Lifecycle Controller (LC) Management Profile

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Version 1.9.5

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Lifecycle Controller (LC) Management

252 1 Scope

253 The Lifecycle Controller (LC) Management Profile describes the management of the Dell Lifecycle
254 Controller and its configuration attributes.   The profile details certificate management and the LC
255 configuration services that are necessary for the LC's proper functionality. The LC configuration attributes
256 are modeled as attribute collections for an individual LC; typically there is one LC per system platform.

257 2 Normative References

258 Refer to the following documents for more information.

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

261 • DMTF DSP1033, *Profile Registration Profile 1.0*
262 • DMTF DSP1061, *BIOS Management Profile 1.0*
263 • *Dell Job Control Profile 1.0.0*
264 • DMTF DSP0004, *CIM Infrastructure Specification 2.3*
265 • *Dell Lifecycle Controller Best Practices Guide 1.0,*
266   *http://en.community.dell.com/techcenter/extras/m/white_papers/20066173.aspx*
267 • *Dell WSMAN Licenses and Privileges 1.0*
268 • ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards*,
269   http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype
270 • Unified Modeling Language (UML) from the Open Management Group (OMG),
271   http://www.uml.org
272 • Dell Tech Center MOF Library: http://www.delltechcenter.com/page/DCIM.Library.MOF
273 • Related Managed Object Format (MOF) files:
274   ○ DCIM_LCAttribute.mof
275   ○ DCIM_LCElementConformsToProfile.mof
276   ○ DCIM_LCEnumeration.mof
277   ○ DCIM_LCRegisteredProfile.mof
278   ○ DCIM_LCService.mof
279   ○ DCIM_LCString.mof

280 3 Terms and Definitions

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

3.1

282
283 **Conditional –** Indicates requirements to be followed strictly in order to conform to the document when the
284 specified conditions are met.

3.2

285
286 **Mandatory –** Indicates requirements to be followed strictly in order to conform to the document and from
287 which no deviation is permitted.

3.3

288
289 **May** – Indicates a course of action permissible within the limits of the document.

3.4

290
291 **Optional** – Indicates a course of action permissible within the limits of the document.

3.5

292
293 **can –** Used for statements of possibility and capability, whether material, physical, or causal.

3.6

294
295 **cannot –** Used for statements of possibility and capability, whether material, physical, or causal.

3.7

296
297 **need not** – Indicates a course of action permissible within the limits of the document.

3.8

298
299 **referencing profile** – Indicates a profile that owns the definition of this class and can include a reference
300 to this profile in its "Related Profiles" table.

3.9

301
302 **shall** – Indicates requirements to be followed strictly in order to conform to the document and from which
303 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

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

3.14

Interop Namespace – Interop Namespace is where instrumentation instantiates classes to advertise its capabilities for client discovery.

3.15

Implementation Namespace – Implementation Namespace is where instrumentation instantiates classes relevant to executing core management tasks.

3.16

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

3.17

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

LC – Lifecycle Controller

4.3

VD – Virtual Disk

5   Synopsis

Profile Name: LC Management

Version: 1.6.0

Organization: DCIM

CIM Schema Version: 2.26 Experimental

Central Class: DCIM_LCService

Scoping Class: CIM_ComputerSystem

340 The LC Management Profile extends the management capability of the referencing profiles by adding the
341 capability to describe lifecycle controller (LC) through its attributes. Each DCIM_LCAttribute derived
342 instance represents an LC configuration-related attribute.

343 The DCIM_LCService class shall be the Central Class. The DCIM_ComputerSystem class shall be the
344 Scoping Class. The DCIM_LCService instance shall be the Central Instance. The
345 DCIM_ComputerSystem instance shall be the Scoping Instance.

346 Table 1 identifies profiles that are related to this profile.

347 **Table 1 – Related Profiles**

Profile Name	Organization	Version	Relationship
Profile Registration	DCIM	1.0	Reference

6   Description

348

349 The LC Management Profile describes the LC attribute configuration service and the attributes instances
350 that the service manages. The profile also describes the relationship of the LC attribute service to the Dell
351 profile version information.

352 Figure 1 represents the class schema for the Lifecycle Controller (LC) Management. The LC service in a
353 managed system is represented by the instance of the DCIM_LCService class. The LC attributes are
354 represented by the DCIM_LCAttribute class derivation: DCIM_LCEnumeration and DCIM_LCString
355 classes.

356 The LC Management Profile information is represented with the instance of the
357 DCIM_LCRegisteredProfile.

358
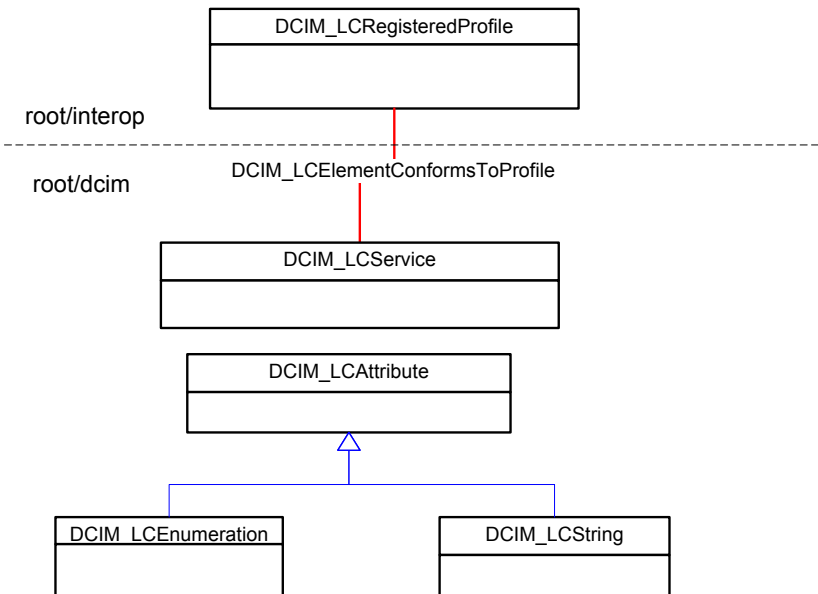
359 **Figure 1 – LC Management Profile: Class Diagram**

360 7 Implementation Requirements

361 This section describes the implementation of Dell LC Management.

362 **Table 2 – Class Requirements: Power State Management Profile**

Element Name	Requirement	Description
Classes		
DCIM_LCService	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.1.
DCIM_LCEnumeration	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.2.
DCIM_LCString	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.3.
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in both the *Interop* and *Implementation Namespaces*. See section 7.1 and 7.4.
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the *Interop Namespace*. See section 7.4.
Indications		
None defined in this profile		

363 7.1 DCIM_LCService

364 This section describes the implementation for the DCIM_LCService class.

365 This class is instantiated in the Implementation Namespace.

366 The DCIM_LCElementConformsToProfile association's ManagedElement property shall references the
367 DCIM_LCService instance(s).

368 7.1.1 Resource URIs for WinRM®

369 The class Resource URI is:

370 *"http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCService?__cimnamespace=root/dcim"*

371 The key properties are the SystemCreationClassName, CreationClassName, SystemName, Name

372 The instance Resource URI for DCIM_LCService instance is:

373 *"http://schemas.dell.com/wbem/wscim/1/cim-*
374 *schema/2/DCIM_LCService?__cimnamespace=root/dcim+SystemCreationClassName=DCIM_Computer*
375 *System+SystemName=DCIM:ComputerSystem+CreationClassName=DCIM_LCService+Name=DCIM:L*
376 *CService"*

7.1.2 Operations

The following table lists the operations implemented on DCIM_LCService.

Table 3 – DCIM_LCService - Operations

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

7.1.3 Class Properties

The following table lists the implemented properties for DCIM_LCService instance in a system. The "Requirements" column shall denote whether the property is implemented (for requirement definitions, see section 3.1, 3.2, and 3.4). The "Additional Requirements" column shall denote either possible values for the property, or requirements on the value formulation.

Table 4 – DCIM_LCService - Properties

Property Name	Type	Requirement	Additional Requirement
CreationClassName	String	Mandatory	The property value shall be "DCIM_LCService"
Name	String	Mandatory	The property value shall be "DCIM:LCService"
ElementName	String	Mandatory	The property value shall be "LC Service"
SystemCreationClassName	String	Mandatory	The property value shall be "DCIM_ComputerSystem"
SystemName	String	Mandatory	The property value shall be "DCIM:ComputerSystem"

7.2 DCIM_LCEnumeration

This section describes the implementation for the DCIM_LCEnumeration class.

This class shall be instantiated in the Implementation Namespace.

7.2.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

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

7.2.2 Operations

The following table lists the operations implemented on DCIM_LCEnumeration.

Table 5 – DCIM_LCEnumeration - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI

Enumerate	Mandatory	Class URI
DCIM_LCService.SetAttributte()	Mandatory	See section 8.1
DCIM_LCService.SetAttributes()	Mandatory	See section 8.2

400

7.2.3 Class Properties

402 The following table lists the implemented properties for DCIM_LCEnumeration instance representing an
403 LC enumeration attribute. The "Requirements" column shall denote whether the property is implemented
404 (for requirement definitions, see section 3). The "Additional Requirement" column shall denote either
405 possible values for the property, or requirements on the value formulation.

406 **Table 6 – Class: DCIM_LCEnumeration**

Properties	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	The property value shall have a unique value.
AttributeName	String	Mandatory	The property value shall be from the "AttributeName" column in Table 7.
CurrentValue[]	string	Mandatory	The property value shall be one of the values in the "PossibleValues" column at the corresponding row in Table 7.
PendingValue[]	string	Mandatory	The property value shall be one of the values in the "PossibleValues" column at the corresponding row in Table 7.
DefaultValue[]	string	Mandatory	The property value shall represent the default value of the attribute and shall be one of the values in the "PossibleValues" column at the corresponding row in Table 7
IsReadOnly	boolean	Mandatory	The property value shall the value in the "IsReadOnly" column at the corresponding row in Table 7.
ElementName	string	Mandatory	The property value shall be the FQDD of the LC.
PossibleValues[]	string	Mandatory	The property value shall be equal to the array of the values in "PossibleValues" column at the corresponding row in Table 7.

407 The following table describes the requirements for the AttributeName, and PossibleValues properties for
408 the DCIM_LCEnumeration class.

409 **Table 7 – DCIM_LCEnumeration Attributes**

AttributeName	IsReadOnly	PossibleValues	Description

AttributeName	IsReadOnly	PossibleValues	Description
Licensed	True	• Yes • No	Whether the Part Replacement feature is licensed.
Part Configuration Update	False	• Disabled • Apply always • Apply only if firmware match	Part cofiguration update method.
Part Firmware Update	False	• Disable • Allow version upgrade only • Match firmware of replaced part	• Disable (default) – firmware update is not allowed. • Allow version upgrade only – Allow firmware update only on up-revision. • Match firmware of replaced part – Always update firmware.
Collect System Inventory on Restart	False	• Disabled • Enabled	• Enabled (default) – Enable collecting system inventory on restart • Disabled – Disable collecting inventory on restart
AutoDiscovery	True	• On • Off	• Whether Auto Discovery feature is turned on or off.
Discovery Factory Defaults	True	• On • Off	• Off (default) – Do not reset to factory defaults when performing auto discovery • On – Reset to factory defaults when performing auto discovery.
IPChangeNotifyPS	False	• On • Off	• On – Notify provisioning server of an IP change. • Off – Do not notify provisioning server of an IP change.
VirtualAddressManagement	False	• Console • FlexAddress	• Console – Console manages the virtual addresses • FlexAddress – (Blade only) Virtual addresses are managed through the flex addressing. Note: If this attribute is configured through console, see to section "Setting virtual address attributes on CNA" in Simple NIC Profile.

AttributeName	IsReadOnly	PossibleValues	Description
LifecycleControllerState	False	• Enabled • Disabled • Recovery	Enabled (Default) The LC core services shall be enabled to enable the update and inventory collection features.
BIOS Reset To Defaults Requested	False	• True • False	• False (default) – Do not reset the BIOS to defaults • True – Reset the BIOS to defaults. **N**ote: This action needs the system reboot.
AutoBackup	False	• Enabled • Disabled	• Enables or disables the automatic backup scheduler.
AutoRestore	False	• Enabled • Disabled	• Enables or disables the automatic restore scheduler.
AutoUpdate	False	• Enabled • Disabled	• Enables or disables the automatic update scheduler.
DiagsJobScheduled	False	• False • True	• Specifies if Diagnostics Job is scheduled

410 ## 7.3   DCIM_LCString

411 This section describes the implementation for the DCIM_LCString class.

412 This class shall be instantiated in the Implementation Namespace.

413 ### 7.3.1   Resource URIs for WinRM®

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

416 The key property shall be the InstanceID.

417 The instance Resource URI for DCIM_LCString instance shall be:
418 "http://schemas.dell.com/wbem/wscim/1/cim-
419 schema/2/DCIM_LCString?__cimnamespace=root/dcim+InstanceID=<InstanceID>"

420 ### 7.3.2   Operations

421 The following table details the implemented operations on DCIM_LCString.

422 **Table 8 – DCIM_LCString - Operations**

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

7.3.3 Class Properties

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

Table 9 – Class: DCIM_LCString

Properties	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	The property value shall have unique value.
AttributeName	string	Mandatory	The property value shall be from the "AttributeName" column in Table 10
CurrentValue[]	string	Mandatory	The property shall represent the current value of the attribute.
PendingValue[]	string	Mandatory	The property value shall represent the pending value of the attribute.
DefaultValue[]	string	Mandatory	The property value shall represent the default value of the attribute.
IsReadOnly	boolean	Mandatory	The property value shall be the value in the "IsReadOnly" column at the corresponding row in Table 10
ElementName	string	Mandatory	The property value shall be the FQDD of the LC.
MinLength	uint64	Mandatory	The property value shall be the value in the "MinLength" column at the corresponding row in Table 10 The CurrentValue and PendingValue shall have equal or higher number of characters than the MinLength property value from the corresponding row. The omission or NULL shall denote that no known constraint exists on the CurrentValue and PendingValue properties.
MaxLength	uint64	Mandatory	The property value shall be the value in the "MaxLength" column at the corresponding row in Table 10. The CurrentValue and PendingValue shall have equal or lower number of characters than the MaxLength property value. The omission or NULL shall denote that no known constraint exists on the CurrentValue and PendingValue properties.
StringType	uint32	Mandatory	The property shall describe the type of string in the CurrentValue, PendingValue, and DefaultValue properties and have one of the following values: • 0 - "Unknown", • 2 - "ASCII", • 3 - "hex", • 4 - "unicode", • 5 - "regex"

429 The following table describes possible DCIM_LCString attributes and the requirements for the
430 AttributeName, MinLength, and MaxLength properties. The column headers represent the properties of
431 the DCIM_ LCString class. Each of the cells represents the values of the properties.

Table 10 – DCIM_LCString Attributes

AttributeName	IsRead Only	MinLength	MaxLength	Description
SYSID	TRUE	N/A	N/A	Dell System ID.
Provisioning Server	FALSE	0	255	Provisioning server address and port. Attribute value examples: • Hostname • hostname.domain.com • 1.1.1.1 • Mypc:8080 • Myps.dell.com(1.2.3.4):8080 • Host1:80,host2:8080, • Hostname[2001:db8:0000:1428: 57ab]:443 [2001:db8:0000:1428:57ab]:443
VirtualAddressManagem entApplication*	FALSE *	0	32	The console name of the Virtual Address Management Application, if the DCIM_LCEnumeration VirtualAddressManagement attribute is set to CurrentValue equals "Console".
CMCIP	TRUE	0	64	CMC IP address

433 * - Note that VirtualAddressMangementApplication attribute is settable only if the
434 VirtualAddressManagement DCIM_LCEnumeration instance's CurrentValue is set to "Console".

7.4 Lifecycle Controller (LC) Management Registration – DCIM_LCRegistered Profile

437 This section describes the implementation for the DCIM_LCRegisteredProfile class.

438 This class shall be instantiated in the Interop Namespace.

439 The DCIM_LCElementConformsToProfile association(s)' ConformantStandard property shall reference
440 the DCIM_LCRegisteredProfile instance.

7.4.1 Resource URIs for WinRM®

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

444 The key property shall be the InstanceID property.

445 The instance WBEM URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-
446 schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID=
447 DCIM:LCManagement:1.1.0"

7.4.2 Operations

449 The following table lists the operations implemented on DCIM_LCRegisteredProfile.

450

Table 11 – DCIM_LCRegisteredProfile - Operations

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

451

7.4.3 Class Properties

453 The following table details the properties implemented for the DCIM_LCRegisteredProfile instance
454 representing Lifecycle Controller (LC) Management implementation. The "Requirements" column shall
455 denote whether the property is implemented (for requirement definitions, see section 3). The "Additional
456 Requirements" column shall denote either possible values for the property, or requirements on the value
457 formulation.

458

Table 12 – Class: DCIM_LCRegisteredProfile

Properties	Type	Requirement	Additional Requirements
InstanceID	String	Mandatory	This property shall have a value of "DCIM:LCManagement:1.1.0"
RegisteredName	String	Mandatory	This property shall have a value of "LC Management".
RegisteredVersion	String	Mandatory	This property shall have a value of "1.6.0".
RegisteredOrganization	uint16	Mandatory	This property shall have a value of 1 (Other).
OtherRegisteredOrganization	String	Mandatory	This property shall match "DCIM"
AdvertiseTypes[]	uint16	Mandatory	This property array shall have values "1(Other)" and "1(Other)"
AdvertiseTypeDescriptions[]	String	Mandatory	This property array shall have values "WS-Identify" and "Interop Namespace"
ProfileRequireLicense[]	String	Mandatory	This property array shall describe the required licenses for this profile. If no license is required for the profile, the property shall have value NULL.
ProfileRequireLicenseStatus[]	string	Mandatory	This property array shall contain the status for the corresponding license in the same element index of the ProfileRequireLicense array property. Each array element shall contain: • "LICENSED" • "NOT_LICENSED" If no license is required for the profile, the property shall have value NULL.

459

8 Methods

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

8.1 DCIM_LCService.SetAttribute()

464 The SetAttribute( ) method is used to set or change the value of an LC attribute.

465 Invoking the SetAttribute( ) method shall change the value of the DCIM_LCAttribute.CurrentValue or
466 DCIM_LCAttribute.PendingValue property to the value specified by the AttributeValue parameter if the
467 DCIM_LCAttribute.IsReadOnly property is FALSE. Invoking this method when the
468 DCIM_LCAttribute.IsReadOnly property is TRUE shall result in no change to the value of the
469 DCIM_LCAttribute.CurrentValue property. The results of changing this value is described with the
470 SetResult parameter.

471 Return code values for the SetAttribute( ) method are specified in tables below.

472 **NOTE:** Invoking the SetAttribute( ) method multiple times can result in the earlier requests being
473 overwritten or lost.

474 **Table 13 – DCIM_LCService.SetAttribute() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

475 **Table 14 – DCIM_LCService.SetAttribute() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	AttributeName	string	DCIM_LCAttribute.AttributeName
IN, REQ	AttributeValue[]	string	Pending or Current value to be set.
OUT	SetResult	string	Invoking the SetAttribute may result in the CurrentValue or PendingValue property being set. A value of: • "Set CurrentValue" means CurrentValue property is set. • "Set PendingValue" means PendingValue property is set.
OUT	RebootRequired	string	A value of • "Yes" means a reboot is required to set this value. • "No" means a reboot is not required to set this value.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments []	string	Substitution variables for dynamic error messages.

476

Table 15 – DCIM_LCService.SetAttribute() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC003	Failed to change the FW Update mode	NA
LC004	PS info not formatted correctly	NA
LC005	Invalid FW update mode	NA
LC007	Invalid parameter	NA
LC008	Unsupported method parameter value	NA
LC012	Lifecycle Controller is being used by another process	NA
LC015	Invalid Part Configuration Update	NA
LC016	Missing required parameter	<parameter>
LC036	System Services is disabled	NA
LC041	Virtual Address Mgmt file error	NA
LC042	Virtual Address Mgmt using FlexAddr	NA
LC048	Invalid value of IPChangeNotifyPS	NA
LC049	Invalid value of VirtualAddressManagement	NA
LC057	Invalid AttributeName.	NA
LC058	Invalid AttributeValue for AttributeName.	<parameter>
LC059	Cannot set ReadOnly AttributeName.	<parameter>
LC062	An instance of Export or Import System Configuration is already running.	

478

8.2 DCIM_LCService.SetAttributes()

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

481 Invoking the SetAttributes( ) method shall change the values of the DCIM_LCAttribute.CurrentValue or
482 PendingValue properties that correspond to the names specified by the AttributeName parameter and the
483 values specified by the AttributeValue parameter if the respective DCIM_LCAttribute.IsReadOnly property
484 is FALSE. Invoking the method when the respective DCIM_LCAttribute.IsReadOnly property is TRUE
485 shall result in no change to the corresponding value of the DCIM_LCAttribute.CurrentValue property.

486 Return code values for the SetAttributes( ) method are specified in tables below.

487 **NOTE:** Invoking the SetAttributes( ) method multiple times can result in the earlier requests being
488 overwritten or lost.

Table 16 – DCIM_LCService.SetAttributes() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 17 – DCIM_LCService.SetAttributes() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	AttributeName[]	string	The array parameter shall contain the AttributeName property values for the attributes to be modified.
IN, REQ	AttributeValue[]	string	The array parameter shall contain the desired attribute values at the corresponding array element with the attribute name in the AttributeName array parameter. For example, if there are two attributes in the AttributeName array: AttributeName1 and AttributeName2, the array index 1 shall contain the value for AttributeName1 and array index 2 shall contain the value for AttributeName2. Attributes with array values shall not be set using this method, rather the SetAttribute() method shall be used to set the array attributes one at a time.. If the value is valid, the CurrentValue or PendingValue property of the specified attribute shall be modified.
OUT	SetResult[]	string	Invoking the SetAttributes may result in the CurrentValue or PendingValue property of each input element being set. AttributeValue array shall have a corresponding SetResult value in the SetResult array. A return value of: "Set CurrentValue" means CurrentValue property is set. "Set PendingValue" means PendingValue property is set.
OUT	RebootRequired[]	string	Each input element's AttributeValue array shall have a corresponding RebootRequired value in the RebootRequired array. A value of: "Yes" means a reboot is required to set this value. "No" means a reboot is not required to set this value

Qualifiers	Name	Type	Description/Values
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

491 **Table 18 – DCIM_LCService.SetAttributes() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC003	Failed to change the FW Update mode	NA
LC004	PS info not formatted correctly	NA
LC005	Invalid FW update mode	NA
LC007	Invalid parameter	NA
LC008	Unsupported method parameter value	NA
LC012	Lifecycle Controller is being used by another process	NA
LC015	Invalid Part Configuration Update	NA
LC016	Missing required parameter	<parameter>
LC036	System Services is disabled	NA
LC041	Virtual Address Mgmt file error	NA
LC042	Virtual Address Mgmt using FlexAddr	NA
LC048	Invalid value of IPChangeNotifyPS	NA
LC049	Invalid value of VirtualAddressManagement	NA
LC057	Invalid AttributeName.	NA
LC058	Invalid AttributeValue for AttributeName.	<parameter>
LC059	Cannot set ReadOnly AttributeName.	<parameter>
LC062	An instance of Export or Import System Configuration is already running.	

492

8.3 DCIM_LCService.CreateConfigJob()

494 The CreateConfigJob( ) method is used to apply the pending values created by the SetAttribute and
495 SetAttributes methods. The successful execution of this method creates a job for application of pending
496 attribute values.

497 Return code values for the CreateConfigJob( ) method are specified in tables below.

498 **NOTE:** Subsequent calls to CreateConfigJob after the first CreateConfigJob will result in error until the
499 first job is completed.

500 **Table 19 – DCIM_LCService.CreateConfigJob() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

501 **Table 20 – DCIM_LCService.CreateConfigJob() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN	ScheduledStartTime	datetime	Start time for the job execution in format: yyyymmddhhmmss. The string "TIME_NOW" means immediate.
IN	RebootIfRequired	boolean	
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status[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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

502

503 **Table 21 – DCIM_LCService.CreateConfigJob() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	
LC012	Lifecycle Controller is being used by another process	NA
LC013	There are no pending values to set	NA
LC045	An instance of CreateConfigJob is already running	NA

MessageID (OUT parameter)	Message	MessageArguments[]
JCP017	Maximum job limit reached, cannot create new jobs	NA
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	NA
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA
LC062	An instance of Export or Import System Configuration is already running.	

504

8.4   DCIM_LCService.ReInitiateDHS()

506   The ReInitiateDHS() method is used to reinitiate the provisioning server discovery and handshake.

507

Table 22 – DCIM_LCService.ReInitiateDHS() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

508

Table 23 – DCIM_LCService.ReInitiateDHS() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	ProvisioningServer	string	An optional parameter to specify provisioning server addresses and ports used for auto discovery. If omitted, the Lifecycle Controller shall get the value from DHCP or DNS.
IN, REQ	ResetToFactoryDefaults	boolean	If set to "true", all configuration information is replaced with the auto discovery factory defaults. If set to "false", an error will be returned
IN, REQ	PerformAutoDiscovery	uint16	- A value of "Off = 1" disables auto discovery. - A value of "Now = 2" enables and initiates auto discovery immediately. - A value of "NextBoot = 3" will delay reconfiguration and auto discovery until next A/C cycle. NOTE: If NextBoot has value 3, then upon successful execution, the Discovery Factory Defaults attribute shall be set to "On".
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

509

Table 24 – DCIM_LCService.ReInitiateDHS() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC004	PS info not formatted correctly	NA
LC008	Unsupported method parameter value	NA
LC009	Insufficient method parameters	NA

510

8.5 DCIM_LCService.ReInitiateAutoDiscovery()

The ReInitiateAutoDiscovery() method is used to reinitiate the discovery and handshake with static IP configuration. If the method successfully executes, the iDRAC shall be in the static IP mode after the auto-discovery is initiated and thus, shall not require DHCP setup. The static IP information for auto-discovery can be set either through the optional input parameters of this method or through the iDRAC attributes in the iDRAC Card Profile.

After the successful auto-discovery initiation, if the IPAddress parameter has non-NULL value, then the iDRAC IPv4 address shall be set to that parameter's value, otherwise the iDRAC IPv4 Address shall be set to the Address attribute in the IPv4 Information group in the iDRAC Card Profile.

After the successful auto-discovery initiation, if the Mask parameter has non-NULL value, then the iDRAC IPv4 address net mask shall be set to that parameter's value, otherwise the iDRAC IPv4 address net mask shall be set to the to the Netmask attribute in the IPv4 Information group in the iDRAC Card Profile.

After the successful auto-discovery initiation, if the Gateway parameter has non-NULL value, then the iDRAC IPv4 gateway address shall be set to that parameter's value, otherwise the iDRAC IPv4 gateway shall be set to the to the Gateway attribute in the IPv4 Information group in the iDRAC Card Profile.

After the successful auto-discovery initiation, if the DNS parameter has non-NULL value, then the iDRAC IPv4 DNS address shall be set to that parameter's value, otherwise the iDRAC IPv4 DNS address shall be set to the to the DNS1 attribute in the IPv4 Information group in the iDRAC Card Profile.

After the successful auto-discovery initiation, if the Domain parameter has non-NULL value, then the iDRAC domain name shall be set to that parameter's value, otherwise the iDRAC domain name shall be set to the to the DNSDomainName attribute in the NIC Information group in the iDRAC Card Profile.

Table 25 – DCIM_LCService.ReInitiateAutoDiscovery() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 26 – DCIM_LCService.ReInitiateAutoDiscovery() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	ProvisioningServer	string	An optional parameter to specify provisioning server addresses and ports used for auto discovery. If omitted, the Lifecycle Controller shall get the value from DNS.
IN, REQ	PerformAutoDiscovery	uint16	• A value of "Off = 1" disables auto discovery. • A value of "Now = 2" enables and initiates auto discovery immediately. • A value of "NextBoot = 3" will delay reconfiguration and auto discovery until next A/C cycle. NOTE: If NextBoot has value 3, then upon successful execution, the Discovery Factory Defaults attribute shall be set to "On".
IN	IPAddress	string	An optional parameter for specifying the iDRAC static IP configuration after the reset to the factory defaults occurs. The parameter shall be IPv4 address. The iDRAC IPv4 address shall be set to this parameter value after the reset occurs. NOTE: If this parameter is not specified then iDRAC shall be set to the value of the Address attribute in the IPv4 Information group in the iDRAC Card Profile.
IN	Mask	string	An optional parameter for specifying the iDRAC static IP configuration after the reset to the factory defaults occurs. The iDRAC shall be set to this net mask after the reset of iDRAC configuration. NOTE: If this parameter is not specified then iDRAC shall be set to the value of the Netmask attribute in the IPv4 Information group in the iDRAC Card Profile.

Qualifiers	Name	Type	Description/Values
IN	Gateway	string	An optional parameter for specifying the iDRAC static IP configuration after the reset to the factory defaults occurs. The parameter shall be IPv4 address. The iDRAC shall be set to this gateway IP address after the reset of iDRAC configuration. NOTE: If this parameter is not specified then iDRAC shall be set to the value of the Gateway attribute in the IPv4 Information group in the iDRAC Card Profile.
IN	DNS	string	An optional parameter for specifying the iDRAC static IP configuration after the reset to the factory defaults occurs. The parameter shall be IPv4 address. The iDRAC shall be set to this DNS IP address after the reset of iDRAC configuration. NOTE: If this parameter is not specified then iDRAC shall be set to the value of the DNS1 attribute in the IPv4 Information group in the iDRAC Card Profile.
IN	Domain	string	An optional parameter for specifying the iDRAC static IP configuration after the reset to the factory defaults occurs. The iDRAC shall be set to this domain after the reset of iDRAC configuration. NOTE: If this parameter is not specified then iDRAC shall be set to the value of the DNSDomainName attribute in the NIC Information group in the iDRAC Card Profile.
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

534   **Table 27 – DCIM_LCService.ReInitiateAutoDiscovery() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC004	PS info not formatted correctly	NA
LC008	Unsupported method parameter value	NA

MessageID (OUT parameter)	Message	MessageArguments[]
LC009	Insufficient method parameters	NA
LC065	Static IP information is not configured correctly <attribute key>.	attribute key

8.6 DCIM_LCService.ClearProvisioningServer()

536 The ClearProvisioningServer() method is used to clear the provisioning server values.

537 **Table 28 – DCIM_LCService.ClearProvisioningServer() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

538 **Table 29 – DCIM_LCService.ClearProvisioningServer() Method: Parameters**

Qualifiers	Name	Type	Description/Values
OUT	MessageID	string	Error MessageID is returned if the method fails to execute
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

539 **Table 30 – DCIM_LCService.ClearProvisioningServer() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	

8.7 DCIM_LCService.DownloadServerPublicKey()

541 The DownloadServerPublicKey() method is used to set a public certificate in the chain of trust for
542 provisioning server. The successful invocation of this method shall set the certificate inside the
543 KeyContent parameter to the iDRAC trusted Root CA list. The certificate will be used to authenticate the
544 provisioning server access to iDRAC.

Table 31 – DCIM_LCService.DownloadServerPublicKey() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started

546 **Table 32 – DCIM_LCService.DownloadServerPublicKey() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, OctetString, REQ	KeyContent	string	Base64 encoded public CA certificate.
OUT	Job	CIM_ConcreteJob REF	Returned to track the setting of the public key.
OUT	MessageID	string	Error Message ID can be used to index into Dell Message registry files.
OUT	Message	string	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

547

548 **Table 33 – DCIM_LCService.DownloadServerPublicKey() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC016	Missing required parameter	<parameter>
LC017	Invalid value of parameter	<parameter>
LC040	Resource Allocation Failure	
LC046	An instance of DownloadServerPublicKey is already running	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

549

8.8 DCIM_LCService.DownloadClientCerts()

551 DCIM_LCService.DownloadClientCerts() is used to copy a CA cert and private key to the iDRAC to sign
552 the iDRAC certificate. When this command is issued the iDRAC will generate a new auto-discovery client
553 certificate and sign it using the CA cert and private key. The CA cert then needs to be added to the
554 provisioning server trusted Root CA list before performing auto-discovery.

Table 34 – DCIM_LCService.DownloadClientCerts() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started

556   **Table 35 – DCIM_LCService.DownloadClientCerts() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, OctetString, REQ	KeyContent	string	Base64 encoded private key content.
IN, REQ	Password	string	Private key password.
IN, OctetString, REQ	CAContent	string	Base64 encoded root certificate content.
OUT	Job	CIM_ConcreteJob REF	Returned to track the setting of the public key.
OUT	MessageID	string	Error Message ID can be used to index into Dell Message registry files.
OUT	Message	string	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

557   **Table 36 – DCIM_LCService.DownloadClientCerts() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	NA
LC016	Missing required parameter	<parameter>
LC017	Invalid value of parameter	<parameter>
LC040	Resource Allocation Failure	
LC047	An instance of DownloadClientCerts is already running	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

558   **8.9 DCIM_LCService.DeleteAutoDiscoveryClientCerts ()**

559   The DeleteAutoDiscoveryClientCerts() method is used to wipe all configurations from the Lifecycle
560   controller before the system is retired.

561 **Table 37 – DCIM_LCService.DeleteAutoDiscoveryClientCerts() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

562 **Table 38 – DCIM_LCService.DeleteAutoDiscoveryClientCerts() Method: Parameters**

Qualifiers	Name	Type	Description/Values
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

563 **Table 39 – DCIM_LCService.DeleteAutoDiscoveryClientCerts() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	

564

8.10 DCIM_LCService.SetCertificateAndPrivateKey()

The SetCertificateAndPrivateKey() method is used to set iDRAC owned server certificate and public and private key pairs using the contents of a PKCS#12 file. iDRAC will serve the certificate to identify itself during web server based connections such as for iDRAC's web application and WSMan instrumentation connections. The certificate will also be served for connections with directory services.

Table 40 – DCIM_LCService.SetCertificateAndPrivateKey() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 41 – DCIM_LCService.SetCertificateAndPrivateKey() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	Type	string	This parameter specifies the certificate use. **Note: The parameter shall have "server" value.**
IN, REQ	PKCS12	string	An input parameter that represents the Base64 encoded contents of PKCS#12 file to set. Note this is the content of the file and not a file name.
IN, REQ	PKCS12pin	string	Password to decode the PKCS12.
OUT	MessageID	String	Error Message ID can be used to index into Dell Message registry files.
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	String	Substitution variables for dynamic error messages.

Table 42 – DCIM_LCService.SetCertificateAndPrivateKey() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	
LC016	Missing required parameter	"Type", "PKCS12","PKCS12pin"
LC017	Invalid value of parameter	"Type", "PKCS12","PKCS12pin"

8.11 DCIM_LCService.SetPublicCertificate()

576 The SetPublicCertificate() method is used to set a public certificate in the chain of trust for directory
577 services. The successful invocation of this method shall set the certificate inside the Certificate parameter
578 to the iDRAC trusted Root CA list. The certificate will be used to authenticate the directory service access
579 to iDRAC.

580 **Table 43 – DCIM_LCService.SetPublicCertificate() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

581 **Table 44 – DCIM_LCService.SetPublicCertificate() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Type	string	This parameter specifies the service the certificate is for. "directoryCA" = CA certificate for Active Directory or LDAP server
IN, REQ	Certificate	string	An input parameter that represents the certificate to set. The certificate must be in X509 format and Base64 encoded.
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

582 **Table 45 – DCIM_LCService.SetPublicCertificate() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	
LC016	Missing required parameter %s	"Type", "Certificate"
LC017	Invalid value of parameter %s	"Type", "Certificate"

8.12 DCIM_LCService.DeleteAutoDiscoveryServerPublicKey()

584 The DeleteAutoDiscoveryServerPublicKey() method is used to delete the server public key set previously
585 by the auto discovery method.

586   **Table 46 – DCIM_LCService.DeleteAutoDiscoveryServerPublicKey() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

587   **Table 47 – DCIM_LCService.DeleteAutoDiscoveryServerPublicKey() Method: Parameters**

Qualifiers	Name	Type	Description/Values
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

588   **Table 48 – DCIM_LCService.DeleteAutoDiscoveryServerPublicKey() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	

589

590   **8.13 DCIM_LCService.InsertCommentInLCLog()**

591   The InsertCommentInLCLog() method is used to insert additional user comments into the Lifecycle
592   Controller log.

593   **Table 49 – DCIM_LCService.InsertCommentInLCLog() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

594   **Table 50 – DCIM_LCService.InsertCommentInLCLog() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Comment	string	This parameter holds the text that shall be inserted into the LC log Comment field.
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

595

596

597

Table 51 – DCIM_LCService.InsertCommentInLCLog() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	
LC008	Unsupported method parameter value	
LC014	Comment length must be between 1 and 255 characters	

8.14 DCIM_LCService.ExportLCLog()

599 The ExportLCLog() method is used to export the log from the Lifecycle Controller to a remote share.

600

Table 52 – DCIM_LCService.ExportLCLog() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

601

Table 53 – DCIM_LCService.ExportLCLog() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
OUT	Job	CIM_ConcreteJob REF	[1] Returned to keep track of config job status[1].
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files.
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

602

603

Table 54 – DCIM_LCService.ExportLCLog() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 53
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 53
LC022	LCL Export was successful	
LC023	Cannot access network share	
LC030	Filepath is a read-only file system	
LC037	An instance of LCExport is already running	
LC040	Resource Allocation Failure	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

605

8.15 DCIM_LCService.ExportCompleteLCLog()

607 The ExportLCLog() method is used to export the log from the Lifecycle Controller to a remote share.

608

Table 55 – DCIM_LCService.ExportCompleteLCLog() Method: Return Code Values

Value	Description
1	Not Supported
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

609

Table 56 – DCIM_LCService.ExportCompleteLCLog() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
OUT	Job	CIM_ConcreteJob REF	[2] Returned to keep track of config job status[1].
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files.
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

610

611

612   **Table 57 – DCIM_LCService.ExportCompleteLCLog() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 56
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 56
LC022	LCL Export was successful	
LC023	Cannot access network share	
LC030	Filepath is a read-only file system	
LC037	An instance of LCExport is already running	
LC040	Resource Allocation Failure	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

613
614
615   Note: Exporting of log files will be in tar.gz format. Users are at their liberty to change the extension.

616   ## 8.16 DCIM_LCService.ExportHWInventory()

617   The ExportHWInventory() method is used to export the hardware inventory from the Lifecycle Controller
618   to a remote share.

619 **Table 58 – DCIM_LCService.ExportHWInventory() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

620 **Table 59 – DCIM_LCService.ExportHWInventory() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN. REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	XMLSchema	uint8	The schema to be used for the Hardware Inventory XML output: 0 (CIM-XML), 1(Simple). If this parameter is not specified, then the output shall be in CIM-XML schema XML.
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status[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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

621

622

623 **Table 60 – DCIM_LCService.ExportHWInventory() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see table 59
LC017	Invalid value of parameter <parameter name>	Parameter name, see table 59
LC023	Cannot access network share	
LC025	Insufficient space on network share	
LC027	Hardware Inventory Export was successful	

MessageID (OUT parameter)	Message	MessageArguments[]
LC029	Filepath is invalid	
LC030	Filepath is a read-only file system	
LC038	An instance of Hardware Inventory is already running	
LC040	Resource Allocation Failure	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

8.17 DCIM_LCService.ExportFactoryConfiguration()

The ExportFactoryConfiguration() method is used to export the factory configuration from the Lifecycle Controller to a remote share.

627 **Table 61 – DCIM_LCService.ExportFactoryConfiguration() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

628 **Table 62 – DCIM_LCService.ExportFactoryConfiguration() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

629 **Table 63 – DCIM_LCService.ExportFactoryConfiguration() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see table 62
LC017	Invalid value of parameter <parameter name>	Parameter name, see table 62
LC023	Cannot access network share	
LC025	Insufficient space on network share	
LC029	Filepath is invalid	
LC030	Filepath is a read-only file system	
LC033	Factory Configuration Export was successful	
LC034	Factory Configuration was not found on the system	
LC039	An instance of Factory Configuration is already running	

MessageID (OUT parameter)	Message	MessageArguments[]
LC040	Resource Allocation Failure	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

630

8.18 DCIM_LCService.ExportSystemConfiguration()

This method is used to export the system configuration from the Lifecycle Controller to a file on a remote share.

Table 64 – DCIM_LCService.ExportSystemConfiguration() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

635 **Table 65 – DCIM_LCService.ExportSystemConfiguration() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	WorkGroup name if it is needed.
IN	Target	String	To identify the component for Export. It identifies the one or more FQDDs .Selective list of FQDDs should be given in comma separated format . Default = "All" .
IN	ExportUse	uint16	Type of Export intended for use : Default =0, Clone=1 , Replace=2.
IN	IncludeInExport	uint16	Extra information to include in the export: Default=0, Include read only = 1, Include password hash values = 2, Include read only and password hash values=3.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

636 **Table 66 – DCIM_LCService.ExportSystemConfiguration() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 65
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 65
LC023	Cannot access network share	
LC040	Resource Allocation Failure	
LC062	An instance of Export or Import System Configuration is already	

MessageID (OUT parameter)	Message	MessageArguments[]
	running.	
LC063	Cannot create new jobs until the existing running jobs are completed or deleted.	
LC064	Parameter exceeds maximum length <max parameter length> for <parameter name>	Parameter name, see Table 65
JCP017	Maximum job limit reached, cannot create new jobs	

637

8.19 DCIM_LCService.ImportSystemConfiguration()

639 This method is used to import the system configuration from the Lifecycle Controller from a file on a
640 remote share. The successful invocation of this method shall return a job. The job execution results shall
641 be logged in the Lifecycle log as part of configuration results. The Dell Record Log Profile provides the
642 DCIM_LCRecordLog.GetConfigResults() method to retrieve the configuration results from the lifecycle
643 logs based on the returned job's JobID (see Dell Record Log Profile for more details).

644 **Table 67 – DCIM_LCService.ImportSystemConfiguration() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

645 **Table 68 – DCIM_LCService.ImportSystemConfiguration() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target import server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Target	String	To identify the component for Import. It identifies the one or more FQDDs .Selective list of FQDDs should be given in comma separated format . Default = "All" .
IN	ShutdownType	uint16	Type of the host shut down before perform the import operation. Type of shut down: Graceful=0, Forced =1,NoReboot=2
IN	TimeToWait	uint16	The time to wait for the host to shut down. Default and minimum value is 300 seconds. Maximum value is 3600 seconds.
IN	EndHostPowerState	uint16	The desired host power state after the import operation is finished. Default value is 1 - On. Type of state: Off=0, On=1
IN	Username	String	User name for the target import server.
IN	Password	String	Password for the target import server.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

646 **Table 69 – DCIM_LCService.ImportSystemConfiguration() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 68
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 68
LC023	Cannot access network share	

MessageID (OUT parameter)	Message	MessageArguments[]
LC040	Resource Allocation Failure	
LC062	An instance of Export or Import System Configuration is already running.	
LC063	Cannot create new jobs until the existing running jobs are completed or deleted.	
LC064	Parameter exceeds maximum length <max parameter length> for <parameter name>	Parameter name, see Table 68
JCP017	Maximum job limit reached, cannot create new jobs	

647

648

8.20 DCIM_LCService.LCWipe()

This LCWipe() method is used to delete all configurations from the Lifecycle controller before the system is retired.

652

Table 70 – DCIM_LCService.LCWipe() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 71 – DCIM_LCService.LCWipe() Method: Parameters

Qualifiers	Name	Type	Description/Values
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

Table 72 - DCIM_LCService.LCWipe() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC012	Lifecycle Controller is being used by another process	
LC044	An instance of LCWipe is already running	

8.21 DCIM_LCService.TestNetworkShare()

The TestNetworkShare() method is used to test network connection for the Lifecycle Controller.

Table 73 – DCIM_LCService.TestNetworkShare() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 74 – DCIM_LCService.TestNetworkShare() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of the NFS or CIFS share such as 192.168.10.12. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), 3-TFTP,5-HTTP or not specified. In case of ftp, ftp.dell.com is the default IP taken
IN	ShareName	String	Share name for the network share such as "imageshare". The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	ShareType	Unit16	Type of the share or storage. • 0 – NFS • 2 – CIFS • 1-FTP • 3-TFTP • 5-HTTP If ShareType is blank or null, it shall be considered as NFS type. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	Username	String	User name for the remote share
IN	Password	String	Password for the remote share
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

Table 75 – DCIM_LCService.TestNetworkShare() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter	<parameter>
LC017	Invalid value of parameter	"ShareType"
LC023	Cannot access network share	NA

8.22 DCIM_LCService.BackupImage()

The BackupImage() method is used to backup firmware and configurations for the Lifecycle Controller.

Table 76 – DCIM_LCService.BackupImage() Method: Return Code Values

Value	Description
2	Error occurred
4096[1]	A DCIM_ConcreteJob is returned[1]

664 NOTE: 1 – If return code is 4096 (Job Created), the newly created job will not execute if the LC core services are not
665 running (DCIM_LCEnumeration with AttributeName equal to "LifecycleControllerState" has the CurrentValue property
666 equal to "Disabled").

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of the NFS or CIFS share such as 192.168.10.12. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	ShareName	String	Share name for the network share such as "imageshare". The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	ShareType	Unit16	Type of the share or storage. • 0 – NFS • 2 – CIFS • 4 – VFLASH If ShareType is blank or null, it shall be considered as NFS type. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	Passphrase	String	The passphrase for the image. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ImageName	String	The name of the backup file. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	Username	String	User name for the remote share
IN	Password	String	Password for the remote share
IN	Workgroup	String	Workgroup for the share
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	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	Job	DCIM_ConcreteJob Ref	The job that represents this operation[1]
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MssageArguments[]	string	Substitution variables for dynamic error messages

667 **Table 77 – DCIM_LCService.BackupImage() Method: Return Code Values**

668

669 **Table 78 – DCIM_LCService.BackupImage() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	
LC017	Invalid value of parameter	"ShareType"
LC023	Cannot access network share	NA
LC051	Cannot create multiple Export jobs.	NA
SUP017	Invalid start time.	
SUP018	Invalid until time.	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	

670 8.23 DCIM_LCService.RestoreImage()

671 This RestoreImage() method is used to restore firmware and configurations.

Table 79 – DCIM_LCService.RestoreImage() Method: Return Code Values

Value	Description
2	Error occurred
4096[1]	A DCIM_ConcreteJob is returned[1]

Table 80 – DCIM_LCService.RestoreImage() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of the NFS or CIFS share. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN.	ShareName	String	Share name for the network share, The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	ShareType	Uint16	Type of the share or storage. • 0 – NFS • 2 – CIFS • 4 – VFLASH If ShareType is blank or null, it shall be considered as NFS type
IN	Passphrase	String	The passphrase for the image. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	ImageName	String	The name of the backup file. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
IN	Username	String	User name for the remote share
IN	Password	String	Password for the remote share
IN	Workgroup	String	Workgroup for the share
IN, REQ	PreserveVDConfig	Uint16	Whether to preserve the VD (Virtual Disk) configuration.
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	DCIM_ConcreteJob Ref	The job that represents this operation[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 in English corresponding to MessageID is returned if the method fails to execute

Qualifiers	Name	Type	Description/Values
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

674 NOTE: 1 – If return code is 4096 (Job Created), the newly created job will not execute if the LC core services are not
675 running (DCIM_LCEnumeration with AttributeName equal to "LifecycleControllerState" has the CurrentValue property
676 equal to "Disabled").

677 **Table 81 – DCIM_LCService.RestoreImage() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC002	General failure	LC002
LC017	Invalid value of parameter	"ShareType", "PreserveVDConfig"
LC023	Cannot access network share	NA
LC052	Cannot create multiple Import jobs.	NA
SUP017	Invalid start time	
SUP018	Invalid until time	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	

678 ## 8.24 DCIM_LCService.GetRSStatus()

679 The GetRSStatus() method is used to obtain the Data Manager (Remote Services) status.

680 **NOTE:** The GetRemoteServicesAPIStatus() method execution reports more granular and detailed status
681 of the Remote Services API.

Table 82 – DCIM_LCService.GetRSStatus() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

Table 83 – DCIM_LCService.GetRSStatus() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	Status	string	The status for the Data Manager: Ready Not Ready Reloading
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

Table 84 – DCIM_LCService.GetRSStatus() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
RSI0001	The remote service is available	
RSI0002	The remote service is currently not available	
RSI0003	The remote service is reloading data	
RSI0004	The remote service is unavailable	

8.25   DCIM_LCService.GetRemoteServicesAPIStatus ()

The GetRemoteServicesAPIStatus() method is used to obtain the overall remote services API status that includes host system status, the remote services (Data Manager) status and Real Time Status. The overall rolled up status shall be reflected in the Status output parameter.

NOTE: The LCStatus output parameter value includes the status reported by the DMStatus output parameter in the GetRSStatus() method and the Lifecycle Controller status. Thus, GetRSStatus() method invocation is redundant.

692 **Table 85 – DCIM_LCService.GetRemoteServicesAPIStatus() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred

693 **Table 86 – DCIM_LCService.GetRemoteServicesAPIStatus() Method: Parameters**

Qualifiers	Name	Type	Description/Values
OUT	ServerStatus	uint8	The host system status: • 0 – Powered Off • 1 – In POST • 2 – Out of POST • 3 – Collecting System Inventory • 4 – Automated Task Execution • 5 – Lifecycle Controller Unified Server Configurator • 6 – Server has halted at F1/F2 error prompt because of a POST error • 7 – Server has halted at F1/F2/F11 prompt because there are no bootable devices available • 8 – Server has entered F2 setup menu • 9 – Serrver has entered F11 Boot Manager menu
OUT	LCStatus	uint8	The Lifecycle Controller status that includes the Data Manager status: • 0 – Ready • 1 – Not Initialized • 2 – Reloading data • 3 – Disabled • 4 – In Recovery • 5 – In Use
OUT	Status	uint8	The overall status of the Remote Services API: • 0 – Ready • 1 – Not Ready
OUT	RTStatus	Uint8	The RealTime Status : • 0 – Ready • 1 – Not Ready (Also means that NA which RT is not supported on current config)
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

Table 87 – DCIM_LCService.GetRemoteServicesAPIStatus() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC060	Lifecycle Controller Remote Services is not ready.	NA
LC061	Lifecycle Controller Remote Services is ready.	NA

8.26 DCIM_LCService.ExportCertificate()

696 The ExportCertificate() method is used to export unique generated SSL Certificates from the Lifecycle
697 Controller to a file in remote share.

698 **Table 88 – DCIM_LCService.ExportCertificate() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

699 **Table 89 – DCIM_LCService.ExportCertificate() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Type	uint16	The type of the certificate 2 = Custom Signing Certificate
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

700 **Table 90 – DCIM_LCService.ExportCertificate() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 89
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 89
LC023	Cannot access network share	

MessageID (OUT parameter)	Message	MessageArguments[]
LC025	Insufficient space on network share	
LC029	Filepath is invalid	
LC030	Filepath is a read-only file system	
LC040	Resource Allocation Failure	
LC064	The value exceeds the maximum length of %d characters for %s	
LC065	Static IP information is not configured correctly	
LC066	An instance of Export Certificate is already running	
LC067	Export SSL Certificate success	
LC069	Certificate does not Exist on the System.	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	
JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA

701 ## 8.27 DCIM_LCService.ImportSystemConfigurationPreview()

702 This method is used to preview the results of the application of the XML template ahead of the actual
703 application with out any reboot.It also gives the information about the failure. The successful invocation of
704 this method shall return a job.

Table 91 – DCIM_LCService.ImportSystemConfigurationPreview() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

706 **Table 92 – DCIM_LCService.ImportSystemConfigurationPreview() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target import server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target import server.
IN	Password	String	Password for the target import server.
IN	Workgroup	String	WorkGroup name if it is needed.
IN	Target	String	To identify the component for ImportPreview. Default = "All" . Selective list of FQDD's is not supported in this release. Target by default takes only All FQDDs.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status.
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 in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

707 **Table 93 – DCIM_LCService.ImportSystemConfigurationPreview() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 92
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 92
LC023	Cannot access network share	
LC040	Resource Allocation Failure	
LC062	An instance of Export or Import System Configuration is already running.	
LC063	Cannot create new jobs until the existing running jobs are completed or deleted.	
LC064	Parameter exceeds maximum length <max parameter length> for	Parameter name, see Table 92

MessageID (OUT parameter)	Message	MessageArguments[]
	<parameter name>	
JCP017	Maximum job limit reached, cannot create new jobs	

8.28 DCIM_LCService. RunePSADiagnostics ()

708

709 The method is used to run the diagnostics based on the runmode switch and save the report in the Maser
710 partition (MAS002). The diagnostics can be run in either express or extended mode or as a long run
711 which encompasses all diagnostic tests.

Table 94 – DCIM_LCService. RunePSADiagnostics () Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 95 – DCIM_LCService. RunePSADiagnostics () Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	RunMode	Uint32	Type of diagnostic to run. 0 – is the express tests() 1- is extended set of tests() 2 – run (long)all tests NOTE: Default value is 0 (express tests)
IN,REQ	RebootJobType	Uint32	Creates a specific reboot job to power cycle the host system. This parameter only creates the RebootJob and does not schedule it. Shall contain the requested reboot type: 1 - PowerCycle 2 - Graceful Reboot without forced shutdown 3 - Graceful Reboot with forced shutdown. NOTE: This parameter only creates the RebootJob and does not schedule it.
IN	ScheduledStartTime	String	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. Start time for the job execution in format: yyyymmddhhmmss. The string "TIME_NOW" means immediate.
IN	UntilTime	String	Defines a time window for scheduling the job(s). However, this parameter is dependent on "ScheduledStartTime" and "ScheduledStartTime" parameters. Once scheduled, jobs will be executed within the time window. 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	a reference to the ConcreteJob is returned
OUT	MessageID	String	Error MessageID is returned if the method fails to execute

Qualifiers	Name	Type	Description/Values
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message

714   **Table 96 – DCIM_LCService. RunePSADiagnostics () Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS083	Export of Diagnostics results failed as no MASER session could be acquired.	Parameter name, see Table 95
SYS084	Export of Diagnostics results failed as the partition containing the results could not be mounted.	
SYS085	Successfully exported diagnostics results.	
SYS095	Unable to unmount a MASER partition.	

8.29 DCIM_LCService. ExportePSADiagnosticsResult ()

716   This method will export the result file of the last completed diagnostics into the respective remote
717   share path (cifs/nfs).The result file will have time stamps to show when the diagnostics was run.

718

719   **Table 97 – DCIM_LCService. ExportePSADiagnosticsResult() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

720   **Table 98 – DCIM_LCService. ExportePSADiagnosticsResult() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	String	IP address of network share
IN, REQ	ShareName	String	Network sharepoint address
IN, REQ	FileName	String	Diagnostic Result File name
IN, REQ	ShareType	Uint8	Type of network share (NFS=0 and CIFS=2)
IN	Username	String	The username to be used to access the network share for the export result
IN	Password	String	The password to be used to access the network share
OUT	Job	CIM_ConcreteJob REF	a reference to the ConcreteJob is returned
OUT	MessageID	String	Error MessageID is returned if the method fails to execute
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message
OUT	MessageID	String	Error MessageID is returned if the method fails to execute

721   **Table 99 – DCIM_LCService. ExportePSADiagnosticsResult() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS083	Export of Diagnostics results failed as no MASER session could be acquired.	Parameter name, see Table 98
SYS084	Export of Diagnostics results failed as the partition containing the results could not be mounted.	
SYS085	Successfully exported diagnostics results.	
SYS086	Unable to copy the diagnostics results file to the network share.	
SYS095	Unable to unmount a MASER partition.	

722   ## 8.30   DCIM_LCService. ExportTechSupportReport ()

723   This method is used to collects the TSR i.e hardware, OS and App data, then compressed the zip
724   file saves into the respective remote share path (cifs/nfs).

725   Note: Collecting and exporting of OS App data is not supporting in ES1.4 release.

726   **Table 100 – DCIM_LCService. ExportTechSupportReport() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

727   **Table 101 – DCIM_LCService. ExportTechSupportReport () Method: Parameters**

Qualifiers	Name	Type	Description/Values

IN	DataSelectorArrayIn	Uint16[]	DataSelectorArrayIn to select the data", "0" - For HW Data
			    "1" – For OSApp Data Without PII
			    "2" – For OSApp Data
			    "3" – For TTY Logs
			Note: Default value is "HW Data". And MUT data be part of every TSR report.

IN, REQ	IPAddress	String	IP address of network share
IN, REQ	ShareName	String	Network sharepoint address
IN, REQ	ShareType	Uint8	Type of network share (NFS=0 and CIFS=2)
IN	Username	String	The username to be used to access the network share for the export result
IN	Password	String	The password to be used to access the network share
OUT	Job	CIM_ConcreteJob REF	a reference to the ConcreteJob is returned
OUT	MessageID	String	Error MessageID is returned if the method fails to execute
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message
OUT	MessageID	String	Error MessageID is returned if the method fails to execute

728   **Table 102 – DCIM_LCService. ExportTechSupportReport () Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
SYS094	[3] Another instance of embedded health report job is already running	Parameter name, see Table 101

729 ## 8.31 DCIM_LCService. UpdateOSAppHealthData ()

730   This method is used to generate OS and App health data.

731   If the method is unable to collects the OS and App health data automatically then user needs to
732   do manual execution to update the OS and App health data. Manual execution will expose the
733   virtual USB drive or mount the virtual drive .

734

Table 103 – DCIM_LCService. UpdateOSAppHealthData() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

736

Table 104 – DCIM_LCService. UpdateOSAppHealthData () Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	UpdateType	uint16	Agent Lite OSApp plugIn: 0 Manual execution: 1 [4] *Note: Default value is "Agent Lite OSApp plugin"*
OUT	Job	CIM_ConcreteJob REF	a reference to the ConcreteJob is returned
OUT	MessageID	String	Error MessageID is returned if the method fails to execute
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message
OUT	MessageID	String	Error MessageID is returned if the method fails to execute

737

Table 105 – DCIM_LCService. UpdateOSAppHealthData () Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
SYS094	[1] Another instance of embedded health report job is already running	Parameter name, see Table 104

738

8.32 DCIM_LCService. SystemErase()

739 This method is to create granular, user selectable, categories to increase flexibility and improve
740 the repurposing aspect of the existing System Wipe feature.

741 This method will take the component name as input. Multiple options can also be provided. A job
742 ID will be returned to the user upon successful creation of job.

743 **Table 106 - DCIM_ LCService : SystemErase() Method: Return code values**

Value	Description
2	Failed
4096	**Job created to complete the task**

744

745

Table 107- DCIM_ LCService : SystemErase() Method: Parameters

Qualifiers	Parameter	Type	Description/value
IN,REQ	Component	String[]	Array to select the component to be erased.System Components: BIOS DIAG DrvPack LCData IDRAC
OUT	Job	CIM_ConcreteJob REF	a reference to the ConcreteJob is returned
OUT	MessageID	String	Error MessageID is returned if the method fails to execute
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message

746

747 Command:

748 winrm i SystemErase http://schemas.dmtf.org/wbem/wscim/1/cim-
749 schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationCl
750 assName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -u:root -
751 p:password -r:https://192.168.0.18/wsman -SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic -file:
752 SystemErase.xml

753 SystemErase_input.xml:

754 <p:SystemErase_INPUT xmlns:p="http://schemas.dmtf.org/wbem/wscim/1/cim-
755 schema/2/root/dcim/DCIM_LCService">
756 <p: Component > BIOS </p: Component >
757 <p: Component > DIAG</p: Component >
758 </p: SystemErase _INPUT>

759

760 **Table 108 – DCIM_LCService. SystemErase () Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC042	Invalid number of input parameters	NA

MessageID (OUT parameter)	Message	MessageArguments[]
LC017	Invalid value for parameter <parameter>	NA
LC016	Missing required parameter, <parameter>.	Include all the parameters required for the command. Check Lifecycle Controller Profile documentation and try again.
LC044	An instance of Lifecycle Controller system configuration wipe is already running	NA
LC063	[2] Cannot create new jobs until the existing running jobs are completed or deleted.	NA
LC040	Memory resource allocation failure.	Power cycle system and retry the operation. If the problem persists, reapply firmware packages for Lifecycle Controller and iDRAC.

761

8.33 DCIM_LCService. SetBackupSchedule()

763   The SetBackupSchedule() method is used to set the periodic backup for firmware and configurations for

764   the Lifecycle Controller. This method will return an error if the AutomaticBackup attribute is Disabled.

765   This method will return an error if CSIOR or LC are disabled.

766   **Table 109 – DCIM_LCService. SetBackupSchedule() Method: Return Code Values**

Value	Description
2	Error occurred
4096	**Job started**

767

Table 110 – DCIM_LCService. SetBackupSchedule() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of NFS/CIFS share. This parameter is required if ShareType = 0 or 2
IN	ShareName	String	Share name of the NFS/CIFS network share
IN	Passphrase	String	Passphrase for the backup server profile
IN	ShareType	Uint16	Type of network share (NFS=0, CIFS=2, vFlash = 4). Defaults to NFS=0
IN	Username	String	The username to be used to access the network share
IN	Password	String	The password to be used to access the network share
IN	ImageName	String	Name of the backup server profile image. This parameter is not required if ShareType is vFlash=4.
IN	Domain	String	Domain name for the network share
IN, REQ	Time	String	Hh:mm (hour and minute of day to run)
IN	DayOfMonth	String	*, 1-28, L Default *
IN	WeekOfMonth	String	*, 1-4, L
Only one of the characters above.
Default *
IN	DayOfWeek	String	*, Mon, Tue, Wed, Thu, Fri, Sat, Sun
Comma delimited
IN	Repeat	UINT16	1-366
IN	MaxNumberOfBackup Archives	UINT16	1-50
OUT	MessageID	String	Error MessageID is returned if the method fails to execute
OUT	Message	String	Error Message in English corresponding to the MessageID
OUT	MessageArguments	String[]	Any dynamic string substitutions for the Message

768

Table 111 – DCIM_LCService. SetBackupSchedule() Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
RED055	Set Automatic Backup Schedule failed	None
RED060	Automatic Backup Schedule already exists	None
RED058	Invalid value of parameter <param>	Invalid parameter

769 ## 8.34 DCIM_LCService. GetBackupSchedule()

770 The GetBackupSchedule() method is used to retrieve the periodic backup settings for firmware and
771 configurations for the Lifecycle Controller.

Table 112 – DCIM_LCService.GetBackupSchedule() Method: Return Code Values

Value	Description
2	Error occurred
4096	Job started

Table 113 – DCIM_LCService.GetBackupSchedule() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	IPAddress	String	IP address of the NFS or CIFS share such as 192.168.10.12. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
OUT	ShareName	String	Share name for the network share such as "imageshare". The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
OUT	ShareType	Unit16	Type of the share or storage. • 0 – NFS • 2 – CIFS • 4 – VFLASH If ShareType is blank or null, it shall be considered as NFS type. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
OUT	ImageName	String	The name of the backup file. The parameter shall be required, if the ShareType parameter has value 0 (NFS), 2 (CIFS), or not specified.
OUT	Username	String	User name for the remote share
OUT	Domain	String	Domain for the share
OUT	Time	String	hh:mm Represents hour and minute of day to run.
OUT	DayofMonth	String	*,1-28,L
OUT	WeekofMonth	String	*,1-4, L Only one of the above characters
OUT	DayofWeek	String	*,Mon,Tue,Wed,Thu,Fri,Sat,Sun Comma delimited.
OUT	Repeat	Unint16	1-366
OUT	MaxNumberOfBackup Archives	Unint16	1-50
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 in English corresponding to MessageID is returned if the method fails to execute

Qualifiers	Name	Type	Description/Values
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

774   **Table 114 – DCIM_LCService. GetBackupSchedule() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RED056	Get Automatic Backup Schedule failed	

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8.35 DCIM_LCService. ClearBackupSchedule()

777 The ClearBackupSchedule() method is used to clear all the periodic backup settings for firmware and
778 configurations for the Lifecycle Controller. This method also sets attribute AutomaticBackup to Disabled.

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780   **Table 115 – DCIM_LCService. ClearBackupSchedule() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started

781   **Table 116 – DCIM_LCService. ClearBackupSchedule() Method: Parameters**

Qualifiers	Name	Type	Description/Values
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 in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages

782   **Table 117 – DCIM_LCService. ClearBackupSchedule() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RED057	Clear Automatic Backup Schedule failed	

783

8.36 DCIM_LCService. MapMessageIdsToDetails()

785 This Method is used to map the Detailed Description and the Recommended Action by mapping the
786 messageIDs.

787

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Qualifiers	Name	Type	Description/Values
IN, REQ	EEMIMsgID[]	string	MessageID array of multiple Log Entries
IN	Language	UInt16	0 (Default English)*
OUT	DetailedDescription[]	String	Indexed array of Detailed Description string for the EEMI Message
OUT	RecommendedAction[]	String	Indexed array of Recommended Action string for the EEMI Message
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files.
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute.
OUT	MessageArguments[]	string	Substitution variables for dynamic error messages.

791

Table 119 – DCIM_LCService.MapMessageIdsToDetails() Method: Return Code Values

Value	Description
0	Request was successfully executed.
2	Error occurred

793

Table 120 – DCIM_LCService. MapMessageIdsToDetails() Method : Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
LC017	Invalid value for Parameter	EEMIMsgID

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8.37 DCIM_LCService. ExportErrorMsgRegistry()

797 This Method is used to export the EEMI Database XML file to the specified Network Share.

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Table 121 – DCIM_LCService.ExportErrorMsgRegistry() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server.
IN, REQ	ShareName	string	The directory path to the mount point.
IN, REQ	FileName	string	The target output file name.
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	User name for the target export server.
IN	Password	String	Password for the target export server.
IN	Workgroup	String	The applicable workgroup.
IN	Language	UInt16	0 (Default English)*
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status[1].
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files.
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute.

807 **Table 122 – DCIM_LCService.ExportErrorMsgRegistry() Method: Return Code Values**

Value	Description
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

808

809 **Table 123 – DCIM_LCService.ExportErrorMsgRegistry() Method : Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
LC016	Missing required parameter <parameter name>	Parameter name, see Table 121
LC017	Invalid value of parameter <parameter name>	Parameter name, see Table 121
LC078	The Export Message Registry operation was successfully completed.	
LC079	Unable to start the export operation because Lifecycle Controller is currently running an instance of Export Message Registry operation	
LC023	Cannot access network share	
LC030	Filepath is a read-only file system	
LC040	Resource Allocation Failure	
JCP017	Maximum job limit reached, cannot create new jobs	
JCP018	Backup Job is running, cannot create new jobs until the existing Backup job is completed or is cancelled	

JCP019	Restore Job is running, cannot create new jobs until the existing Restore job is completed or is cancelled	NA		

9 Use Cases

810

811 See *Lifecycle Controller (LC) Integration Best Practices Guide*

10 CIM Elements

812

813 No additional requirements have been defined.

11 Privilege and License Requirement

814

815 The following table describes the privilege and license requirements for the listed operations . For the
816 detailed explanation of the privileges and licenses, refer to the Dell WSMAN Licenses and Privileges
817 specification.

818 **Table 118 – Privilege and License Requirements**

Class and Method	Instance (GroupID.Attribute Name)	Operation	User Privilege Required	License Required
DCIM_LCString	SYSID	ENUMERATE, GET	Login	NONE
DCIM_LCEnumeration	Licensed	ENUMERATE, GET	Login	NONE
DCIM_LCString	CMCIP			NONE
DCIM_LCString	Provisioning Server	ENUMERATE, GET	Login	LM_AUTO_DISCOVERY
DCIM_LCEnumeration	Auto Discovery	ENUMERATE, GET	Login	LM_AUTO_DISCOVERY
DCIM_LCEnumeration	Discovery Factory Defaults	ENUMERATE, GET	Login	LM_AUTO_DISCOVERY
DCIM_LCEnumeration	Part Configuration Update	ENUMERATE, GET	Login	LM_PART_REPLACEMENT
DCIM_LCEnumeration	Part Firmware Update	ENUMERATE, GET	Login	LM_PART_REPLACEMENT
DCIM_LCEnumeration	Collect System Inventory on Restart	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_LCEnumeration	VirtualAddressManagement	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION

DCIM_LCString	VirtualAddressMan agementApplication	ENUMER ATE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_LCEnumeration	IPChangeNotifyPS	ENUMER ATE, GET	Login	LM_AUTO_DISCOVE RY
DCIM_LCEnumeration	Lifecycle Controller State	ENUMER ATE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_LCService		ENUMER ATE, GET	Login	NONE
DCIM_LCService. SetAttribute()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. SetAttributes()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. CreateConfigJob()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. ReInitiateDHS()		INVOKE	Login, System Control	LM_AUTO_DISCOVE RY
DCIM_LCService. ReInitiateAutoDiscovery()		INVOKE	Login, System Control	LM_AUTO_DISCOVE RY
DCIM_LCService. ClearProvisioningServer()		INVOKE	Login, System Control	LM_AUTO_DISCOVE RY
DCIM_LCService. DownloadServerPublicKey()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. DownloadClientCerts()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. DeleteAutoDiscoveryClientCert s()		INVOKE	Login, System Control	LM_AUTO_DISCOVE RY
DCIM_LCService. SetCertificateAndPrivateKey()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. SetPublicCertificate()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. DeleteAutoDiscoveryServerPu blicKey()		INVOKE	Login, System Control	LM_AUTO_DISCOVE RY
DCIM_LCService.LCWipe()		INVOKE	Login, System Control	NONE

DCIM_LCService.LCWipe().ExportFactoryConfiguration()		INVOKE	Login	LM_BASIC_REMOTE_INVENTORY_EXPORT
DCIM_LCService.ExportHWInventory()		INVOKE	Login	LM_BASIC_REMOTE_INVENTORY_EXPORT
DCIM_LCService.ExportLCLog()		INVOKE	Login	NONE
DCIM_LCService.ExportCompleteLCLog()		INVOKE	Login	NONE
DCIM_LCService..InsertCommentInLCLog()		INVOKE	Login, System Operations	LM_REMOTE_CONFIGURATION
DCIM_LCService.GetRSStatus()		INVOKE	Login	NONE
DCIM_LCService.GetRemoteServicesAPIStatus()		INVOKE	Login	NONE
DCIM_LCService.TestNetworkShare()		INVOKE	Login	LM_REMOTE_CONFIGURATION
DCIM_LCService.BackupImage()		INVOKE	Login, System Control	LM_BACKUP_RESTORE
DCIM_LCService.RestoreImage()		INVOKE	Login, System Control	LM _RESTORE
DCIM_LCService.ExportCertificate()		INVOKE	Login	LM_REMOTE_CONFIGURATION
DCIM_LCService.ExportSystemConfiguration()		INVOKE	Administrator	LM_REMOTE_CONFIGURATION
DCIM_LCService.ImportSystemConfiguration()		INVOKE	Administrator	LM_REMOTE_CONFIGURATION
DCIM_LCService.ImportSystemConfigurationPreview()		INVOKE	Administrator	LM_REMOTE_CONFIGURATION
DCIM_LCRegisteredProfile		ENUMERATE, GET	Login	None.
DCIM_LCElementConformsToProfile		ENUMERATE, GET	Login	None.
DCIM_LCService.RunePSADiagnostics ()		INVOKE	Login, System Control	LM_REMOTE_CONFIGURATION

DCIM_LCService. ExportePSADiagnosticsResult ()		INVOKE	Login, System Control	LM_REMOTE_CONFI GURATION
DCIM_LCService. ExportTechSupportReport ()		INVOKE	Login, System Control	None
DCIM_LCService. UpdateOSAppHealthData()		INVOKE	Login, System Control	None
DCIM_LCService.SystemEras e()		INVOKE	Login,Syte m Control	None
DCIM_LCService.SetBackupS chedule()		INVOKE	Login, System Control	LM_BACKUP_REST ORE
DCIM_LCService.GetBackupS chedule()		INVOKE	Login	None
DCIM_LCService.ClearBackup Schedule		INVOKE	Login, Server Control	LM_BACKUP_REST ORE
DCIM_LCService.ExportError MsgRegistry		INVOKE	Login	None
DCIM_LCService.MapMessag eIdsToDetails		INVOKE	Login	None

ANNEX A
(informative)

Change Log

Version	Date	Description
1.6.0		Added the IPAddress, Mask, Gateway, DNS, Domain optional parameters to the DCIM_LCService.ReInitiateDHS() method. Added the DCIM_LCService.ExportSystemConfiguration() method.
1.6.0	4/23/2012	Added optional MaxExecutionTime input parameter to DCIM_LCService.ExportSystemConfiguration() method. Added messages LC016 and LC017 to methods -DCIM_LCService.ExportLCLog(), DCIM_LCService.ExportHWInventory(), DCIM_LCService.ExportFactoryConfiguration() and DCIM_LCService.ExportSystemConfiguration(). Added LC062 error message to the SetAttribute(), SetAttributes(), and CreateTargetedConfigJob() methods.
1.6.0	4/25/2012	Add licensing and privilege requirement for ExportSystemConfiguration().
1.6.0	4/30/2012	Remove MaxExecutionTime input parameter from DCIM_LCService.ExportSystemConfiguration() method.
1.6.0	5/08/2012	Added DCIM_LCService.ReInitiateAutoDiscovery() method to support Auto-Discovery with static IP. Removed optional parameters (IPAddress, Mask, Gateway, DNS, Domain) from DCIM_LCService.ReInitiateDHS().
1.6.0	6/05/2012	Added DCIM_LCService.ExportCertificate method to support export of uniquely generated SSL certificates
1.6.1	6/18/2012	Added DCIM_LCService.ImportSystemConfiguration() method to support importing system configuration settings.
1.6.2	6/25/2012	Added DCIM_LCService.TestNetworkShare() method to test network connection.
1.6.2	7/10/2012	Added Target to DCIM_LCService.ExportSystemConfiguration() method. Added ScheduledStartTime and UntilTime to DCIM_LCService.ImportSystemConfiguration() method.
1.6.2	7/25/2012	Changed privilege requirement to Administrator for DCIM_LCService.ImportSystemConfiguration() method.
1.6.3	4/24/2013	Added details for ExportCompleteLCLog
1.6.4	5/8/2013	Added details for RunePSADiagnostics and ExportePSADiagnostics
1.6.5	5/9/2013	Added
1.6.	5/31/1013	Added details for ExportHealthReport

5		
1.6.5	10/30/2013	Added support for selective import/export feature for the following methods . DCIM_LCService.ImportSystemConfiguration(),DCIM_LCService.ImportSystemConfigurationPreview(),DCIM_LCService.ExportSystemConfiguration()
1.6.5	5/22/2014	Updated the privilege for ExportSystemConfiguration from login to administrator as per technologist's inputs
1.6.6	7/15/2014	System Erase
1.6.7	7/15/2014	Added parameter to ExportSystemConfiguration for PasswordHash story
1.7.0	7/20/2014	Tech Support Report
1.8.0	9/9/2014	Updated the correct version and added SetBackupSchedule, GetBackupSchedule and ClearBackupSchedule APIs
1.9.0	11/6/2014	Corrected the CreateConfigJob API (was missing Input parameters)and updated the SetBackupSchedule API (modified description for ImageName Parameter). Updated missing Attributes for 13G
1.9.1	11/19/2014	Changed the description for Target parameter in the ImportSystemConfigurationPreview method. It accepts only All but not selective fqdds.
1.9.2	02/23/2015	Added New NoReboot value for the ShutDownType in ImportSystemConfiguration Method .
1.9.3	03/03/2015	Added new methods to the DCIM.LCService . 1) MapMessageIdsToDetails 2)ExportErrorMsgRegistry
1.9.4	05/05/2015	Added New OUT Parameter RTStatus in the GetRemoteServicesAPIStatus Method. Added the EEMI msg IDs LC078 , LC079
1.9.5	07/22/2015	Added some more Description for RTStatus out parameter in GetRemoteServicesAPIStatus Method.

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