System Info Profile

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143 # System Info Profile

144 ## 1 Scope

145 The DCIM System Info Profile describes the properties and interfaces for executing system management
146 tasks related to the management of the host system. The profile standardizes and aggregates the
147 description for the platform's basic properties into a system view representation and provides static
148 methodology for the clients to query the system views without substantial traversal of the model.

149

150 ## 2 Normative References

151 Refer to the following documents for more information.

152 **NOTE:** For dated references, only the edition cited applies. For undated references, the latest edition of
153 the referenced document (including any amendments) applies.

154 - DMTF DSP1033, *Profile Registration Profile 1.0.0*
155 - DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*
156 - DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*
157 - *Dell Lifecycle Controller Best Practices Guide v1.0*, <link TBD>
158 - *Dell WSMAN Licenses and Privileges 1.0*
159 - *Dell LC XML Schema Guide*
160 - Dell Tech Center MOF Library:

161   http://www.delltechcenter.com/page/DCIM.Library.MOF

162 - Related Managed Object Format (MOF) files:

163   - DCIM_SystemView.mof
164   - DCIM_SystemAttribute.mof
165   - DCIM_SystemEnumeration.mof
166   - DCIM_SystemInteger.mof
167   - DCIM_SystemString.mof
168   - DCIM_SystemManagementService.mof
169   - DCIM_LCElementConformsToProfile.mof
170   - DCIM_LCRegisteredProfile.mof
171

3   Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1
conditional – Indicates **requirements to be followed strictly in order to conform to the document when the specified conditions are met.**

3.2
mandatory - Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted.

3.3
may - Indicates a course of action permissible within the limits of the document.

3.4
optional– Indicates a course of action permissible within the limits of the document.

3.5
referencing profile – Indicates a profile that owns the definition of this class and can include a reference to this profile in its "Related Profiles" table.

3.6
Shall – Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted.

3.7
FQDD – Fully Qualified Device Descriptor is used to identify a particular component in a system.

3.8
Interop Namespace: root/interop
Interop Namespace: root/interop is where instrumentation instantiates classes to advertise its capabilities for client discovery.

3.9
Implementation Namespace: root/dcim
Implementation Namespace: root/dcim is where instrumentation instantiates classes relevant to executing core management tasks.

3.10
ENUMERATE – Refers to WS-MAN ENUMERATE operation as described in Section 8.2 of DSP0226_V1.1 and Section 9.1 of DSP0227_V1.0

3.11
GET – Refers to WS-MAN GET operation as defined in Section 7.3 of DSP00226_V1.1 and Section 7.1 of DSP0227_V1.0

4 Symbols and Abbreviated Terms

4.1
CIM - Common Information Model

4.2
iDRAC - Integrated Dell Remote Access Controller – management controller for blades and monolithic servers

4.3
CMC - Chassis Manager Controller – management controller for the modular chassis

4.4
WBEM - Web-Based Enterprise Management

4.5
PFC - Power Factor Corrector – controls the power drawn from the power supply.

5 Synopsis

Profile Name: System Info

Version: 1.4.0

Organization: Dell

CIM Schema Version: 2.26 Experimental

Dell Schema Version: 1.0.0

Interop Namespace: root/interop: root/interop

Implementation Namespace: root/dcim: root/dcim

Central Class: DCIM_SystemView

Scoping Class: DCIM_ComputerSystem

The Dell System Info Profile is a component profile that contains the Dell specific implementation requirements for system view.

DCIM_SystemView shall be the Central Class.

Table 1 identifies profiles that are related to this profile.

Table 1 – Related Profiles

Profile Name	Organization	Version	Relationship
Profile Registration Profile	DMTF	1.0	References

²³⁵ **6 Description**

236 The Dell System Info Profile describes platform's basic properties. The host system's information is
237 represented by an instance of DCIM_SystemView class.

238 Figure 1 details the class diagram of the Dell System Info Profile.

239
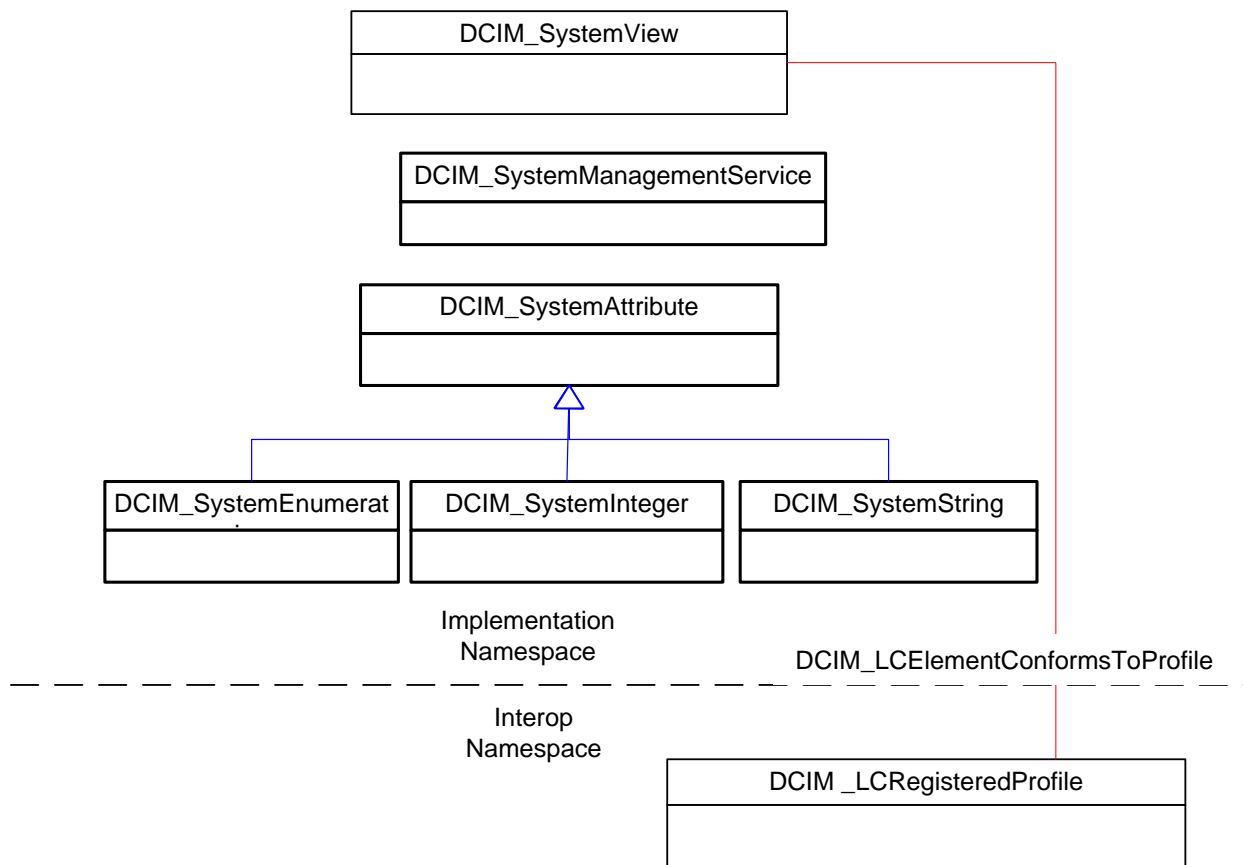
240
241

242 **Figure 1 – Class Diagram**

243 Figure 2 details typical Dell System Info Profile implementation for a platform. In order for client to
244 discover the instrumentation's support of this profile, SystemInfoProfile is instantiated in the Interop
245 Namespace: root/interop. SystemInfoProfile instance describes the information about the implemented
246 profile: most importantly, the name and version of the profile and the organization name that produced the
247 profile.

248 Systemview1 is the system views representing the platform's basic properties in the Implementation
249 Namespace: root/dcim. It is associated to the Interop namespace's SystemInfoProfile instance.
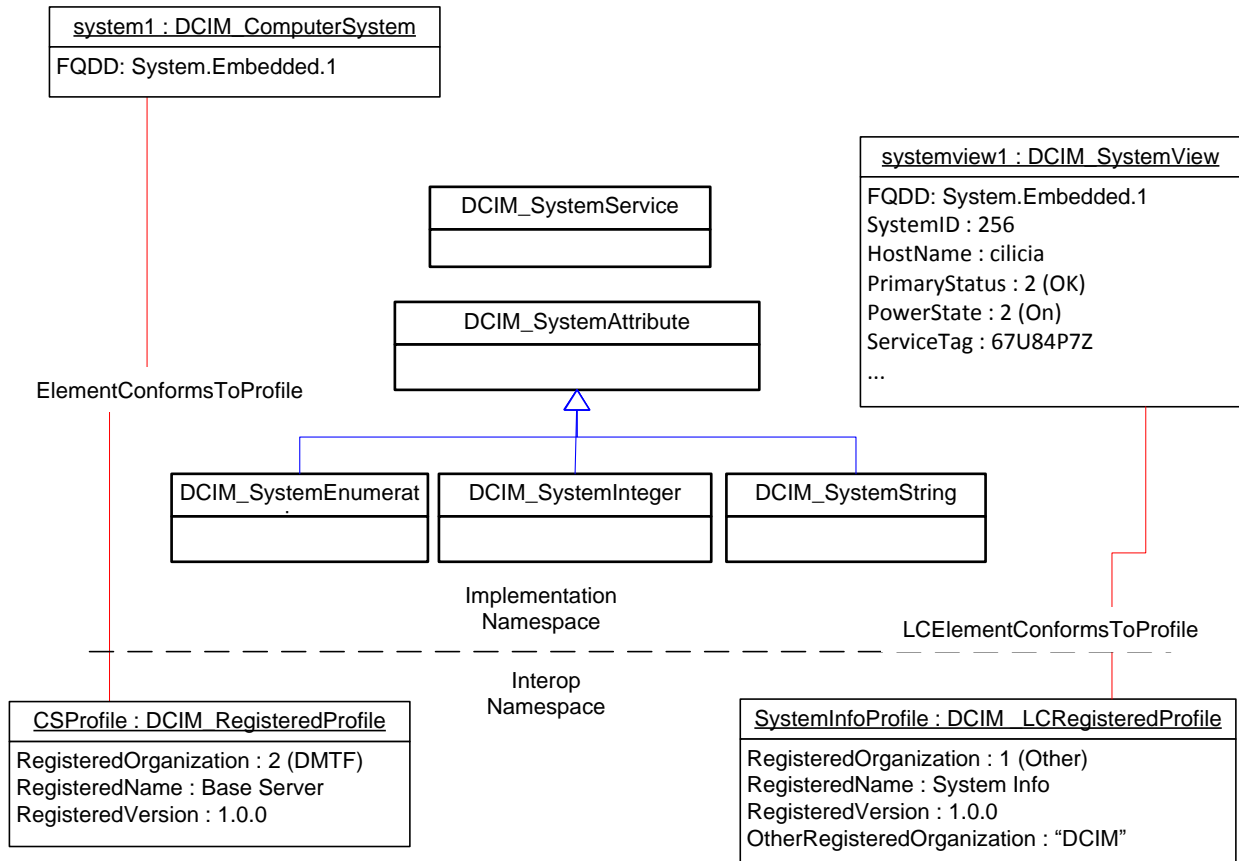
250

251   **Figure 2 – System Info Profile Implementation**

²⁵² 7 Implementation Description

²⁵³ This section describes the requirements and guidelines for implementing Dell System Info Profile.

²⁵⁴ **Table 2 – Class Requirements: System Info Profile**

Element Name	Requirement	Description
Classes		
DCIM_SystemView	Mandatory	The class shall be implemented in the *Implementation Namespace: root/dcim.* See section 7.1.
DCIM_SystemEnumeration	Mandatory	The class shall be implemented in the *Implementation Namespace: root/dcim.* See section 7.2.
DCIM_SystemString	Mandatory	The class shall be implemented in the *Implementation Namespace: root/dcim.* See section 7.3.
DCIM_SystemInteger	Mandatory	The class shall be implemented in the *Implementation Namespace: root/dcim.* See section 7.4.
DCIM_SystemManagementService	Mandatory	The class shall be implemented in the *Implementation Namespace: root/dcim.* See section 7.6.
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in both the *Interop Namespace: root/interop* and *Implementation Namespace: root/dcims.* See sections 7.1 and 7.7
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the *Interop Namespace: root/interop.* See section 7.7
Indications		
None defined in this profile		

²⁵⁵

²⁵⁶ 7.1 DCIM_SystemView – System View

²⁵⁷ This section describes the implementation for the DCIM_SystemView class.

²⁵⁸ This class shall be instantiated in the Implementation Namespace: root/dcim.

²⁵⁹ The DCIM_LCElementConformsToProfile association(s) shall reference the DCIM_SystemView
²⁶⁰ instance(s).

²⁶¹ 7.1.1 Resource URIs for WinRM®

²⁶² The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-
²⁶³ schema/2/DCIM_SystemView?__cimnamespace=root/dcim"

²⁶⁴ The key property shall be the InstanceID.

²⁶⁵ The instance Resource URI for DCIM_SystemView instance shall be:
²⁶⁶ "http://schemas.dell.com/wbem/wscim/1/cim-
²⁶⁷ schema/2/DCIM_SystemView?__cimnamespace=root/dcim+InstanceID=System.Embedded.1"

268 **7.1.2 Operations**

269 The following table lists the operations implemented on DCIM_SystemView.

270 **Table 3 – DCIM_SystemView – Operations**

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

271

272 **7.1.3 Properties**

273 The following table details the implemented properties for DCIM_SystemView instance that represents
274 the host system. The "Requirements" column shall denote whether the property is implemented (for
275 requirement definitions, see section 3). The "Additional Requirements" column shall denote either
276 possible values for the property, or requirements on the value formulation.

277 **Table 4 – DCIM_SystemView – Properties**

Property Name	Requirements	Type	Requirement and Description
InstanceID	Mandatory	string	The property shall be "System.Embedded.1"
FQDD	Mandatory	string	The property shall be "System.Embedded.1"
AssetTag	Mandatory	string	Asset tag of the system.
BaseBoardChassisSlot	Optional	string	The property represents the modular chassis slot numbers that the server blade occupies in the modular enclosure. This property shall be represented for modular server blades.
BatteryRollupStatus	Mandatory	uint32	The property shall contain the battery rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). BatteryRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
BIOSReleaseDate	Mandatory	string	String number of the BIOS release date. The date string, if supplied, is in mm/dd/yyyy format.
BIOSVersionString	Mandatory	string	System BIOS version.
BladeGeometry	Optional	uint16	The property shall represent the geometric dimension of the server blade enclosure in modular enclosure described. The property defines value maps for the geometry description in slot height and width. This property shall be represented for modular server blades.
BoardPartNumber	Mandatory	string	The property shall represent the motherboard part number.
BoardSerialNumber	Mandatory	string	The property shall represent the motherboard serial number.

Property Name	Requirements	Type	Requirement and Description
ChassisName	Mandatory	string	The property shall be "Main System Chassis" for monolithic and "Server Blade" for modular's server blades.
ChassisServiceTag	Optional	string	This property represents the service tag for the modular enclosure chassis. This property shall be represented for modular server blades.
ChassisSystemHeight	Mandatory	uint16	The property shall be in U of rack space units. The property shall be applicable only for monolithic server.
CMCIP	Optional	string	This property represents the IP address for the modular enclosure chassis management controller (CMC). This property shall be represented for modular server blades.
CPLDVersion	Mandatory	string	The property shall represent the CPLD version.
CPURollupStatus	Mandatory	uint32	The property shall contain the rollup status of all the CPUs and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). CPURollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
ExpressServiceCode	Mandatory	String	ExpressServiceCode of the system.
FanRollupStatus	Mandatory	uint32	The property shall contain the fan rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). FanRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
HostName	Mandatory	string	System name string in ASCII.
LicensingRollupStatus	Mandatory	uint32	The property shall contain the licensing rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). LicensingRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.

Property Name	Requirements	Type	Requirement and Description
LifecycleControllerVersion	Mandatory	string	The property shall represent the overall product release version for the Lifecycle Controller (LC). The property format shall be M + "." + N + "." + U where: M - the major version (in numeric form); N - the minor version (in numeric form); and U - the update version (in numeric form). NOTE: The property does not represent a particular firmware version that LC consists of but rather the overall LC product version.
Manufacturer	Mandatory	string	System Manufacturer string. For example: DELL Inc.
MaxCPUSockets	Mandatory	uint32	Maximum CPU sockets in the system.
MaxDIMMSlots	Mandatory	uint32	The number of slots or sockets available for memory devices in the system memory array.
MaxPCIeSlots	Mandatory	uint32	Maximum PCIe slots in the system.
MemoryOperationMode	Mandatory	string	System memory operation mode. Denotes the mode of operation for system memory such as mirrored, advanced ECC, or optimized mode.
Model	Mandatory	string	Model of the system. For example: PowerEdge R610.
PlatformGUID	Mandatory	string	System GUID uniquely identifies the system. The property is also known as BIOS GUID. This GUID matces in value with the representation of the GUID surfaced through OS based GUI and SNMP.
PopulatedCPUSockets	Mandatory	uint32	Populated CPU sockets in the system.
PopulatedDIMMSlots	Mandatory	uint32	System memory sockets current capacity.
PopulatedPCIeSlots	Mandatory	uint32	Populated PCIe slots in the system.
PowerCap	Mandatory	Uint32	The current power cap (in Watts) of the associated managed system element.
PowerCapEnabledState	Mandatory	uint16	Whether the cap on the power consumption is enabled.
PowerState	Mandatory	uint16	The current power state of the system.
PrimaryStatus	Mandatory	uint32	The property shall contain current information on the system health state excluding storage sub-systems. PrimaryStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
PSRollupStatus	Mandatory	uint32	The property shall contain the power supply rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). PSRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.

Property Name	Requirements	Type	Requirement and Description
RollupStatus	Mandatory	uint32	The property shall contain the rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). RollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
ServerAllocation	Optional	uint32	The property shall represent the power allocated by Chassis Manager to the blade server in Watt. This property shall be represented for modular server blades.
ServiceTag	Mandatory	string	Service tag of the system.
smbiosGUID	Mandatory	string	System GUID uniquely identifies the system. The property is also know as BIOS GUID. The smbiosGUID value matces exactly the SMBIOS representation of the GUID.
StorageRollupStatus	Mandatory	uint32	The property shall contain the storage rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). StorageRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
SysMemErrorMethodology	Mandatory	uint16	The primary hardware error correction or detection method supported by the system's memory array.
SysMemFailOverState	Mandatory	string	System memory fail over state.
SysMemLocation	Mandatory	uint16	The physical location of the memory array, whether on the system board or an add-in board.
SysMemPrimaryStatus	Mandatory	uint32	SystemMemoryPrimaryStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status for the system memory.
SysMemTotalSize	Mandatory	uint32	The property shall be in Mbytes. The maximum memory capacity in MB.
SysMemMaxCapacitySize	Mandatory	uint32	The property shall be in Mbytes. The maximum memory capacity in MB that could be installed on the platform. Note that this property represents the sum of totals for the possible memory that could be installed in each slot regardless of currently installed memory capacity.

Property Name	Requirements	Type	Requirement and Description
SystemID	Mandatory	uint32	System ID describes the model of the system in integer value. The SystemID property is usually used to identify the compatibility of the updateable software/firmware.
SystemRevision	Mandatory	uint16	System Revision describes whether the platform was the first or second revision of the corresponding model. The revisions are usually correlated with an upgrade of the CPU model in the same platform model.
TempRollupStatus	Mandatory	uint32	The property shall contain the temperature rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). TempRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
UUID	Mandatory	string	UUID uniquely identifies the system. The property is also known as BIOS GUID. The UUID value matces the WMI® representation of the UUID/GUID.
VoltRollupStatus	Mandatory	uint32	The property shall contain the voltage rollup status of all the system components and shall contain one of the following values: • 0(Unknown) • 1(OK) • 2(Degraded) • 3(Error). VoltRollupStatus provides a high level status value, intended to align with Red-Yellow-Green type representation of status.
LastSystemInventoryTime	Mandatory	string	This property provides the last time \"System \"Inventory Collection On Reboot(CSIOR)\" was performed. The value is represented as yyyymmddHHMMSS.
LastUpdateTime	Mandatory	string	This property provides the last time the data was updated. The value is represented as yyyymmddHHMMSS

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7.2 DCIM_SystemEnumeration – System Enumeration Attributes

280

281 This section describes the implementation for the DCIM_SystemEnumeration class.

282 Each DCIM_SystemEnumeration instance is logically associated to a DCIM_SystemView instance, where
283 the DCIM_SystemEnumeration.FQDD property is equal to the FQDD property on the DCIM_SystemView
284 instance.

285 This class shall be instantiated in the Implementation Namespace: root/dcim.

7.2.1 Resource URIs for WinRM®

286

287 The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-
288 schema/2/DCIM_SystemEnumeration?__cimnamespace=root/dcim"

289 The key property shall be the InstanceID.

290 The instance Resource URI for DCIM_SystemEnumeration instance shall be:
291 "http://schemas.dell.com/wbem/wscim/1/cim-
292 schema/2/DCIM_SystemEnumeration?__cimnamespace=root/dcim+InstanceID=
293 <FQDD>:<AttributeName>"

7.2.2 Operations

294

295 The following table lists the operations implemented on DCIM_SystemEnumeration.

296 **Table 5 – DCIM_SystemEnumeration – Operations**

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
DCIM_SystemManagementService.SetAttributte()	Mandatory	See section 8.1
DCIM_SystemManagementService.SetAttributes()	Mandatory	See section 8.2

297

7.2.3 Class Properties

298

299 The following table lists the implemented properties for DCIM_SystemEnumeration instance representing
300 a system attribute. The "Requirements" column shall denote whether the property is implemented (for
301 requirement definitions, see section 3). The "Additional Requirements" column shall denote either
302 possible values for the property, or requirements on the value formulation..

Table 6 – Class: DCIM_SystemEnumeration

Properties	Requirements	Type	Additional Requirements
InstanceID	Mandatory	String	The property value shall be formed as follows: "System.Embedded.1:<AttributeName property value>".
AttributeName	Mandatory	String	The property value shall be from the "AttributeName" column in Table 11 and Table 16.
AttributeDisplayName	Mandatory	String	The property value shall be from the "AttributeDisplayName" column in Table 11 and Table 16.
GroupID	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
GroupDisplayName	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
CurrentValue[]	Mandatory	String	The property value shall be one of the values in the "PossibleValues" column at the corresponding row in Table 11 and Table 16..
DefaultValue[]	Mandatory	String	The property value shall be one of the values in the "PossibleValues" column at the corresponding row in Table 11 and Table 16..
PendingValue[]	Mandatory	String	The property value shall be one of the values in the "PossibleValues" column at the corresponding row in Table 11 and Table 16.
IsReadOnly	Mandatory	Boolean	The property value shall be from the "IsReadOnly" column in Table 11 and Table 16.
FQDD	Mandatory	String	The property shall be set to "System.Embedded.1".
DisplayOrder	Optional	uint16	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all system attributes.
Dependency	Optional	String	The property shall be NULL.
PossibleValues[]	Mandatory	String	The property value shall be equalt to the array of the values in "PossibleValues" column at the corresponding row in Table 11 and Table 16.

304 **7.3 DCIM_SystemString – System String Attributes**

305 This section describes the implementation for the DCIM_SystemString class that represents a string type
306 System attribute.

307 This class shall be instantiated in the Implementation Namespace: root/dcim.

308 **7.3.1 Resource URIs for WinRM®**

309 The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-
310 schema/2/DCIM_SystemString?__cimnamespace=root/dcim"

311 The key property shall be the InstanceID.

312 The instance Resource URI for DCIM_SystemString instance shall be:
313 http://schemas.dell.com/wbem/wscim/1/cim-
314 schema/2/DCIM_SystemString?__cimnamespace=root/dcim+InstanceID=
315 System.Embedded.1:<AttributeName> (AttributeName comes from Table 5)

7.3.2 Operations

The following table lists the operations implemented on DCIM_SystemString.

Table 7 – DCIM_SystemString - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
DCIM_SystemManagementService.SetAttributte()	Mandatory	See section 8.1
DCIM_SystemManagementService.SetAttributes()	Mandatory	See section 8.2

7.3.3 Class Properties

The following table lists the implemented properties for DCIM_SystemString instance representing a system string attribute. The "Requirements" column shall denote whether the property is implemented (for requirement definitions, see section 3). The "Additional Requirements" column shall denote either possible values for the property, or requirements on the value formulation

Table 8 – Class: DCIM_SystemString

Properties	Requirements	Type	Additional Requirements
InstanceID	Mandatory	String	The property value shall be formed as follows: System.Embedded.1:<AttributeName property value>".
AttributeName	Mandatory	String	The property value shall be from the "AttributeName" column in Table 12, and Table 14.
AttributeDisplayName	Mandatory	String	The property value shall be from the "AttributeDisplayName" column in Table 12, and Table 14.
GroupID	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
GroupDisplayName	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
CurrentValue[]	Mandatory	String	The property value shall represent the current value of the attribute.
DefaultValue[]	Mandatory	String	The property value shall represent the default value of the attribute.
PendingValue[]	Mandatory	String	The property value shall represent the pending value of the attribute. If the property value is NULL, then the attribute has no pending value.
IsReadOnly	Mandatory	Boolean	The property value shall be the value in the "IsReadOnly" column at the corresponding row in Table 12, and Table 14.
FQDD	Mandatory	String	The property shall be set to "System.Embedded.1".
DisplayOrder	Optional	uint16	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all system attributes.
Dependency	Optional	String	The property shall be NULL.
MinLength	Mandatory	uint64	The property value shall be the value in the "MinLength" column at the corresponding row in Table 12, and Table 14.
MaxLength	Mandatory	uint64	The property value shall be the value in the "MaxLength" column at the corresponding row in Table 12, and Table 14.

326 **7.4   DCIM_SystemInteger – System Integer Attributes**

327   This section describes the implementation for the DCIM_SystemInteger class.

328   Each DCIM_SystemInteger instance is logically associated to a DCIM_SystemView instance, where the
329   DCIM_SystemInteger.FQDD property is equal to the FQDD property on the DCIM_SystemView instance.

330   This class shall be instantiated in the Implementation Namespace: root/dcim.

331 **7.4.1   Resource URIs for WinRM®**

332   The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-
333   schema/2/DCIM_SystemInteger?__cimnamespace=root/dcim"

334   The key property shall be the InstanceID.

335 The instance Resource URI for DCIM_SystemInteger instance shall be:
336 "http://schemas.dell.com/wbem/wscim/1/cim-
337 schema/2/DCIM_SystemInteger?__cimnamespace=root/dcim+InstanceID= <FQDD>:<AttributeName>"

338 7.4.2 Operations

339 The following table lists the operations implemented on DCIM_SystemInteger.

340 **Table 9 – DCIM_SystemInteger - Operations**

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
DCIM_SystemManagementService.SetAttributte()	Mandatory	See section 8.1
DCIM_SystemManagementService.SetAttributes()	Mandatory	See section 8.2

341

342 7.4.3 Class Properties

343 The following table lists the implemented properties for DCIM_SystemInteger instance representing a
344 system attribute. The "Requirements" column shall denote whether the property is implemented (for
345 requirement definitions, see section 3). The "Additional Requirements" column shall denote either
346 possible values for the property, or requirements on the value formulation

Table 10 – Class: DCIM_SystemInteger

Properties	Requirement	Type	Additional Requirements
InstanceID	Mandatory	String	The property value shall be formed as follows: "System.Embedded.1:<AttributeName property value>".
AttributeName	Mandatory	String	The property value shall be from the "AttributeName" column in Table 13, Table 15, and Table 19.
AttributeDisplayName	Mandatory	String	The property value shall be from the "AttributeDisplayName" column in Table 13, Table 15, and Table 19.
GroupID	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
GroupDisplayName	Mandatory	String	See section 7.5.1, 7.5.2, 7.5.3 and 7.5.4.
CurrentValue[]	Mandatory	String	The property value shall represent the current value of the attribute.
DefaultValue[]	Mandatory	String	The property value shall represent the default value of the attribute.
PendingValue[]	Mandatory	String	The property value shall represent the pending value of the attribute. If the property value is NULL, then the attribute has no pending value.
IsReadOnly	Mandatory	Boolean	The property value shall be from the "IsReadOnly" column in Table 13, Table 15, and Table 19.
FQDD	Mandatory	String	The property shall be set to "System.Embedded.1".
DisplayOrder	Optional	uint16	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all system attributes.
Dependency	Optional	String	The property shall be NULL.
LowerBound	Mandatory	uint64	The property value shall be from the "LowerBound" column in Table 13, Table 15, and Table 19.
UpperBound	Mandatory	uint64	The property value shall be from the "UpperBound" column in Table 13, Table 15, and Table 19.

348   7.5   System Attributes

349   This section lists and describes the attributes and their logical grouping.

350   7.5.1   Server Power Attributes

351   This section describes the attributes for managing system's power. The attributes are used to set power
352   cap and thresholds , manage power allocation, and redundancy settings.

353   The GroupID property for the DCIM_SystemEnumeration, DCIM_SystemString, and
354   DCIM_SystemInteger shall be "ServerPwr.1".

355   The GroupDisplayName property for the DCIM_SystemEnumeration, DCIM_SystemString, and
356   DCIM_SystemInteger shall be "Server Power".

357   The following table lists the values for the DCIM_SystemEnumeration of this group. Each of the column
358   headings correspond to a property name on the DCIM_SystemEnumeration class. The Description
359   column contains the description for each of the attribute. Each row contain the values for the properties
360   listed in the column headings. The PossibleValues property is an array property represented in the table
361   as comma delimited list.

362 **Table 11 – DCIM_SystemEnumeration Server Power Attributes**

AttributeName	AttributeDisplayName	IsReadOnly	PossibleValues	Description
PowerCapSetting	Power Cap Setting	FALSE	"Disabled", "Enabled"	Enable or disable the cap on the system power consumption.
PSRedPolicy	Power Supply Redundancy Policy	FALSE	"N/A", "Not Redundant", "AC/Input", "Redundant", "PSU Redundant"	Enables monitoring of the power supply redundancy. NOTE: Power Supply Profile describes the power supply redundancy status based on this attribute value.
PSPFCEnabled	Power Supply PFC Enable	FALSE	"Disabled", "Enabled"	
PSRapidOn	PSRapidOn	FALSE	"Disabled", "Enabled"	
RapidOnPrimaryPSU	Rapid on Primary PSU	FALSE	"Disabled", "Enabled"	

363 The following table lists the values for the DCIM_SystemString of this group. Each column heading
364 corresponds to a property name on the DCIM_SystemString class. The Value Expression column
365 contains constraints on string value formulation. Each row contains the values for the properties listed in
366 the column headings.

367 **Table 12 – DCIM_SystemString Server Power Attributes**

AttributeName	Attribute Description	IsReadOnly	MinLength	MaxLength	Value Expression
ActivePolicyName	Active Power Cap Policy Name	TRUE	0	128	

368 The following table lists the values for the DCIM_SystemInteger of this group. Each column heading
369 correspond to a property name on the DCIM_SystemInteger class. Each row contains the values for the
370 properties listed in the column headings.
371

373

Table 13 – DCIM_SystemInteger Server Power Attributes

AttributeName	AttributeDisplayName	IsReadOnly	LowerBound	UpperBound
PowerCapValue[1]	Power Cap Value	FALSE		
PowerCapMaxThres[1]	Power Cap Max Threshold	TRUE		
PowerCapMinThres[1]	Power Cap Min Threshold	TRUE		
pciePowerAllocation[1]	PCIe Power Power Allocation	FALSE		
ActivePowerCapVal[1]	Active Power Cap Value	TRUE	0	65535
ActivePowerCapValBTUHr	Active Power Cap Value in BTU/hr	TRUE	0	65535
RapidOnPrimSecPSUMask	Rapid on Primary Sec PSU Mask	TRUE		
RapidOnPrimaryPSU	Rapid on Primary PSU	FALSE		

374   NOTE: 1 – The attributes PendingValue, CurrentValue and DefaultValue are in Watt units.

7.5.2 Server Topology Attributes

376   This section describes the attributes for managing system's topology. The attributes are used to manage
377   location and physical configuration settings.

378   The GroupID property for the DCIM_SystemEnumeration, DCIM_SystemString, and
379   DCIM_SystemInteger shall be "ServerTopology.1".

380   The GroupDisplayName property for the DCIM_SystemEnumeration, DCIM_SystemString, and
381   DCIM_SystemInteger shall be "Server Topology".

382   The following table lists the values for the DCIM_SystemString of this group. Each column heading
383   corresponds to a property name on the DCIM_SystemString class. The Value Expression column
384   contains constraints on string value formulation. Each row contains the values for the properties listed in
385   the column headings.

386   **Table 14 – DCIM_SystemString Server Topology Attributes**

AttributeName	Attribute Description	IsReadOnly	MinLength	MaxLength	Value Expression

AttributeName	Attribute Description	IsReadOnly	MinLength	MaxLength	Value Expression
DataCenterName	Data Center Name	FALSE	0	128	
AisleName	Aisle Name	FALSE	0	128	
RackName	Rack Name	FALSE	0	128	
ChassisName	Chassis Name(Modular Only)	TRUE	0	64	
BladeSlotNumInChassis	Blade Slot Num In Chassis(Modular Only)	TRUE	0	64	

387 The following table lists the values for the DCIM_SystemInteger of this group. Each column heading
388 corresponds to a property name on the DCIM_SystemInteger class. Each row contains the values for the
389 properties listed in the column headings.

390 **Table 15 – DCIM_SystemInteger Server Topology Attributes**

AttributeName	AttributeDisplayName	IsReadOnly	LowerBound	UpperBound
RackSlot	Rack Slot	FALSE	1	255
SizeOfManagedSystemInU	Size of Managed System in U	TRUE		

391 **7.5.3 LCD Attributes**

392 This section describes the attributes for managing system's power. The attributes are used to set the
393 system LCD settings.

394 The GroupID property for the DCIM_SystemEnumeration and DCIM_SystemString shall be "LCD.1".

395 The GroupDisplayName property for the DCIM_SystemEnumeration and DCIM_SystemString shall be
396 "LCD".

397 The following table lists the values for the DCIM_SystemEnumeration of this group. Each column heading
398 corresponds to a property name on the DCIM_SystemEnumeration class. The Description column
399 contains the description for each of the attribute. Each row contains the values for the properties listed in
400 the column headings. The PossibleValues property is an array property represented in the table as
401 comma delimited list.

402 **Table 16 – DCIM_SystemEnumeration LCD Attributes**

AttributeName	AttributeDisplayName	IsReadOnly	PossibleValues

AttributeName	AttributeDisplayName	IsReadOnly	PossibleValues
Configuration	LCD Configuration	FALSE	""User Defined", "Model Name", "None", "iDRAC IPv4 Address", "iDRAC MAC Address", "OS System Name", "Service Tag", "IPv6 Address", "Ambient Temperature", "System Watts", "Asset Tag", "OEM PM LCD Override"

403 The following table lists the values for the DCIM_SystemString of this group. Each column heading
404 corresponds to a property name on the DCIM_SystemString class. The Value Expression column
405 contains constraints on string value formulation. Each row contains the values for the properties listed in
406 the column headings.

407 **Table 17 – DCIM_SystemString LCD Attributes**

AttributeName	Attribute Description	IsReadOnly	MinLength	MaxLength	Value Expression
CurrentDisplay	Current LCD Display String	TRUE	0	62	
UserDefinedString	User Defined String for LCD	FALSE	0	62	

408

7.5.4 Thermal Configuration Attributes

410 This section describes the attributes for managing system's power. The attributes are used to set the
411 system thermal configuration.

412 The GroupID property for the DCIM_SystemEnumeration and DCIM_SystemInteger shall be
413 "ThermalConfig.1".

414 The GroupDisplayName property for the DCIM_SystemEnumeration and DCIM_SystemInteger " shall be
415 "Thermal Configuration".

416 The following table lists the values for the DCIM_SystemEnumeration of this group. Each column heading
417 corresponds to a property name on the DCIM_SystemEnumeration class. The Description column
418 contains the description for each of the attribute. Each row contains the values for the properties listed in
419 the column headings. The PossibleValues property is an array property represented in the table as
420 comma delimited list.

421 **Table 18 – DCIM_SystemEnumeration Thermal Configuration Attributes**

AttributeName	AttributeDisplayName	IsReadOnly	PossibleValues
FreshAirCompliantConfiguration	Fresh Air Compliant Configuration	TRUE	"Not Applicable", "Yes", "No"

422 The following table lists the values for the DCIM_SystemInteger of this group. Each column heading
423 corresponds to a property name on the DCIM_SystemInteger class. Each row contains the values for the
424 properties listed in the column headings.

Table 19 – DCIM_SystemInteger Thermal Configuration Attributes

AttributeName	AttributeDisplayName	IsReadOnly	LowerBound	UpperBound
EventGenerationInterval	Event Generation Interval	FALSE	0 (disables event generation)	365
CriticalEventGenerationInterval	Critical Event Generation Interval	FALSE	0	365

426 7.5.5 Server OS Attributes

427 This section describes the attributes for managing system's operating system. The attributes are used to
428 manage server OS name, OS version and host name.

429 The GroupID property for the DCIM_SystemEnumeration, DCIM_SystemString shall be "ServerOS.1".

430 The GroupDisplayName property for the DCIM_SystemEnumeration, DCIM_SystemString, and
431 DCIM_SystemInteger shall be "Server Operating System".

432 The following table lists the values for the DCIM_SystemString of this group. Each column heading
433 corresponds to a property name on the DCIM_SystemString class. The Value Expression column
434 contains constraints on string value formulation. Each row contains the values for the properties listed in
435 the column headings.

436 **Table 20 – DCIM_SystemString Server OS Attributes**

AttributeName	Attribute Description	IsReadOnly	MinLength	MaxLength	Value Expression
HostName	Host Name	FALSE	0	62	
OSName	Operating Sytem Name	FALSE	0	62	
OSVersion	Operating Sytem Version	TRUE	0	62	

437 7.6 DCIM_SystemManagementService – System Management Service

438 This section describes the implementation for the DCIM_SystemManagementService class.

439 This class shall be instantiated in the Implementation Namespace: root/dcim.

440 7.6.1 Resource URIs

441 The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-
442 schema/2/DCIM_SystemManagementService?__cimnamespace=root/dcim"

443 The key property shall be the SystemCreationClassName, SystemName, CreationClassName, and
444 Name.

445 The instance Resource URI for DCIM_ SystemManagementService instance shall be:
446 "http://schemas.dell.com/wbem/wscim/1/cim-
447 schema/2/DCIM_SystemManagementService?__cimnamespace=root/dcim+
448 SystemCreationClassName=DCIM_ComputerSystem+SystemName=srv:system+CreationClassName=D
449 CIM_SystemManagementService+Name=DCIM:SystemManagementService"

450 7.6.2 Operations

451 The following table lists the operations implemented on DCIM_SystemManagementService.

452 **Table 21 – DCIM_SystemManagementService - Operations**

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
Invoke	Mandatory	Instance URI
DCIM_SystemManagementService.SetAttributte()	Mandatory	See section 8.1
DCIM_SystemManagementService.SetAttributes()	Mandatory	See section 8.2
DCIM_SystemManagementService.CreateTargetedConfigJob()	Mandatory	See section 8.3
DCIM_SystemManagementService.DeletePendingConfiguration()	Mandatory	See section 8.4
DCIM_SystemManagementService.ShowErrorsOnLCD()	Mandatory	See section 8.5
DCIM_SystemManagementService.IdentifyChassis()	Mandatory	See section 8.6

453 **7.6.3 Properties**

454 The following table lists the implemented properties for DCIM_ SystemManagementService instance
455 representing system management service in a system. The "Requirements" column shall denote whether
456 the property is implemented (for requirement definitions, see section 3). The "Additional Requirements"
457 column shall denote either possible values for the property, or requirements on the value formulation.

458 **Table 22 – DCIM_SystemManagementService- Properties**

Property Name	Requirements	Description/Additonal Requirement
SystemCreationClassName	Mandatory	The property value shall be "DCIM_ComputerSystem".
CreationClassName	Mandatory	The property value shall be "DCIM_SystemManagementService".
SystemName	Mandatory	The property value shall be "srv:system".
Name	Mandatory	This property shall have a value of "DCIM:SystemManagementService"
ElementName	Mandatory	The property value shall be "System Management Service".

459 **7.7 System Info Profile Profile Registration**

460 This section describes the implementation for the DCIM_LCRegisteredProfile class.

461 This class shall be instantiated in the Interop Namespace: root/interop.

462 The DCIM_ElementConformsToProfile association(s) shall reference the DCIM_LCRegisteredProfile
463 instance.

464 **7.7.1 Resource URIs for WinRM®**

465 The class Resource URI shall be "http://schemas.dmtf.org/wbem/wscim/1/cim-
466 schema/2/CIM_RegisteredProfile?__cimnamespace=root/interop"

467 The key property shall be the InstanceID property.

468 The instance Resource URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-
469 schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID=DCIM:
470 SystemInfo:1.0.0"

7.7.2 Operations

The following table lists the operations implemented on for DCIM_LCRegisteredProfile.

Table 23 – DCIM_LCRegisteredProfile - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.7.3 Properties

The following table lists the implemented properties for DCIM_LCRegisteredProfile instance representing System Info Profile implementation. The "Requirements" column shall denote whether the property is implemented (for requirement definitions, see section 3). The "Additional Requirements" column shall denote either possible values for the property, or requirements on the value formulation

Table 24 – DCIM_LCRegisteredProfile

Property Name	Type	Requirement	Additional Requirements
InstanceID	String	Mandatory	DCIM:SystemInfo:1.0.0
RegisteredName	String	Mandatory	This property shall have the value "System Info".
RegisteredVersion	String	Mandatory	This property shall have the value "1.4.0".
RegisteredOrganization	Uint16	Mandatory	This property shall have the value 1 (Other).
OtherRegisteredOrganization	String	Mandatory	The property value shall match "DCIM".
AdvertiseTypes[]	Uint16	Mandatory	The property array shall contain: ["1(Other), 1(Other)"]
AdvertiseTypeDescriptions[]	String	Mandatory	The property array shall contain: "WS-Identify", "Interop Namespace"

8   Methods

This section details the requirements for supporting extrinsic methods for the CIM elements defined by this profile.

8.1   DCIM_SystemManagementService.SetAttribute()

The SetAttribute() method is used to set or change the value of a system attribute.

Invocation of the SetAttribute() method shall change the value of the attribute's CurrentValue or attribute's PendingValue property to the value specified by the AttributeValue parameter if the attribute's IsReadOnly property is FALSE. If this method is invoked when the attribute's IsReadOnly property is TRUE, it shall result in no change to the value of the attribute's CurrentValue property. The result of changing this value is described with the SetResult parameter.

Return code values for the SetAttribute() method are specified in Table 25 and parameters are specified in Table 26. Invoking the SetAttribute() method multiple times can result in the earlier requests being overwritten or lost.

Table 25 – SetAttribute( ) Method: Return Code Values

Value	Description
0	Completed with no error
2	Failed

Table 26 – SetAttribute( ) Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	Shall be set to "System.Embedded.1"
IN, REQ	AttributeName	String	Shall be the GroupID property value followed by "#" character and then followed by the AttributeName property value for the attribute to be modified. Example: "ServerPwr.1#PowerCapSetting"
IN, REQ	AttributeValue[]	String	Shall contain the desired attribute value. If the value is valid, the CurrentValue or PendingValue property of the specified attribute will be modified.
OUT	SetResult	String	Returns: • "Set CurrentValue property" when the attributes current value is set. • "Set PendingValue property" when the attributes pending value is set.
OUT	RebootRequired	String	Returns: • "Yes" if reboot is required, • "No" if reboot is not required.
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry
OUT	Message	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

Table 27 – SetAttribute( ) Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) %s	AttributeName/AttributeValue
SYS004	Invalid parameter value for %s	AttributeName/AttributeValue
SYS005	AttributeName and AttributeValue count mismatch	
SYS006	Cannot set ReadOnly AttributeName %s	AttributeName
SYS007	Input out of range for %s	AttributeName
SYS008	Invalid boolean in AttributeValue for AttributeName %s	AttributeName
SYS009	String exceeds maximum length for AttributeName %s	AttributeName
SYS010	Invalid character in AttributeValue for AttributeName %s	AttributeName
SYS011	Configuration is already committed,	

MessageID (OUT parameter)	Message	MessageArguments[]
	cannot set the configuration	
SYS012	User is not authorized to perform this operation	
SYS013	Invalid AttributeName %s	AttributeName
SYS014	Invalid AttributeValue for AttributeName %s	AttributeName
SYS015	Job created	
SYS016	Job completed with errors	
SYS017	Job failed	
SYS018	Job completed	
SYS019	Required dependancy input not found	
SYS020	Invalid Required Attribute value	
SYS023	No pending configurations	
SYS024	Attribute dependency failed	
JCP017	Maximum job limit reached, cannot create new jobs	
LC062	An instance of Export or Import System Configuration is already running.	

498

8.2 DCIM_SystemManagementService.SetAttributes()

500 The SetAttributes() method is used to set or change the values of a group of attributes.

501 Invocation of the SetAttributes() method shall change the values of the attribute's CurrentValue or
502 PendingValue properties that correspond to the names specified by the AttributeName parameter and the
503 values specified by the AttributeValue parameter if the respective attribute's IsReadOnly property is
504 FALSE. . If this method is invoked when the attribute's IsReadOnly property is TRUE, it shall result in no
505 change to the value of the attribute's CurrentValue property.

506 Return code values for the SetAttributes() method are specified in Table 28, and parameters are
507 specified in Table 29.

508 Invoking the SetAttributes() method multiple times can result in the earlier requests being overwritten or
509 lost.

510 **Table 28 – SetAttributes() Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

511 **Table 29 – SetAttributes() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	Shall be set to "System.Embedded.1"

Qualifiers	Name	Type	Description/Values
IN, REQ	AttributeName[]	String	Shall contain array of attributes where each element shall be the GroupID property value followed by "#" character and then followed by the AttributeName property value for the attribute to be modified. Example: "ServerPwr.1#PowerCapSetting"
IN, REQ	AttributeValue[]	String	Shall contain the desired attribute values. If the value is valid, the CurrentValue or PendingValue property of the specified attribute will be modified. Note: Attributes with multi-element array values shall not be set using this method.
OUT	SetResult[]	String	Returns: "Set CurrentValue property" when the attributes current value is set. "Set PendingValue property" when the attributes pending value is set.
OUT	RebootRequired[]	String	Returns: "Yes" if reboot is required, "No" if reboot is not required.
OUT	MessageID[]	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry
OUT	Message[]	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

512   **Table 30 – SetAttributes( ) Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The Command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) %s	AttributeName/AttributeValue
SYS004	Invalid parameter value for %s	AttributeName/AttributeValue
SYS005	AttributeName and AttributeValue count mismatch	
SYS006	Cannot set ReadOnly AttributeName %s	AttributeName
SYS007	Input out of range for %s	AttributeName
SYS008	Invalid boolean in AttributeValue for AttributeName %s	AttributeName
SYS009	String exceeds maximum length for AttributeName %s	AttributeName
SYS010	Invalid character in AttributeValue for AttributeName %s	AttributeName
SYS011	Configuration already committed, cannot set configuration	
SYS012	User is not Authorized to perform this operation	
SYS013	Invalid AttributeName %s	AttributeName

MessageID (OUT parameter)	Message	MessageArguments[]
SYS014	Invalid AttributeValue for AttributeName %s	AttributeName
SYS015	Job created	
SYS016	Job completed with errors	
SYS017	Job failed	
SYS018	Job completed	
SYS019	Required Dependancy input not found	
SYS020	Invalid Required Attribute value	
SYS023	No pending configurations	
SYS024	Attribute dependency failed	
JCP017	Maximum job limit reached, cannot create new jobs	
LC062	An instance of Export or Import System Configuration is already running.	

8.3 DCIM_SystemManagementService.CreateTargetedConfigJob( )

The CreateTargetedConfigJob( ) method is used to apply the pending values created by the SetAttribute, SetAttributes, ChangeBootSourceState, and ChangeBootOrderByInstanceID methods. The successful execution of this method creates a job to apply the pending values.

The CreateTargetedConfigJob() method supports the following optional input parameters:

- RebootJobType: When provided in the input parameters, it creates a specific reboot job to "PowerCycle", "Graceful Reboot without forced shutdown", or "Graceful Reboot with forced shutdown". This parameter only creates the RebootJob and does not schedule it.

   NOTE: Many attributes in the profile do not require a reboot job. Thus, it may not be necessary to specify this parameter.

- ScheduledStartTime: When provided in the input parameters, schedules the "configuration job" and the optional "reboot job" at the specified start time. A special value of "TIME_NOW" schedules the job(s) immediately.

- UntilTime: This parameter has a dependency on "ScheduledStartTime", together "ScheduledStartTime" and "UntilTime" define a time window for scheduling the job(s). Once scheduled, jobs will be executed within the time window.

If CreateTargetedConfigJob method is executed without the three optional parameters discussed above, then configuration job is created but not scheduled. However, this configuration job can be scheduled later using the DCIM_JobService.SetupJobQueue () method from the "Job Control Profile". DCIM_JobService.SetupJobQueue () can be executed to schedule several configuration jobs including the reboot job. Refer to "Job Control Profile" for more details.

Return code values for the CreateTargetedConfigJob( ) method are specified in Table 28, and parameters are specified in Table 29.

Subsequent calls to CreateTargetedConfigJob after the first CreateTargetedConfigJob will result in error until the first job is completed."

538 **Table 31 – CreateTargetedConfigJob( ) Method: Return Code Values**

Value	Description
2	Failed
4096	Job Created

539 **Table 32 – CreateTargetedConfigJob( ) Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	Shall be set to "System.Embedded.1"
IN	ScheduledStartTime	String	Start time for the job execution in format: yyyymmddhhmmss. The string "TIME_NOW" means immediate.
IN	UntilTime	String	End time for the job execution in format: yyyymmddhhmmss. If this parameter is not NULL, then ScheduledStartTime parameter shall also be specified.
OUT	Job	CIM_ConcreteJob REF	Reference to the newly created pending value application job.
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

540

541 **Table 33 – CreateTargetedConfigJob( ) Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) %s	AttributeName/AttributeValue
SYS004	Invalid parameter value for %s	AttributeName/AttributeValue
SYS005	AttributeName and AttributeValue count mismatch	
SYS006	Cannot set ReadOnly AttributeName %s	AttributeName
SYS007	Input out of range for %s	AttributeName
SYS008	Invalid boolean in AttributeValue for AttributeName %s	AttributeName
SYS009	String exceeds maximum length for AttributeName %s	AttributeName
SYS010	Invalid character in AttributeValue for AttributeName %s	AttributeName
SYS011	Configuration already committed, cannot set configuration	
SYS012	User is not Authorized to perform this operation	
SYS013	Invalid AttributeName %s	AttributeName

MessageID (OUT parameter)	Message	MessageArguments[]
SYS014	Invalid AttributeValue for AttributeName %s	AttributeName
SYS015	Job created	
SYS016	Job completed with errors	
SYS017	Job failed	
SYS018	Job completed	
SYS019	Required dependancy input not found	
SYS020	Invalid Required Attribute value	
SYS023	No pending configurations	
SYS024	Attribute dependency failed	
SYS029	Unsupported parameter name <parameter name>	Parameter Name
JCP017	Maximum job limit reached, cannot create new jobs	
LC062	An instance of Export or Import System Configuration is already running.	

542

8.4 DCIM_SystemManagementService.DeletePendingConfiguration( )

544 The DeletePendingConfiguration( ) method is used to cancel the pending values created by the
545 SetAttribute and SetAttributes methods. The DeletePendingConfiguration( ) method cancels the pending
546 configuration changes made before the configuration job is created with CreateTargetedConfigJob(). This
547 method only operates on the pending changes prior to CreateTargetedConfigJob() being called. After the
548 configuration job is created, the pending changes can only be canceled by calling DeleteJobQueue()
549 method in the Job Control profile.

550 Return code values for the DeletePendingConfiguration( ) method are specified in Table 34, and
551 parameters are specified in Table 35.

552 **Table 34 – DeletePendingConfiguration( ) Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

553 **Table 35 – DeletePendingConfiguration( ) Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	Shall be equal to "System.Embedded.1"
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

554

555

Table 36 – DeletePendingConfiguration( ) Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) %s	AttributeName/AttributeValue
SYS004	Invalid parameter value for %s	AttributeName/AttributeValue
SYS005	AttributeName and AttributeValue count mismatch	
SYS006	Cannot set ReadOnly AttributeName %s	AttributeName
SYS007	Input out of range for %s	AttributeName
SYS008	Invalid boolean in AttributeValue for AttributeName %s	AttributeName
SYS009	String exceeds maximum length for AttributeName %s	AttributeName
SYS010	Invalid character in AttributeValue for AttributeName %s	AttributeName
SYS011	Configuration already committed, cannot set configuration	
SYS012	User is not authorized to perform this operation	
SYS013	Invalid AttributeName %s	AttributeName
SYS014	Invalid AttributeValue for AttributeName %s	AttributeName
SYS015	Job created	
SYS016	Job completed with errors	
SYS017	Job failed	
SYS018	Job completed	
SYS019	Required dependancy input not found	
SYS020	Invalid Required Attribute value	
SYS023	No pending configurations	
SYS024	Attribute dependency failed	
JCP017	Maximum job limit reached, cannot create new jobs	
LC062	An instance of Export or Import System Configuration is already running.	

556 ## 8.5 DCIM_SystemManagementService.ShowErrorsOnLCD( )

557 The ShowErrorsOnLCD( ) method is used to hide and unhide LCD Errors.

558 Return code values for the ShowErrorsOnLCD( ) method are specified in Table 37, and parameters are
559 specified in Table 38.

560   **Table 37 – ShowErrorsOnLCD( ) Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

561   **Table 38 – ShowErrorsOnLCD( ) Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Show	Boolean	Whether to show or hide LCD errors
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

562

563   **Table 39 – ShowErrorsOnLCD( ) Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) <parameter name>	Show
SYS004	Invalid parameter value for <parameter name>	Show
SYS024	Attribute dependency failed	

564   8.6   DCIM_SystemManagementService.IdentifyChassis( )

565   The IdentifyChassis( ) method is used to turn on and off LEDs on the chassis in order to identify the
566   system.

567   Return code values for the IdentifyChassis( ) method are specified in Table 40, and parameters are
568   specified in Table 41.

569   **Table 40 – IdentifyChassis( ) Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

570   **Table 41 – IdentifyChassis( ) Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IdentifyState	Uint8	This parameter represents the requested state of the identifying LED. 0 – "Disabled" 1 – "Enabled" 2 – "Time Limited Enabled"

Qualifiers	Name	Type	Description/Values
IN	DurationLimit	Uint8	This parameter represents the requested time limit in seconds for identifying chassis before the identifying LED turns back off. The parameter shall be specified and non-NULL, if the IdentifyState parameter has value of 2 – "Time Limited Enabled".
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Error Message
OUT	MessageArguments[]	String	Error MessageArguments

571

572 **Table 42 – IdentifyChassis( ) Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS001	The command was succesful	
SYS002	The command failed	
SYS003	Missing parameter(s) <parameter name>	DurationLimit/IdentifyState
SYS004	Invalid parameter value for <parameter name>	Show
SYS024	Attribute dependency failed	

573 9 Use Cases

574 See *Lifecycle Controller (LC) Integration Best Practices Guide*.

575 10 CIM Elements

576 No additional details specified.

577 11 Privilege and License Requirement

578 The following table describes the privilege and license requirements for the listed operations.

579 **Table 43 – Privilege and License Requirements**

Class and Method	Operation	User Privilege Required	License Required
DCIM_SystemView	ENUMERATE, GET	Login	None.
DCIM_SystemInteger	ENUMERATE, GET	Login	None.
DCIM_SystemEnumeration	ENUMERATE, GET	Login	None.
DCIM_SystemString	ENUMERATE, GET	Login	None.

DCIM_System Management Service	ENUMERATE, GET	Login	None.
DCIM_SystemManagementService. SetAttribute()	INVOKE	Login, Configure	LM_POWER_BUDGETING & LM_REMOTE_CONFIGURATION
DCIM_SystemManagementService. SetAttributes()	INVOKE	Login, Configure	LM_POWER_BUDGETING & LM_REMOTE_CONFIGURATION
DCIM_SystemManagementService. CreateTargetedConfigJob()	INVOKE	Login, Configure	LM_REMOTE_CONFIGURATION
DCIM_SystemManagementService. DeletePendingConfiguration()	INVOKE	Login, Configure	LM_REMOTE_CONFIGURATION
DCIM_SystemManagementService. ShowErrorsOnLCD()	INVOKE	Login, System Operations	LM_REMOTE_CONFIGURATION
DCIM_SystemManagementService. IdentifyChassis()	INVOKE	Login, System Operations	LM_REMOTE_CONFIGURATION
DCIM_LCRegisteredProfile	ENUMERATE, GET	Login	None.
DCIM_LCElementConformsToProfile	ENUMERATE, GET	Login	None.

| | | ANNEX A |
| | | (informative) |

580   **ANNEX A**
581   **(informative)**
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584   **Change Log**

Version	Date	Description
1.4.0		Added the Thermal Configuration attribute.
		Added LC062 error message to the SetAttribute(), SetAttributes(), CreateTargetedConfigJob(), and DeletePendingConfiguration() methods.
1.4.0	9/6/2012	Added LCD group attributes – CurrentDisplay, UserDefinedString
		Added ThermalConfig group attributes – EventGenerationInterval, CriticalEventGenerationInterval
		Added ServerOS group attributes – HostName, OSName, OSVersion
		Added methods – ShowErrorsOnLCD(), IdentifyChassis()
		Updated privilege and licensing requirement for added methods/attributes

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