on periodic evaluation of customer usage to deliver the best balance of capacity 5 = Custom Charge — The battery starts and stops charging based on the user input 	
Primary Battery Custom Charge Limit	<p>Charges the battery based on the user input.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 1 = Primary Battery Custom Charge Start Limit — Is applicable to the DCIM_BIOSService for setting the start limit for charging the battery. 2 = Primary Battery Custom Charge Stop Limit — Is applicable to the DCIM_BIOSService for setting the stop limit for charging the battery. <p>Possible values for the Start and Stop limit are:</p> <ul style="list-style-type: none"> Start limit = 50 — 95 Stop limit = 55 — 100 Granularity — Dead band in binary format. For example, if the dead band is 5%, the stop charging value is 5% greater than the start charging value, but is not allowed to exceed 100. 	Microsoft Windows
Primary Battery Custom Charge Start Limit	<p>Sets the start limit for charging the battery.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Integers ranging from 50 to 95 	Linux
Primary Battery Custom Charge Stop Limit	<p>Sets the stop limit for charging the battery.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Integers ranging from 55 to 100 	Linux
Primary IDE Channel, Master Device	<p>Enables or Disables primary Parallel ATA master channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Off Auto 	Microsoft Windows
Primary IDE Channel, Slave Device	<p>Enables or disables primary Parallel ATA slave channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
Primary Video Device Slot	<p>Configures the slot for primary video display.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> 0 — Sets the onboard video device slot as primary video device slot. 1-15 — Sets the specified slot number as a primary video device slot. 255 — Scans PCI buses and uses the first video device slot, found with video card as a primary video device slot. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<p> NOTE: If a video card is not available in the specified slot number, the system will scan the PCI buses and uses the first video device slot, found with video card as a primary video device.</p>	
Prompt On Error	<p>Enables or disable the Prompt on Error.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Rear Single USB	<p>Allows the users to electrically enable or disable the Rear Single USB ports. If disabled, they are unusable in any OS.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • On 	Microsoft Windows, Linux
Rear Dual USB 2nd stack	<p>Enables or disable the Rear Dual USB 2nd stack.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Rear Quad USB	<p>This feature allows the users to electrically enable or disable the Rear Quad USB ports. If disabled, they are unusable in any OS.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Rear USB Ports	<p>Enables or disables all the rear ports.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Rear USB 3 Port	<p>Enables or disables the third rear USB port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Report Logo Type	<p>Sets Dell logo or Custom logo.</p> <p>Possible values are: 0,1</p> <ul style="list-style-type: none"> • Dell logo • Custom logo 	Microsoft Windows
Radio Transmission	<p>Enables or disables the radio transmission (MiniPCI Wireless or Bluetooth module).</p>	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Rugged Dock Non-Video Devices	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable <p>Enables or disables all the non-video devices (serial, audio, LAN, and USB ports) on a rugged dock.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Sata Controllers	<p>Enables or disable all SATA Controllers.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
SATA DIPM	<p>This property will allow users to disable or enable the feature that allows SATA HDDs to initiate link power management transitions.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Secondary IDE Channel, Master Device	<p>Enables or disables secondary Parallel ATA master channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows
Secondary IDE Channel, Slave Device	<p>Enables or disables secondary Parallel ATA slave channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows
Selective USB	<p>Enable Selective USB feature to disable all USB ports, except for the 2 Selective USB ports. This option will allow only keyboard/mouse connected to the Selective USB ports for the boot process to continue.</p> <p>Disable Selective USB feature to resume normal USB status and normal boot procedure.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
SATA Port 0	<p>Enables or disables Serial ATA channel 1.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
SATA Port 1	Enables or disables Serial ATA channel 2. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 2	Enables or disables Serial ATA channel 3. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 3	Enables or disables Serial ATA channel 4. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 4	Enables or disables Serial ATA channel 5. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 5	Enables or disables Serial ATA channel 6. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 6	Enables or disables Serial ATA channel 7. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 7	Enables or disables Serial ATA channel 8. Possible values are: <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SATA Port 8	Enables or disables Serial ATA channel 9. Possible values are: 1, 2 <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows, Linux
SD Card Boot	Enables or disables the system to boot from SD card. Possible values are: <ul style="list-style-type: none"> • Enabled — Allows the system to boot from SD card. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	<ul style="list-style-type: none"> Disabled — Restricts the system to detect SD card and boot from the SD card. 	
Secure Boot	<p>The BIOS performs a Secure Boot authentication while attempting to boot from a UEFI partition. It refers to this setting to decide on the POST behavior.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Enable — When enabled, BIOS only performs Secure Boot and boot in UEFI mode without loading the Compatibility Support Model (CSM). <p>NOTE: You can disable secure boot only from the BIOS setup screen.</p>	Microsoft Windows, Linux
Secure Boot Mode	<p>Configures the Secure Boot Mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Deployed Mode Audit Mode 	Microsoft Windows, Linux
Secure Boot Policy	<p>Configures the secure boot policy.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Standard — The BIOS uses the system manufacturer's keys and certificates to authenticate preboot images. Custom — The BIOS uses user-defined keys and certificates. Secure Boot Policy is Standard by default. 	Microsoft Windows, Linux
Secure Guard Extensions	<p>Configures the Software Guard Extensions (SGX) feature. You can select Enabled or Software Controlled if this option is Disabled.</p> <p>NOTE: Using Dell Command Monitor, you cannot do the following:</p> <ul style="list-style-type: none"> Disable this feature if the current state is Enabled or Software Controlled Enable this feature if the current state is Software Controlled Change this feature to Software Controlled if the current state is Enabled <p>NOTE: One of the methods of configuring the Software Guard Extensions (SGX) feature is from the BIOS setup screen.</p>	Microsoft Windows, Linux
Serial Communications	<p>Sets the Serial Communication.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> Off On without console redirection On with console redirection (COM1) On with console redirection (COM2) On with console redirection 	Microsoft Windows
Serial Port 1	<p>Configures the 1st serial port of the system.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Serial Port 2	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the 1st serial port. • Auto — Enables the auto-configuration of the 1st serial port. • COM1 • COM2 • COM3 • COM4 • BMC Serial • BMC NIC • RAC • COM1BMC • RS232 • RS422 • RS485 	Microsoft Windows, Linux
Serial Port 3	<p>Configures the 2nd serial port of the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the 2nd serial port. • Auto — Enables the auto-configuration of the 2nd serial port. • COM2 • COM4 • RS232 • RS422 • RS485 	Microsoft Windows, Linux
Serial Port 4	<p>Configures the 3rd serial port of the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the 3rd serial port. • Auto — Enables the auto-configuration of the 3rd serial port. • RS232 • RS422 • RS485 	Microsoft Windows, Linux
Serial Port 5	<p>Configures the 4th serial port of the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the 4th serial port. • Auto — Enables the auto-configuration of the 4th serial port. • RS232 • RS422 • RS485 	Microsoft Windows, Linux
Serial Port 5	<p>Configures the system's 5th serial port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the 5th serial port. • Auto — Enables the auto-configuration of the 5th serial port. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Serial Port 6	Configures the 6th serial port of the system. Possible values are: <ul style="list-style-type: none"> Disable — Disables the 6th serial port. Auto — Enables the auto-configuration of the 6th serial port. 	Microsoft Windows, Linux
SERR DMI Message	Enables or Disables SERR DMI Messages. Possible values are: <ul style="list-style-type: none"> Off On 	Microsoft Windows, Linux
Service OS Clear	Deletes the service OS non-volatile region. Possible values are: <ul style="list-style-type: none"> Enable - Deletes the service OS non-volatile region and changes the BIOS setting status to Disabled. Disable - Does not delete the service OS non-volatile region. 	Microsoft Windows, Linux
Set CMOS To Default	Request or do not request a default of CMOS values on the next boot. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows
SFP	Enables or disables Small Formfactor Pluggable (SFP) device. Possible values are: <ul style="list-style-type: none"> Disable — Disables the SFP device. Enable — Enables the SFP device. Enable With PXE— Enables the SFP device with PXE support. <p>NOTE: SFP device is listed as boot device only if this BIOS setting is enabled with PXE.</p>	Microsoft Windows, Linux
SFP Wake on LAN	Possible values: <ul style="list-style-type: none"> SFP - Allows the system to wake-up by special SFP signals. LAN or PXE - Allows the system to wake-up either by LAN, or by SFP signals. SFP PXE - Allows the system to wake-up by SFP signals, and immediately boot to PXE. 	Microsoft Windows, Linux
Side USB Ports	Enables or disables all the side ports. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
Sign of Life Indication	During POST, system acknowledges that the power button has been pressed in a manner that the user can either hear or feel.	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Signed Firmware Update	<p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable <p>Enforces the verification of digital signatures in the BIOS update payload before updating the BIOS. Once enabled, the system BIOS cannot be updated to any revision that does not contain a valid digital signature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
SmartCard Reader	<p>Enables or Disables the Smart Card Reader.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Enable 	Microsoft Windows
Slice Battery Custom Charge Limit	<p>Customs the charging limit.</p> <p>Possible values are: 50, 100, 5</p> <ul style="list-style-type: none"> • Allow Start Charging Limit • Allow Stop Charging Limit • Allow Stop Granularity 	Microsoft Windows
SMART Errors	<p>Enables or Disables SMART Errors.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
SMM Security Mitigation	<p>Enables or Disables SMM Security Mitigation.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Sound Device	<p>Status of the system's built-in sound device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Speaker	<p>The volume of the speaker.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • Low • Medium • High 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
SpeedStep	<p>Sets SpeedStep to Automatic, Disabled, Max Performance, or Max Battery.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Maximum performance • Maximum battery life • Auto 	Microsoft Windows, Linux
Splash Screen	<p>Enable/Disable the Splash Screen.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Spread Spectrum	<p>Tokens Used in Dell Command Monitor.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows
SR-IOV Global Enable	<p>Enable/Disable BIOS support for SRIOV devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Standby State	<p>Selects the power management suspend mode.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Standby S1 • Standby S3 	Microsoft Windows
Stealth Mode	<p>Enables or disables the pre-programmed stealth mode of operation of the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — The system elements operate in the normal mode. • Enable — The system elements operate in the pre-programmed stealth mode. <p>For example,</p> <ul style="list-style-type: none"> • If stealth mode is enabled and the device stealth mode is set to Turn off, it turns the device off while pressing Fn+F7 keys. • If the stealth mode is enabled and the device stealth mode is set to Unchanged, then the device retains its status and remains unchanged while pressing Fn+F7 keys. • If the stealth mode is disabled, then the state of the device cannot be changed by the individual device stealth modes. <p>Following are the system elements that have effect of stealth mode on them:</p> <ul style="list-style-type: none"> • Stealth Mode Quiet Bluetooth 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Stealth Mode Quiet Bluetooth	<ul style="list-style-type: none"> • Stealth Mode Quiet Fans • Stealth Mode Quiet GPS • Stealth Mode Quiet LCD • Stealth Mode Quiet LEDs • Stealth Mode Quiet Speakers • Stealth Mode Quiet WLAN • Stealth Mode Quiet WWAN • Stealth Mode WiGig Radio <p>Configures the state of the bluetooth radio depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the bluetooth radio if the stealth mode is enabled. • Unchanged - Retains the current state of the bluetooth. 	Microsoft Windows, Linux
Stealth Mode Quiet Fans	<p>Configures the state of the fans depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the fan if the stealth mode is enabled. • Unchanged - Retains the current state of the fan. 	Microsoft Windows, Linux
Stealth Mode Quiet GPS	<p>Configures the state of the GPS radio depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the GPS radio if the stealth mode is enabled. • Unchanged - Retains the current state of the GPS radio. 	Microsoft Windows, Linux
Stealth Mode Quiet LCD	<p>Configures the state of the LCD screen backlight depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the LCD screen backlight if the stealth mode is enabled. • Unchanged - Retains the current state of the LCD screen backlight. 	Microsoft Windows, Linux
Stealth Mode Quiet LEDs	<p>Configures the state of the LEDs depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the system LEDs if the stealth mode is enabled. • Unchanged - Retains the current state of the system LEDs. 	Microsoft Windows, Linux
Stealth Mode Quiet Speakers	<p>Configures the state of the onboard speakers depending on the Stealth mode is enabled or disabled.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Stealth Mode Quiet WLAN	<p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the onboard speakers if the stealth mode is enabled. • Unchanged - Retains the current state of the onboard speakers. 	Microsoft Windows, Linux
Stealth Mode Quiet WWAN	<p>Configures the state of the WLAN (and WiGig) radio depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the WLAN if the stealth mode is enabled. • Unchanged - Retains the current state of the WLAN. 	Microsoft Windows, Linux
Stealth Mode WiGig Radio	<p>Configures the state of the WWAN (and WiGig) radio depending on the Stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off - Turns off the WWAN (and WiGig) radio if the stealth mode is enabled. • Unchanged - Retains the current state of the WWAN (and WiGig) radio. 	Microsoft Windows, Linux
Strong Password	<p>Configures or displays the state of Wireless Gigabit Alliance (WiGig) radio depending on the Unobtrusive mode or stealth mode is enabled or disabled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Turn off — Turns off the WiGig radio if the Unobtrusive mode or stealth mode is enabled. • Unchanged — Retains the current state of the Wigig radio. 	Microsoft Windows, Linux
Surround View	<p>Enable/Disable Strong Password.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Switchable Graphics	<p>This feature will allow user to enable SurroundView that allow user to use an additional AMD PCIE video card in conjunction with the onboard graphics card which would give you ability to use multiple monitors at once. Notes: it's only for AMD platform/disable SurroundView thatdisable multiple monitor support with additional AMD PCIE video card. Notes: it's only for AMD platform.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
System Isochronous Mode	<p>Enables or disables System Isochronous mode.</p> <p> NOTE: Isochronous mode may be best for audio and video streaming applications.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable — Enable this mode to reduce the latency of memory transactions at the expense of bandwidth. • Disable — Disable this mode for applications that need high memory bandwidth. 	
Tablet Buttons	<p>Enables or Disables Tablet Buttons.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
TCM Visibility	<p>Hides or unhides the TCM from the operating system on the next boot.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Hidden • Visible 	Microsoft Windows
Tertiary IDE Channel, Master Device	<p>Enables or Disables tertiary Parallel ATA master channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows
Tertiary IDE Channel, Slave Device	<p>Enables or Disables tertiary Parallel ATA master channel.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto 	Microsoft Windows
Thunderbolt	<p>Enables or disables the thunderbolt controller in the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Thunderbolt Boot Support	<p>Enables or disables booting from the Thunderbolt device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Thunderbolt Pre Boot Module	<p>Enables or disables OROMs and pre-boot UEFI drivers provided by Thunderbolt devices or PCIe devices.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Thunderbolt Security Level	<ul style="list-style-type: none"> • Enable <p>Configures the thunderbolt security level.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • No Security — Disables the thunderbolt security. • User Authorization — Allows minimum user notification. Connection manager requests connection approval from the host software, based on the unique ID of the connecting device, auto approval might or might not be given. • Secure Connect — Allows one-time saved key device. Connection manager requests connection approval from the host software; approval is given only if the host challenge to device is acceptable. • Display Port Only — Allows to connect only display port. 	Microsoft Windows, Linux
Touch Screen	<p>Enables or disables the touchscreen of the device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
TPM Hash Algorithm	<p>Selects the hash algorithm used for TPM 2.0 measurements.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = SHA-1 • 1 = SHA-256 • 2 = SHA-384 • 3 = SHA-512 <p>NOTE: This value cannot be changed if the TPM is already owned.</p>	Microsoft Windows, Linux
Trusted Execution	<p>New processor execution mode and BIOS hooks to enable a protected execution environment and main memory protection.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • On • Off 	Microsoft Windows, Linux
Trusted Platform Module	<p>Enables or Disables the Trusted Platform Module (TPM).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Trusted Platform Module Activation	<p>This property is used to activate the TPM if it is deactivated, unowned and a BIOS Admin password is set and has been verified; otherwise this property reports the status of the TPM Activation BIOS option.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Deactivate • Activate 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
TPM PPI ACPI Support	<p>Enables or disables the TPM ACPI physical presence commands.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
TPM PPI Provision Override	<p>Enables or disables the physical presence for the ACPI TPM PPI provision operations.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
TPM PPI Deprovision Override	<p>Enables or disables the physical presence for the ACPI TPM PPI deprovision operations.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
Type-C Battery Overload Protection	<p>Configures the maximum power for type-C connector.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 – 7.5 Watts • 1 – 15 Watts 	Microsoft Windows, Linux
UART Power Down	<p>Allow the operating system to power down or Prohibit OS from powering down UART.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Uefi Boot Path Security	<p>Determines whether the system should prompt the user to enter the Admin password, if set, while booting from a UEFI boot path, from the F12 Boot Menu.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Always except internal hdd — All UEFI boot paths require the user to enter the Admin password, except for the boot paths that are hosted on an internal hard disk drives. • Always Except Internal HDD and PXE - All UEFI boot paths requires the Admin password, except for boot paths hosted on internal hard disk drives or PXE Boot. • Always — Booting from any UEFI boot path requires the user to enter the Admin password. • Never — The Admin password is not required for booting from UEFI boot paths. 	Microsoft Windows, Linux
UEFI Network Stack	<p>Possible values are:</p> <ul style="list-style-type: none"> • Enable — UEFI networking protocols are available permitting preOS image of the network, including PXE. • Disable — UEFI networking protocols are not available in the preOS environment and network boot by PXE is disabled. This setting will improve boot times. 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
UEFI Capsule	<p>Enables or disables BIOS updates via UEFI capsule update packages.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable <p>NOTE: Disabling this option blocks the BIOS updates from services such as Microsoft Windows Update and Linux Vender Firmware Service (LVFS).</p>	Microsoft Windows, Linux
Unobtrusive Mode	<p>Enables or disables the <Fn> key combination, which controls the light emissions from the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — Disables the <fn> key combination • Enable — Enables the <fn> key combination 	Microsoft Windows, Linux
USB	<p>Enables, Disables, or sets the system's USB port to No Boot (if supported).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable • No boot 	Microsoft Windows
USB 3.0	<p>Enable or Disable USB 3.0</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Emulation	<p>Enables or Disables USB keyboard and mouse support for Operating systems that do not natively support USB keyboards and mice.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
USB Flash Drive Emulation	<p>Possible values are:</p> <ul style="list-style-type: none"> • Auto • Floppy • HD only 	Microsoft Windows
USB Port 0	<p>Enables or Disables USB Port 00.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 1	<p>Enables or Disables USB Port 01.</p>	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
	Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	
USB Port 2	Enables or Disables USB Port 02. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 3	Enables or Disables USB Port 03. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 4	Enables or Disables USB Port 04. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 5	Enables or Disables USB Port 05. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 6	Enables or Disables USB Port 06. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 7	Enables or Disables USB Port 07. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 8	Enables or Disables USB Port 08. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
USB Port 9	Enables or Disables USB Port 09. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
USB Port 10	Enables or Disables USB Port 10. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 11	Enables or Disables USB Port 11. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 12	Enables or Disables USB Port 12. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 13	Enables or Disables USB Port 13. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 14	Enables or Disables USB Port 14. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 15	Enables or Disables USB Port 15. Possible values are: <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
USB Port 16	Enables or Disables USB Port 16. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
USB Port 17	Enables or Disables USB Port 17. Possible values are: <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
USB Port 18	Enables or Disables USB Port 18. Possible values are: <ul style="list-style-type: none"> • Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
USB Port 19	<ul style="list-style-type: none"> Disable Enables or Disables USB Port 19. Possible values are: <ul style="list-style-type: none"> Enable Disable 	Microsoft Windows, Linux
USB Port 20	Enables or Disables USB Port 20. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
USB Port 21	Enables or Disables USB Port 21. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
USB Port 22	Enables or Disables USB Port 22. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
USB Port 23	Enables or Disables USB Port 23. Possible values are: <ul style="list-style-type: none"> Disable Enable 	Microsoft Windows, Linux
USB Port 24	Enables or Disables USB Port 24. Possible values are: <ul style="list-style-type: none"> Enable Disable 	Microsoft Windows, Linux
USB Port 25	Enables or Disables USB Port 25. Possible values are: <ul style="list-style-type: none"> Enable Disable 	Microsoft Windows, Linux
USB Port 26	Enables or Disables USB Port 26. Possible values are: <ul style="list-style-type: none"> Enable Disable 	Microsoft Windows, Linux
USB Port 27	Enables or Disables USB Port 27.	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
USB Port 28	<p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable <p>Enables or Disables USB Port 28.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
USB Port 29	<p>Enables or Disables USB Port 29.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable • Disable 	Microsoft Windows, Linux
USB Provision	<p>Enables or disables provisioning of Intel AMT from a USB storage device.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enabled — Intel AMT can be provisioned using the local provisioning file via a USB storage device. • Disabled — Provisioning of Intel AMT from a USB storage device is blocked. 	Microsoft Windows, Linux
USB PowerShare	<p>Enables or disables the USB PowerShare feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
User Accessible USB Ports	<p>Enables or disables user accessible USB ports.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • All off • Back only • All on 	Microsoft Windows
USB Wake from S4	<p>Enables or disables the USB wake from s4 power state of the system.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Enable - Enables the USB wake from s4 power state of the system. • Disable - Disables the USB wake from s4 power state of the system. 	Microsoft Windows, Linux
USB Wake Support	<p>Enables or Disables USB Wake setting.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Video Expansion	<p>Enables or Disables Video Expansion.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Video Memory Size	<p>Enables or Disables Video Expansion.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Off • Auto • 1MB • 8MB • 16MB • 32MB • 64MB • 128MB • 256MB • 512MB • 1GB 	Microsoft Windows
VT for Direct IO	<p>Intel Virtualization Technology for Direct I/O (VT-d) – new chipset feature that enhances I/O support (DMA) when running a Virtual Machine Monitor.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Watchdog OS Boot Protection	<p>Enables or disables Watchdog OS Boot Protection.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable - The application cannot configure a chipset-based timer to reset or shutdown the system. By default the Application Watchdog Timer is disabled • Enable - The application configures a chipset-based timer to reset or shutdown the system. 	Microsoft Windows, Linux
Wake on Dock	<p>Enables or disables waking the system when a docking connection is made.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wake On LAN	<p>Defines the wake On LAN feature. This property defines whether Wakeup On LAN is disabled, enabled for on-board NIC only or enabled for add-in NIC only, if Enabled with boot to NIC option is selected, the system boots from the NIC boot-ROM upon a remote wakeup.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable_AIC 	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Wake on 2nd LAN (RJ-45/SFP)	<ul style="list-style-type: none"> • Enable_OnBoard • Enable All • Lan or WLAN • WLAN only • LAN with PXE boot 	Microsoft Windows
Wake-On-LAN Boot Override	<p data-bbox="580 380 967 407">Defines the wake on 2nd LAN feature.</p> <p data-bbox="580 432 839 459">Possible values are: 1, 2, 3</p> <ul style="list-style-type: none"> • Disabled • LanOnly • LanWithPxeBoot <p data-bbox="580 611 1235 821">If enabled then when the system powers on due to a Wake-on-LAN event, the NIC boot-ROM is automatically given the highest boot priority, pre-pending the PXE boot-ROM to the system's current boot sequence. If the system powers on due to some other event, this selection does not influence the boot sequence. If disabled then the boot override feature is disabled and the system boot sequence is in effect for all types of system power on.</p> <p data-bbox="580 852 775 879">Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Warnings And Errors	<p data-bbox="580 995 1235 1100">During POST the system continues to boot or pauses when warnings or errors are detected. This feature can be used for the remotely managed systems that do not have a keyboard or a consoles available for use.</p> <p data-bbox="580 1125 775 1152">Possible values are:</p> <ul style="list-style-type: none"> • 1 = Disabled – System pauses for the user to respond when warnings or errors are detected. • 2 = Continue on Warnings – System continues to boot when warnings are detected, but pauses for the user to respond when errors are detected. • 3 = Continue on Warnings and Errors – System continues to boot when warnings or errors are detected. 	Microsoft Windows, Linux
Watchdog Timer	<p data-bbox="580 1398 1177 1451">The system will/will not reboot/reset if the watchdog timer expires</p> <p data-bbox="580 1482 775 1509">Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Adapter	<p data-bbox="580 1625 951 1652">Enables or disables Wireless Adapter.</p> <p data-bbox="580 1682 775 1709">Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Device	If disabled then wireless devices are always disabled.	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
WiFi Catcher Changes	<p>If set to APP then wireless devices can be controlled by an application such as QuickSet</p> <p>If set to Hotkey then wireless devices can be controlled by an application such as QuickSet</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • APP • Hotkey 	Microsoft Windows
WiFi Locator	<p>Permits or Denies WiFi Catcher changes. If the administrator password is not set, this setting will have no effect.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Deny • Permit <p>Enables or Disables the WiFi Locator.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
Wireless LAN	<p>Enables or Disables the wireless LAN module.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Radio Control Switch	<p>Enables or disables the Wireless Gigabit (WiGig) radio control switch on the dock.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Switch Bluetooth Control	<p>Enables or Disables wireless switch Bluetooth control.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Switch Cellular Control	<p>Enables or Disables wireless switch cellular control. This switch has no effect on the state of the cellular radio for systems with a physical wireless on/off switch.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Switch Change	<p>Permits or Denies Wireless Switch changes. If the administrator password is not set, this setting will have no effect.</p>	Microsoft Windows

BIOS Settings Name	Description	Supported Operating System(s)
Wireless Switch Wireless LAN Control	<p>Possible values are:</p> <ul style="list-style-type: none"> • Deny • Permit <p>Enables or Disables wireless switch wireless LAN control. This switch has no effect on the state of the wireless LAN radio for systems with a physical wireless on/off switch.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
Wireless Switch WLAN-WIGIG Control	<p>Enables or disables the effect of physical wireless switch on wireless LAN and WiGig radio.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — The wireless physical switch does not affect the wireless LAN and WiGig radios. • Enable — If the wireless physical switch is on, turns the wireless LAN on and WiGig radio on. If the wireless switch is off, turns the wireless LAN on and WiGig radio off. 	Microsoft Windows, Linux
Wireless UWB	<p>Enable/Disable UWB card.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
WLAN Region Code	<p>Sets the WLAN code for specific region.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Rest of the World — Sets the WLAN region code for the rest of the world. This option is selected by default. • 1 = North America (FCC) — Sets the WLAN region code for Canada, and the United States. • 2 = Europe — Sets the WLAN region code for Australia, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and United Kingdom. • 3 = Japan — Sets the WLAN region code for Japan only. • 4 = Australia — Sets the WLAN region code for Australia, New Zealand, Saudi Arabia, South Africa, UAE, and Vietnam. • 5 = China South Asia — Sets the WLAN region code for China, and India. • 6 = Taiwan — Sets the WLAN region code for Colombia, Peru, and Taiwan. • 7 = Indonesia — Sets the WLAN region code for Indonesia only. 	Microsoft Windows, Linux
WWAN Radio	<p>Configures the WWAN radio.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • WLAN on • WWAN on 	Microsoft Windows, Linux

BIOS Settings Name	Description	Supported Operating System(s)
Wireless Switch GPS On WWAN Radio	<ul style="list-style-type: none"> • If set to Disable then it disables both WLAN and WWAN; • If set to WLAN ON then it toggles between WLAN radio on and WWAN radio off; • If set to WWAN ON then it toggles between WWAN radio on and WLAN radio off. <p>Enables or disables the effect of physical wireless switch on the GPS radio of the wireless WAN card.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable — If disabled, wireless switch does not have any effect on the state of the GPS radio of the wireless WAN card. • Enable — If enabled, wireless switch turns the GPS radio of the wireless WAN card on or off. 	Microsoft Windows, Linux
WWan Bus Mode	<p>WWan Bus Mode sets the interface type of the Wireless Wan (WWAN) card. It is recommended that the system running Microsoft Windows must set this field to PCIe mode, while all the other systems must set this field to USB mode.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • PCIe mode • USB mode 	Microsoft Windows, Linux
WWAN Connection Auto Sense	<p>When the WWAN is enabled, this BIOS setting enables the feature that automatically turns off the WWAN when it is connected to the network.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
WLAN Connection Auto Sense	<p>When the WLAN is enabled, this BIOS setting enables the feature that automatically turns off the WLAN when it is connected to the network.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows
XD Card	<p>Enables or disables the embedded XD Card port.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux
ZigBee	<p>Enables or disables the ZigBee option.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Disable • Enable 	Microsoft Windows, Linux

Alerts in Dell Command | Monitor 10.2

Local alerting involves displaying user messages and writing to the Windows event log. Remote alerting is accomplished through WMI indications. When Dell Command | Monitor detects an event, it generates an alert, which can be transmitted through the WMI service to a remote management application that is subscribed to that alert type.

When an alert is generated, Dell Command | Monitor supports following types of notification:

For Windows,

- Windows event log—available at Windows Logs > System
- CIM Indication— available through DCIM_AlerIndication class
- SNMP traps — available through 10909.mib file
- History — available through DCIM_LogEntry class instances

For Linux,

- Syslog — available at /var/log
- CIM Indication— available through DCIM_AlerIndication class
- Application log—available through DCIM_LogEntry class
- History — available through DCIM_LogEntry class instances

In Dell Command | Monitor, each type of event (for example, CurrentProbe, TemperatureProbe, Smart, and so on) that gets logged is provided with a unique event ID number. The events have unique IDs to enable log scraping; this way you can programmatically look at the event log and determine what Dell Command | Monitor events have occurred.

In Dell Command | Monitor for Windows, you are also provided with an option to receive either a single alert or a limited number of alerts of the occurrence of an event, of a given type. You can mask out specific events and can generate single alert messages for only those events.

NOTE: Configuring the selected events is not supported for Dell Command | Monitor for Linux.


Dell Command | Monitor recognizes the following eight CIM severity levels using perceived severity (represented by integers 0 through 7):


- UNKNOWN = 0
- OTHER = 1
- INFORMATION = 2
- WARNING_DEGRADED = 3
- MINOR = 4
- MAJOR = 5
- CRITICAL = 6
- FATAL_NONRECOVERABLE = 7

NOTE: Events with CRITICAL severity cause Dell Command | Monitor to shut down the local system.

The lowest WMI severity level that Dell Command | Monitor sends is WARNING_DEGRADED and the highest is CRITICAL. The severities of Dell Command | Monitor events are listed in Table 2 to 1. Dell Command | Monitor sends local alerting and remote alerting for all the listed events.

Table 147. Events Polled by Dell Command | Monitor

Dell Command Monitor Event (Windows event log Number)	Description
AlertTemperatureProbeWarning (1053)	Temperature probe has detected a warning value.
AlertTemperatureProbeFailure (1054)	Temperature probe has detected a failure value.
AlertTemperatureProbeNonRecoverable (1055)	Temperature probe has detected a nonrecoverable value.
FanProbe (1103)	A cooling device has exceeded a minor threshold.
AlertCoolingDeviceFailure (1104)	Cooling device sensor has detected a failure value.
AlertCoolingDeviceNonRecoverable (1105)	Cooling device sensor has detected a nonrecoverable value.
AlertVoltageProbeWarning (1153)	Voltage probe has detected a warning value.
AlertVoltageProbeFailure (1154)	Voltage probe has detected a failure value.
AlertVoltageProbeNonRecoverable (1155)	Voltage probe has detected a nonrecoverable value.
CurrentProbe (1203)	An electrical current probe has exceeded a minor threshold.
	One of the hard-disk drive is running out of free space.
AlertAmperageProbeFailure (1204)	Amperage probe has detected a failure value.
AlertAmperageProbeNonRecoverable (1205)	Amperage probe has detected a nonrecoverable value.
ChassisIntrusionNormal (1252)	Chassis intrusion has returned to normal.
ChassisIntrusion (1254)	System chassis intrusion alert.
EccMemory (1403)	A memory checksum failure has occurred.
	 NOTE: This event is not supported on the system running RHEL.
RAIDControllerFailure (1801)	A RAID controller has failed.
RAIDControllerOffline (1802)	A RAID controller is offline.
RAIDControllerPowerOff (1803)	A RAID controller is turned off.
AlertRaidControllerDegraded (1804)	A RAID controller has degraded.
PhysicalDiskDegraded (1811)	A physical hard-disk drive is degraded.
AlertPhysicalDiskRebuilding (1812)	A physical hard-disk drive is rebuilding.
PhysicalDiskFailed (1813)	A physical hard-disk drive has failed.
PhysicalDiskOffline (1814)	A physical hard-disk drive is offline.
VirtualDiskDegraded (1821)	A virtual hard-disk drive is degraded.

Dell Command Monitor Event (Windows event log Number)	Description
VirtualDiskRebuilding (1822)	A virtual hard-disk drive is rebuilding.
VirtualDiskFailed (1823)	A virtual hard-disk drive has failed.
VirtualDiskOffline (1824)	A virtual hard-disk drive is offline.
NumberOfDisksIncreased (2030)	A hard-disk drive has been added.
NumberOfDisksDecreased (2031)	A hard-disk drive has been removed.
MemorySizeIncreased (2032)	The memory size has been increased.
MemorySizeDecreased (2033)	The memory size has been decreased.
DiskCapacity (2034)	In the current version, two user-defined thresholds are used. An event is generated only when the conditions of both thresholds are met. The first threshold, expressed as an absolute value in megabytes, specifies the size of the hard-disk drive to be monitored. Hard-disk drives with a capacity smaller than the specified size are ignored. The second threshold is expressed as a percentage of the hard-disk drive size. An event is generated when the available free space on one of the monitored hard-disk drives falls below this percentage.
NumberOfProcessorsIncreased (2035)	Number of processors on the system has increased.
NumberOfProcessorsDecreased (2036)	A processor has been removed.
HDD Smart Failure(2037)	<ul style="list-style-type: none"> • A hard-disk drive condition has occurred that may eventually lead to a hard-disk drive failure. • Error message is displayed when the current value exceeds the threshold value. • Warning message is displayed when the current value exceeds the custom threshold value. <p> NOTE: Extended Error and Warning messages are supported only on Embedded box personal computer 3000/5000.</p>
DiskSizeIncreased (2038)	The size of at least one hard-disk drive has increased.
DiskSizeDecreased (2039)	The size of at least one hard-disk drive has decreased.

Sample scripts for Dell Command | Monitor 10.2

To run various functionalities in Dell Command | Monitor, see the sample PowerShell and VB scripts available at [Dell Knowledge Library](#), Dell Command | Monitor page.