Job Control Profile

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Job Control Profile

1 Scope

The Job Control Profile extends the management capabilities of referencing profiles by adding the capability to create, schedule, track, and otherwise manage jobs that represent platform management actions. This profile is intended to align with the SNIA SMIS Job Control subprofile and the DMTF Job Control Profile that is currently being worked on in the DMTF.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

2.1 Approved References

DMTF DSP1033, *Profile Registration Profile 1.0.0*

DMTF DSP0200, *CIM Operations over HTTP 1.2.0*

DMTF DSP0004, *CIM Infrastructure Specification 2.3.0*

DMTF DSP1000, *Management Profile Specification Template*

DMTF DSP1001, *Management Profile Specification Usage Guide*

DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*

DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*

2.2 Other References

ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards*, http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype

Unified Modeling Language (UML) from the Open Management Group (OMG), http://www.uml.org

3 Terms and Definitions

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

3.1
can
used for statements of possibility and capability, whether material, physical, or causal

3.2
cannot
used for statements of possibility and capability, whether material, physical, or causal

3.3
conditional
indicates requirements to be followed strictly in order to conform to the document when the specified conditions are met

3.4
mandatory
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.5
may
indicates a course of action permissible within the limits of the document

3.6
need not
indicates a course of action permissible within the limits of the document

3.7
optional
indicates a course of action permissible within the limits of the document

3.8
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

3.9
shall
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.10
shall not
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.11
should
indicates that among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required

3.12
should not
indicates that a certain possibility or course of action is deprecated but not prohibited

3.13
`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

3.14
`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 Management Controller – management controller for the modular chassis

4.4
iSCSI

Internet Small Computer System Interface, an Internet Protocol (IP)-based storage networking standard for linking data storage facilities.

4.5
WBEM

Web-Based Enterprise Management

5   Synopsis

Profile Name: Job Control

Version: 1.0.0

Organization: Dell

CIM Schema Version: 2.19.1

Central Class: DCIM_JobService

Scoping Class: CIM_ComputerSystem

The Job Control Profile extends the management capability of the referencing profiles by adding the capability to create, schedule, track, and otherwise manage system management tasks, hereafter referred to as "jobs". In this profile, a job is represented by an instance of a Dell subclass of CIM_ConcreteJob, DCIM_LifecycleJob. DCIM_JobService shall be the Central Class. CIM_ComputerSystem shall be the Scoping 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	Mandatory

6   Description

The Job Control Profile describes the job control service, the job types, their behavior, and state transitions and results representations. The profile also describes the relationship of the job service to the profile version information.

Figure 1 represents the class schema for the Job Control Profile. The job service in a managed system is represented by the instance of DCIM_JobService class. The jobs names, status, and error messages are represented by the DCIM_LifeCycleJob class.

The Job Control Profile information is represented with the instance of DCIM_LCRegisteredProfile.
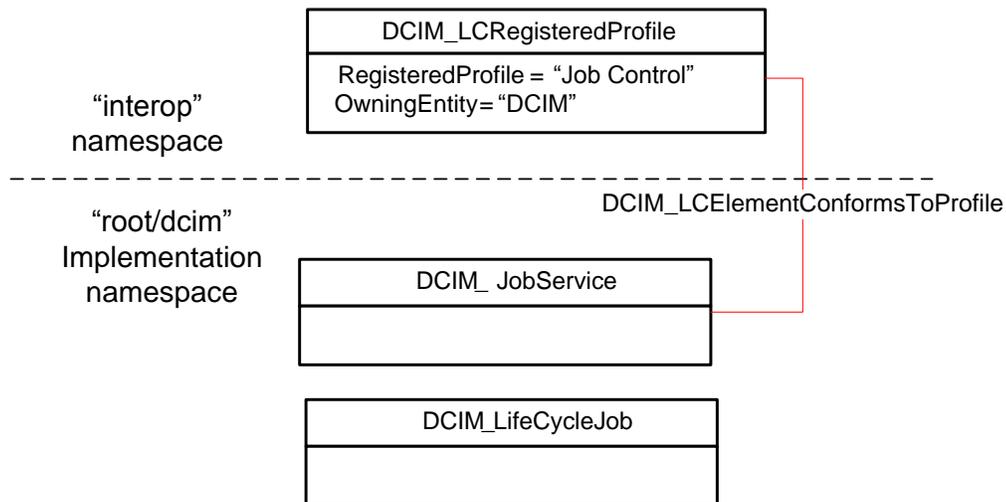
Figure 1 – Job Control Profile: Class Diagram

6.1   Job Types

Different kinds of system management tasks, such as firmware update tasks, reboot tasks, configuration tasks, etc often take a while to complete. In order to provide a means of performing and tracking tasks and task results, individual tasks are defined as jobs that can be run immediately or at a scheduled time.

Tasks of different types typically have state sequences that are unique to the task performed and the state is represented as the job status. For the purposes of managing these tasks as jobs, several job types have been identified; these include firmware download, firmware update, and reboot. Each job type has a different sequence of states it may pass through. The job may contain one action, or there may be a series of actions taken as part of the job execution.

Refer to Table 2 for a list of job types.

6.2   Creating Jobs

Platform management jobs are created as the result of invoking an extrinsic method for performing a specific task. Jobs that are created as the result of an extrinsic method invocation are initially created without a start time defined and require a management client script or application to subsequently set the scheduled start time by specifying job(s) and start time in a job queue.

6.3   Grouping Jobs

One or more jobs are be grouped together in job queues to define job order, start time and to prepare the job grouping for execution in another environment such as Unified Extensible Firmware Interface(UEFI). If the Lifecycle Controller is to perform the system reboot needed to execute update jobs, a reboot job is included in the job queue definition.

6.4   Scheduling Jobs

Jobs, such as firmware update tasks, that are created as a result of extrinsic method invocations are initially unscheduled. One or more job can be scheduled to start immediately or at a specified start time by setting up a job queue. Job queues are setup by calling the SetupJobQueue() method on the job service.

6.5   Canceling Jobs

Jobs may be canceled by the management application calling delete instance method for an existing job instance. Any related extrinsic method invocations that were part of the job will be deleted. Pending update tasks that were defined in the job targets are not executed by deleting the job before it has run. Job queues that were setup using the SetupJobQueue() method on the job control service can be deleted using the DeleteJobQueue() method.

6.6   Maintenance Windows

A client script or application that performs platform hardware management, may define specific maintenance time slots. Time slot specification includes being able to specify a scheduled job start time and a duration interval after which, if the job has not been executed, the job is canceled for jobs and job groups.

7   Implementation Requirements

Requirements and guidelines for propagating and formulating certain class properties are discussed in this section; methods are listed in section 8 and properties are listed in section 10.

7.1   DCIM_JobService

One instance of DCIM_JobService shall be instantiated in the "root/dcim" implementation namespace.

7.2   DCIM_LifeCycleJob

The management tasks requested by the management application shall be represented by instances of a subclass of the DCIM_LifecycleJob class which is a subclass of the CIM_ConcreteJob class. The DCIM_LifecycleJob class is further subclassed as the DCIM_SoftUpdateConcreteJob for BIOS, firmware, and embedded software update jobs. Software update related methods (see the Dell Software Update Profile – DCIM-SoftwareUpdateProfile-1.0.0) return references to the DCIM_SoftUpdateConcreteJob class. Most of the system management tasks require a reboot of the system, which can be scheduled as a job or the reboot can be performed by other means after the job tasks have reached their scheduled start time.

To accomplish these offline platform management actions, several specific job types are defined to represent types of remote enablement actions:

- Image Update

- Image Rollback

- Reboot

7.2.1 Name

The DCIM_LifeCycleJob.Name property represents the job type and is formulated as follows:

Table 2 – Job Types

JobType	Description	Value
Update	The flashing of FW into the target device .	update:DCIM:InstanceID of SoftwareIdentity
Rollback	The flashing of Available FW into the device.	rollback:DCIM:InstanceID of SoftwareIdentity
Reboot	Restart of system	Reboot1 = "PowerCycle" Reboot2 = "Graceful Reboot without forced shutdown" Reboot3 = "Graceful Reboot with forced shutdown"
vFlash	Initialize vFlash	VFlashInitialize:Media
vFlash	Create partition	VFlashCreate:Partition<n> Where n is equal to number of vFlash partition index (1 to 16)
vFlash	Create partition using image	VFlashCreateUsingImage:Partition1<n> Where n is equal to number of vFlash partition index (1 to 16)
vFlash	Format partition	VFlashFormat:Partition1<n> Where n is equal to number of vFlash partition index (1 to 16)
vFlash	Attach partition	VFlashAttach:Partition1<n> Where n is equal to number of vFlash partition index (1 to 16)
vFlash	Detach partition	VFlashDetach:Partition1<n> Where n is equal to number of vFlash partition index (1 to 16)
vFlash	Export data from partition	VFlashExportData:Partition1<n> Where n is equal to number of vFlash partition index (1 to 16)
LC Export	LCL log export	LC Export
HW Export	Hardware Inventory export	HW Export
Factory configuration export	Factory configuration export	FACTORY CONFIG Export
RAID configuration	Applying the pending RAID configuration	ConfigRAID:< RAID Controller FQDD> Each RAID controller has an FQDD and is part of the DCIM_ControllerView instance (DCIM_ControllerView.FQDD) Example: DCIM_ControllerView.FQDD = RAID.Integrated.1-1 Example: ConfigRAID :RAID.Integrated.1-1
BIOS configuration	Applying the pending BIOS configuration	ConfigBIOS: BIOS.Setup.1-1
NIC configuration	Applying the pending NIC configuration	ConfigNIC:< NIC FQDD> Each NIC has an FQDD and is part of the DCIM_NICView instance (DCIM_NICView.FQDD) Example: DCIM_NICView.FQDD = NIC.Embedded.1-1 Example: ConfigNIC: NIC.Embedded.1-1

7.2.2   JobStatus

The value of DCIM_LifeCycleJob.JobStatus represents the current state of the specific job; the following table lists the different status values that are valid for different job types, refer to table 2 for a list of job types:

Table 3 – JobStatus Property Values

Status Value	Description
Job Type = "Update"	
New	New Job has been created
Downloading	Job is Downloading firmware image
Downloaded	Job Downloaded the firmware image
Scheduled	Job has been scheduled
Completed	Job has been completed.
Failed	Job has been failed
Deleted	Job has been deleted.
Job Type = "Rollback"	
New	New Job has been created
Scheduled	Job has been scheduled
Completed	Job has been completed.
Failed	Job has Failed
Job Type = "Reboot"	
Pending Reboot	Reboot Pending for this job
Reboot Completed	Reboot Job completed.
Reboot Failed	Reboot Job failed
Job Type = "vFlash"	
New or NEW	New Job has been created
Completed	Job has been completed.
Failed	Job has been failed
Job Type = "LC Export", "HW Export", "FACTORY CONFIG Export"	
New	New Job has been created
Completed	Job has been completed.
Failed	Job has been failed
Job Type = "RAID Configuration"	
New	New Job has been created
Ready For Execution	Job is ready for execution
Scheduled	Job has been scheduled
Completed	Job has been completed.
Failed	Job has been failed
Job Type = "NIC Configuration"	
New	New Job has been created
Ready For Execution	Job is ready for execution
Scheduled	Job has been scheduled
Completed	Job has been completed.

Completed with Errors	Job has been completed with one or more errors.
Failed	Job has been Failed
Job Type = "BIOS Configuration"	
New	New Job has been created
Ready For Execution	Job is ready for execution
Scheduled	Job has been scheduled
Completed	Job has been completed.
Completed with Errors	Job has been completed with one or more errors.
Failed	Job has been failed

7.2.3   StartTimeInterval

The time interval after midnight of the month to start processing the job. If no scheduled start time is defined, the value shall be NULL.

7.2.4   UntilTime

The time interval after a job has started that it is permitted to run. If the job has not run when the time interval has passed, the job is to be canceled. Canceling a job will cause the schedule start time properties to be set to NULL and the JobStatus to be set to **Failed**.

7.2.5   Message

If an error occurs during the processing of a job, more detailed error information is provided for subsequent inspection of the job completion status. The Message property of the job contains the error message describing the job failure detail.

7.2.6   MessageID

An identifier for the error message that can be used to index into Dell Lifecycle Controller Message Registry xml files.   The Message Registry files are available in localized versions for English, French, Spanish, German, Japanese and Chinese. They also contain more detailed descriptions of the error condition and recommended response actions.

7.2.7   MessageArguments

An error message may contain substitution variables that are filled in dynamically at runtime. To support localizing versions of the message, the values of the substitution variables are set in the MessageArguments array in the order they are defined in the Message Registry.

8   Methods

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

8.1   DCIM_JobControlService.SetupJobQueue()

The SetupJobQueue() method is used for creating a job queue that will contain one or more DCIM_LyfecycleJobs with a specified order of execution within the queue.

Table 4 – DCIM_JobControlService.SetupJobQueue() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 5 – DCIM_JobControlService.SetupJobQueue() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	JobArray	string[]	Array containing the value of the InstanceID property of the instances of DCIM_LifeCycleJob that represent the set of jobs to add to the job queue. This is an ordered array that represents the sequence in which to execute the jobs.
IN	StartTimeInterval	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	Message	string	Error Message
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.2   DCIM_JobControlService.DeleteJobQueue()

The DeleteJobQueue() method is used for deleting one or all jobs from the JobQueue (or job store).

Clearing all jobs and pending data can be accomplished using the keyword *JID_CLEARALL* for the JobID. When this method is invoked with this keyword, the data manager must be allowed time to restart and clear the cache.

When the number of jobs in the JobQueue reach the maximum limit, jobs in the "Completed" state will be deleted automatically. However, jobs in the "Failed" state will not automatically be deleted and must be manually removed one at a time or using the keyword JID_CLEARALL, as mentioned above.

Table 6 – DCIM_JobControlService.DeleteJobQueue() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 7 – DCIM_JobControlService.DeleteJobQueue() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	JobID	string	The InstanceID property of the instances of DCIM_LifeCycleJob that represent the job to be deleted. The value *"JID_CLEARALL"* for the JobID will clear all the jobs.
OUT	Message	string	Error Message
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.3 DCIM_JobControlService.CreateRebootJob ()

The CreateRebootJob() method is used for creating a reboot job.

Table 8 – DCIM_JobControlService.CreateRebootJob() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 9 – DCIM_JobControlService.CreateRebootJob() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	RebootJobType	uint16[]	Input Parameter represents the type of Reboot : 1 - PowerCycle" 2 - Graceful Reboot without forced shutdown 3 - Graceful Reboot with forced shutdown"
OUT	Message	string	Error Message
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages
OUT	Job	DCIM_ConcreteJob REF	Returns the created reboot job. Note: direct GET operation on the returned referenced will FAIL. Extract the InstanceID selector value from the output parameter and construct the URI as described in section 10.2.1.

9   Use Cases

This section contains use cases for the Job Control Profile.

9.1   Discovery of Job Control profile support

Use one of the two procedures below to confirm the existence of Job Control profile support

A)   GET the *DCIM_LCRegisteredProfile* instance using an *InstanceID* of
        DCIM:JobControl:1.0.0. See section 3.14 for a definition of GET.

Instance URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID=DCIM:JobControl:1.0.0

Results for the *InstanceID* of DCIM:JobControl:1.0.0 shown below. If no instance is returned, the profile is not supported.

DCIM_LCRegisteredProfile

  AdvertiseTypeDescriptions = WS-Identify, Interop Namespace

  AdvertiseTypes = 1, 1

  InstanceID = DCIM:JobControl:1.0.0

  OtherRegisteredOrganization = DCIM

  RegisteredName = Job Control

  RegisteredOrganization = 1

  RegisteredVersion = 1.0.0

B)   `ENUMERATE` the *CIM_RegisteredProfile* class. See section 3.13 for a definition of `ENUMERATE` .

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_RegisteredProfile?__cimnamespace=root/interop

Then query the result for the following properties:

RegisteredName = Job Control, OtherRegisteredOrganization = DCIM, RegisteredVersion = 1.0.0

9.2   List all jobs in job store

`ENUMERATE` the *DCIM_LifecycleJob* class to view all available instances of the class. For the class and general instance URI structure

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LifecycleJob?__cimnamespace=root/dcim

The instance information of all available virtual flash media will be returned

9.3   Get one job's information

The URI for getting particular instance information is deterministic (i.e the *InstanceID* will be unique for each instance)

A)   Obtain the applicable instanceID from section 9.2

B)   For the job instance in the system, replace [instanceID] with the instance from A), and the instance URI will be:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LifecycleJob?__cimnamespace=root/dcim+InstanceID=[instanceID]

The instance of *DCIM_LifecycleJob* that contains the information on the job will be returned

9.4   Schedule one or more jobs

A)   To invoke the SetupJobQueue() method construct the input parameters per section Table 5

B)   `INVOKE` SetupJobQueue() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_JobService?CreationClassName=DCIM_JobService+Name=JobService+SystemName=Idrac+SystemCreationClassName=DCIM_ComputerSystem

C)   Examine output parameters per Table 4

D)   Repeat 9.3 to confirm successful execution of the method

9.5   Delete all jobs from job store (JobQueue) using "JID_CLEARALL"

A)   To invoke the DeleteJobQueue() method construct the input parameters per section Table 7

B)   INVOKE DeleteJobQueue() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_JobService?CreationClassName=DCIM_JobService+Name=JobService+SystemName=Idrac+SystemCreationClassName=DCIM_ComputerSystem

C)   Examine output parameters per Table 6

D)   Repeat 9.3 to confirm successful execution of the method

10   CIM Elements

The following table shows the instances of CIM Elements for this profile, and these instances shall be implemented as described below. Sections 7 Implementation Requirements and 8 Methods may impose additional requirements on these elements.

Table 10 – CIM Elements: Job Control Profile

Element Name	Requirement	Description
Classes		
DCIM_JobService	Mandatory	See section 10.1
DCIM_LifeCycleJob	Mandatory	See section 10.2
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in the Implementation Namespace. See section 10.1 and 10.3
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in the Interop Namespace. See section 10.1 and 10.3
DCIM_LCRegisteredProfile	Mandatory	See section 10.3
Indications		
None defined in this profile		

10.1   DCIM_JobService

The DCIM_LCElementConformsToProfile association(s)' ManagedElement property shall reference the DCIM_JobService instance(s).

10.1.1 WBEM URIs for WinRM®

The class WBEM URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_JobService?__cimnamespace=<Implementation Namespace>"

The key properties shall be the SystemCreationClassName, CreationClassName, SystemName, and Name.

The instance WBEM URI for DCIM_JobService instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_JobService?__cimnamespace=<Implementation Namespace>+SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_JobService+SystemName=Idrac+Name= JobService"

10.1.2 Operations

The following table details the implemented operations on DCIM_JobService.

Table 11 – DCIM_JobService – Operations

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

10.1.3 Properties

Table 12 – Class: DCIM_JobService

Properties	Requirement	Notes
SystemCreationClassName	Mandatory	Key: Value shall be "DCIM_ComputerSystem"
SystemName	Mandatory	Key: Value shall be "Idrac"
CreationClassName	Mandatory	Key: Value shall be "DCIM_JobService"
Name	Mandatory	Key: Value shall be "JobService"

10.2   DCIM_LifecycleJob

10.2.1 WBEM URIs for WinRM®

The class WBEM URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LifecycleJob?__cimnamespace=<Implementation Namespace>"

The key property shall be the InstanceID.

The instance WBEM URI for DCIM_LifecycleJob instance shall be:
"http://schemas.dell.com/wbem/wscim/1/cim-
schema/2/DCIM_LifecycleJob?__cimnamespace=<Implementation
Namespace>+InstanceID=<InstanceID>"

10.2.2 Operations

The following table details the implemented operations on DCIM_LifecycleJob.

Table 13 – DCIM_LifecycleJob - Operations

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

10.2.3 Properties

DCIM_LifecycleJob is used to represent the platform management action requested by the management application.

Table 14 – Class: DCIM_LifecycleJob

Properties and Methods	Requirement	Description
InstanceID	Mandatory	**Key –** Dynamic value returned as an output parameter from the extrinsic operation that created the job.
Name	Mandatory	See section 7.2.1
JobStatus	Mandatory	See section 7.2.2
JobStartTime	Mandatory	See section 7.2.3
JobUntilTime	Mandatory	See section 7.2.4
Message	Mandatory	See section 7.2.5
MessageID	Mandatory	See section 7.2.6
MessageArguments	Mandatory	See section 7.2.7

10.3   DCIM_LCRegisteredProfile

The CIM_RegisteredProfile class is defined by the Profile Registration Profile. The requirements denoted in this profile are in addition to those mandated by the Profile Registration Profile.

10.3.1 WBEM URIs for WinRM®

The class WBEM URI shall be "http://schemas.dmtf.org/wbem/wscim/1/cim-
schema/2/CIM_RegisteredProfile?__cimnamespace=<Interop Namespace>"

The key property shall be the InstanceID property.

The instance WBEM URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-
schema/2/DCIM_LCRegisteredProfile?__cimnamespace=<InteropNamespace>+InstanceID=
DCIM:JobControl:1.1.0"

10.3.2 Operations

The following table details the implemented operations on DCIM_SystemView.

Table 15 – DCIM_LCRegisteredProfile - Operations

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

10.3.3 Properties

Table 16 – Class: DCIM_LCRegisteredProfile

Properties	Requirement	Description
InstanceID	Mandatory	This property shall have a value of DCIM:JobControl:1.0.0
RegisteredName	Mandatory	This property shall have a value of "Job Control".
RegisteredVersion	Mandatory	This property shall have a value of "1.0.0".
RegisteredOrganization	Mandatory	This property shall have a value of 1 (Other).
OtherRegisteredOrganization	Mandatory	This property shall match "DCIM"

ANNEX A: Related MOF Files

Dell Tech Center MOF Library:

Related Managed Object Format (MOF) files:

DCIM_JobService.mof

DCIM_LifeCycleJob.mof

DCIM_LCElementConformsToProfile.mof

DCIM_LCRegisteredProfile.mof