

# iDRAC Card Profile

**Document Number: DCIM1043**  
**Document Type: Specification**  
**Document Status: Published**  
**Document Language: E**  
**Date: 2012-03-08**

**Version: 1.2.0**



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207

## 209 1 Scope

210 The DCIM iDRAC Card Profile describes the properties and interfaces for executing system management  
211 tasks related to the management of basic properties of iDRAC card. The profile standardizes and  
212 aggregates the description for the remote access card properties into a iDRAC view and iDRAC attribute  
213 representation, and provides static methodology for the clients to query the iDRAC views and set the  
214 iDRAC attributes without substantial traversal of the model.

215

## 216 2 Normative References

217 Refer to the following documents for more information.

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

- 220 • DMTF DSP1033, *Profile Registration Profile 1.0.0*
- 221 • DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*
- 222 • DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*
- 223 • *Dell Lifecycle Controller Best Practices Guide 1.0*,  
224 [http://en.community.dell.com/techcenter/extras/m/white\\_papers/20066173.aspx](http://en.community.dell.com/techcenter/extras/m/white_papers/20066173.aspx)
- 225 • *Dell WSMAN Licenses and Privileges 1.0*
- 226 • *Intelligent Platform Management Interface Specification v2.0*,  
227 [http://download.intel.com/design/servers/ipmi/IPMIv2\\_0rev1\\_0.pdf](http://download.intel.com/design/servers/ipmi/IPMIv2_0rev1_0.pdf)
- 228 • Dell Tech Center MOF Library:
  - 229 ○ <http://www.delltechcenter.com/page/DCIM.Library.MOF>
- 230 • Related Managed Object Format (MOF) files:
  - 231 ○ DCIM\_iDRACCardView.mof
  - 232 ○ DCIM\_iDRACCardAttribute.mof
  - 233 ○ DCIM\_iDRACCardInteger.mof
  - 234 ○ DCIM\_iDRACCardService.mof
  - 235 ○ DCIM\_iDRACCardEnumeration.mof
  - 236 ○ DCIM\_iDRACCardString.mof
  - 237 ○ DCIM\_LCEnumeration.mof
  - 238 ○ DCIM\_LCRegisteredProfile.mof

239

## 3 Terms and Definitions

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

### 3.1

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

### 3.2

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

### 3.3

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

### 3.4

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

### 3.5

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

### 3.6

**need not** - Indicates a course of action permissible within the limits of the document.

### 3.7

**optional** - Indicates a course of action permissible within the limits of the document.

### 3.8

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

### 3.9

**shall** - Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

### 3.10

**shall not** – Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted.

### 3.11

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

### 3.12

**should not** – Indicates that a certain possibility or course of action is deprecated but not prohibited.



272 **3.13**  
273 **Interop Namespace: root/interop**  
274 Interop Namespace: root/interop is where instrumentation instantiates classes to advertise its capabilities  
275 for client discovery.

276 **3.14**  
277 **Implementation Namespace: root/dcim**  
278 Implementation Namespace: root/dcim is where instrumentation instantiates classes relevant to executing  
279 core management tasks.

280 **3.15**  
281 **ENUMERATE** – Refers to WS-MAN **ENUMERATE** operation as described in Section 8.2 of  
282 DSP0226\_V1.1 and Section 9.1 of DSP0227\_V1.0

283 **3.16**  
284 **GET** – Refers to WS-MAN **GET** operation as defined in Section 7.3 of DSP00226\_V1.1 and Section  
285 7.1 of DSP0227\_V1.0

## 286 **4 Symbols and Abbreviated Terms**

287 **4.1**  
288 **CIM** - Common Information Model

289 **4.2**  
290 **iDRAC** - Integrated Dell Remote Access Controller – management controller for blades and monolithic  
291 servers

292 **4.3**  
293 **CMC** - Chassis Manager Controller – management controller for the modular chassis

294 **4.4**  
295 **WBEM** - Web-Based Enterprise Management

296 **4.5**  
297 **SSO** - Single Sign On

298 **4.6**  
299 **CSR** - Certificate Signing Request

300  
301  
302

## 5 Synopsis

**Profile Name:** iDRAC Card

**Version:** 1.2.0

**Organization:** Dell

**CIM Schema Version:** 2.26 Experimental

**Dell Schema Version:** 1.0.0

**Interop Namespace:** root/interop

**Implementation Namespace:** root/dcim

**Central Class:** DCIM\_iDRACCardView

**Scoping Class:** DCIM\_ComputerSystem

The Dell iDRAC Card Profile is a component profile that contains the Dell specific implementation requirements for remote access card view.

DCIM\_iDRACCardView shall be the Central Class.

Table 1 identifies profiles that are related to this profile.

**Table 1 – Related Profiles**

Profile Name	Organization	Version	Relationship
Profile Registration Profile	DCIM	1.0	Mandatory
Dell Job Control	DCIM	1.0	Mandatory

## 6 Description

The Dell iDRAC Card Profile describes the platform's iDRAC remote access card. Each remote access card's information is represented by an instance of DCIM\_iDRACCardView class.

Figure 1 details typical Dell iDRAC Card Profile implementation for a platform with iDRAC remote access card. For the client to discover the instrumentation's support of this profile, iDracProfile is instantiated in the Interop Namespace:root/dcim.

The DCIM\_LCRegisteredProfile instance describes the information about the implemented profile-most importantly, the name and version of the profile and the organization name that produced the profile.

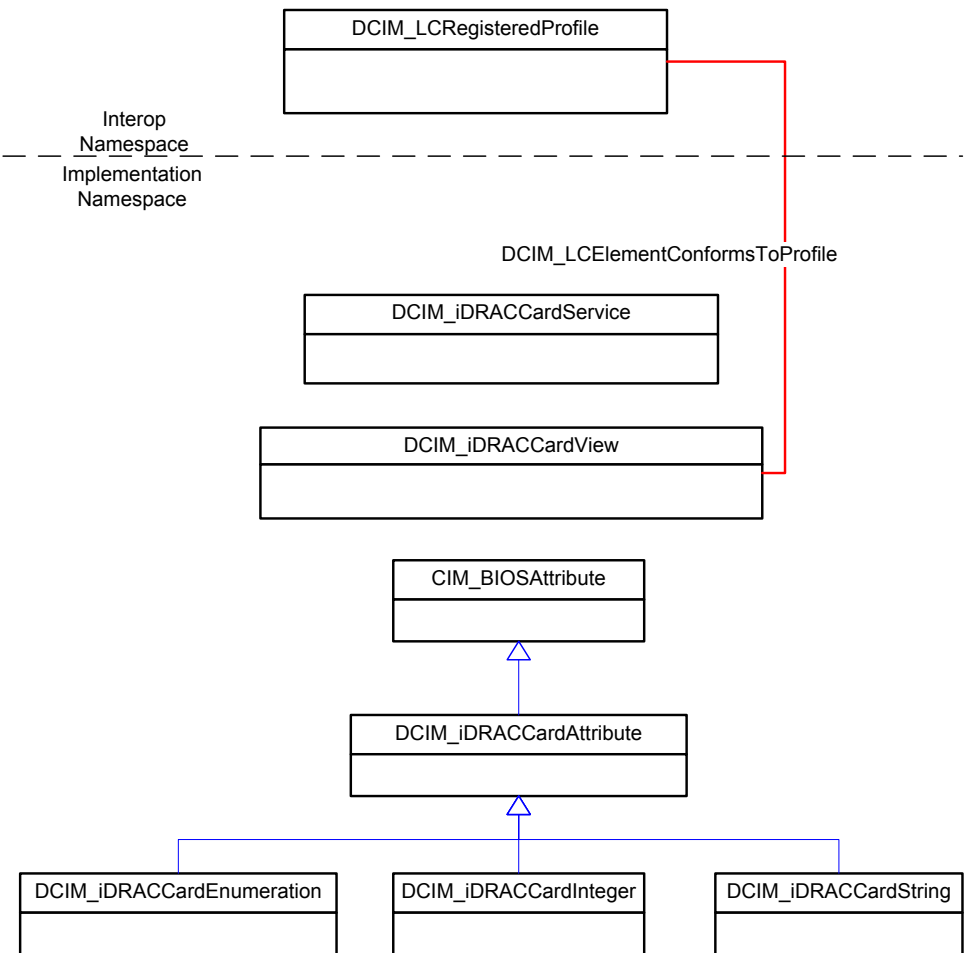


Figure 1 – iDRAC Card Profile Implementation

## 7 Implementation Description

This section describes the requirements and guidelines for implementing Dell iDRAC Card Profile.

**Table 2 – Class Requirements: iDRAC Card Profile**

Element Name	Requirement	Description
<b>Classes</b>		
DCIM_iDRACCardView	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . [1] See section 7.1.
DCIM_iDRACCardEnumeration	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . [2] See section 7.2.
DCIM_iDRACCardString	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . [3] See section <b>Error! Reference source not found..</b>
DCIM_iDRACCardInteger	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . [4] See section <b>Error! Reference source not found..</b>
DCIM_iDRACCardService	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . [5] See section 7.6.
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> .
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in the <i>Interop Namespace: root/interop</i> .
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the <i>Interop Namespace: root/interop</i> . [6] See section 7.7.
<b>Indications</b>		
None defined in this profile		

### 7.1 DCIM\_iDRACCardView - iDrac View

This section describes the implementation for the DCIM\_iDRACCardView class.

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

The DCIM\_LCElementConformsToProfile association(s) shall reference the DCIM\_iDRACCardView instance(s).

#### 7.1.1 Resource URIs for WinRM®

The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardView?\_\_cimnamespace=root/dcim”

The key property shall be the InstanceID.

The instance Resource URI for DCIM\_iDRACCardView instance shall be:  
 “http://schemas.dell.com/wbem/wscim/1/cim-  
 schema/2/DCIM\_iDRACCardView?\_\_cimnamespace=root/dcim+InstanceID=<InstanceID>”

## 7.1.2 Operations

The following table lists the implemented operations on DCIM\_iDRACCardView.

**Table 3 – DCIM\_iDRACCardView - Operations**

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

## 7.1.3 Class Properties

The following table details the implemented properties for DCIM\_iDRACCardView instance representing a remote access card in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

**Table 4 – DCIM\_iDRACCardView - Properties**

Property Name	Requirements	Type	Requirement and description
InstanceID	Mandatory	string	The property value shall be unique key value.
FQDD	Mandatory	string	A string containing the Fully Qualified Device Description, a user-friendly name for the object.
IPMIVersion	Mandatory	string	A string containing the IPMI Version.
GUID	Mandatory	string	A string containing the GUID for iDRAC.
LANEnabledState	Mandatory	uint16	LAN enabled state.
SOLEnabledState	Mandatory	uint16	SOL enabled state
PermanentMACAddress	Mandatory	string	A string containing the permanent MAC address.
FirmwareVersion	Mandatory	string	A string containing the iDRAC firmware Version.
Model	Mandatory	string	A string containing the iDRAC model.
ProductDescription	Mandatory	string	A string containing the iDRAC’s purpose and short description.
URLString	Mandatory	string	A string containing the URL for the iDRAC Web GUI.
LastSystemInventoryTime	Mandatory	string	This property provides the last time “System \Inventory Collection On Reboot(CSIOR)” was performed. The value is represented as yyyyymmddHHMMSS.
LastUpdateTime	Mandatory	string	This property provides the last time the data was updated. The value is represented as yyyyymmddHHMMSS

## 7.2 DCIM\_iDRACCardEnumeration

This section describes the implementation for the DCIM\_iDRACCardEnumeration class.

Each DCIM\_iDRACCardEnumeration instance is logically associated to a DCIM\_iDRACCardView instance, where the DCIM\_iDRACCardEnumeration.FQDD property is equal to the FQDD property on the DCIM\_iDRACCardView instance.

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

### 7.2.1 Resource URIs for WinRM®

The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardEnumeration?\_\_cimnamespace=root/dcim”

The key property shall be the InstanceID.

The instance Resource URI for DCIM\_iDRACCardEnumeration instance shall be:  
 “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardEnumeration?\_\_cimnamespace=root/dcim+InstanceID=<FQDD>#<GroupID>#<AttributeName>”

### 7.2.2 Operations

The following table lists the implemented operations on DCIM\_iDRACCardEnumeration.

**Table 5 – DCIM\_iDRACCardEnumeration - Operations**

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

### 7.2.3 Class Properties

The following table details the implemented properties for DCIM\_iDRACCardEnumeration instance representing a iDRAC Card enumeration attribute. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

**Table 6 – Class: DCIM\_iDRACCardEnumeration**

Properties	Type	Notes	Additional Requirements
InstanceID	String	Mandatory	The property value shall be formed as follows: “<FQDD property value>#<GroupID>#<AttributeName property value>”.
AttributeName	String	Mandatory	The property value shall be from the “AttributeName” column in Tables in section 7.5.
AttributeDisplayName	String	Mandatory	The property value shall be from the “AttributeDisplayName” column in Tables in section 7.5.
GroupID	String	Mandatory	See section 7.5.
GroupDisplayName	String	Mandatory	See section 7.5.
CurrentValue[]	String	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Tables in section 7.5.
PendingValue[]	String	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Tables in section 7.5.
DefaultValue[]	String	Mandatory	The property value shall represent the default value of the attribute.
IsReadOnly	Boolean	Mandatory	The property value shall be from the “IsReadOnly” column in Tables in section 7.5.
FQDD	String	Mandatory	FQDD of the iDRAC that the attribute belongs to.
DisplayOrder	uint16	Mandatory	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all iDRAC attributes.
Dependency	String	Optional	The property shall be formatted as XML describing the attributes dependence on other attribute(s).
PossibleValues[]	String	Mandatory	The property value shall be equal to the array of the values in “PossibleValues” column at the corresponding row in in Tables in section 7.5.

## 7.3 DCIM\_iDRACCardString

This section describes the implementation for the DCIM\_iDRACCardString class.

Each DCIM\_iDRACCardString instance is logically associated to a DCIM\_iDRACCardView instance, where the DCIM\_iDRACCardString.FQDD property is equal to the FQDD property on the DCIM\_iDRACCardView instance.

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

### 7.3.1 Resource URIs for WinRM®

The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardString?\_\_cimnamespace=root/dcim”

The key property shall be the InstanceID.

The instance Resource URI for DCIM\_iDRACCardString instance shall be:

“http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardString?\_\_cimnamespace=root/dcim+InstanceID=<FQDD>#<GroupID>#<Attribute Name>”

### 7.3.2 Operations

The following table lists the implemented operations on DCIM\_iDRACCardString.

**Table 7 – DCIM\_iDRACCardString - Operations**

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

### 7.3.3 Class Properties

The following table details the implemented properties for DCIM\_iDRACCardString instance representing a iDRAC string attribute. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.



**Table 8 – Class: DCIM\_iDRACCardString**

Properties	Type	Notes	Additional Requirements
InstanceID	String	Mandatory	The property value shall be formed as follows: “<FQDD property value>#<GroupID>#<AttributeName property value>”.
AttributeName	String	Mandatory	The property value shall be from the “AttributeName” column in Tables in section 7.5.
AttributeDisplayName	String	Mandatory	The property value shall be from the “AttributeDisplayName” column in in Tables in section 7.5.
GroupID	String	Mandatory	See section 7.5.
GroupDisplayName	String	Mandatory	See section 7.5.
CurrentValue[]	String	Mandatory	The property value shall represent the current value of the attribute.
PendingValue[]	String	Mandatory	The property value shall represent the current 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 from the “IsReadOnly” column in Tables in section 7.5.
FQDD	String	Mandatory	FQDD of the iDRAC that the attribute belongs to.
DisplayOrder	uint16	Mandatory	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all iDRAC attributes.
Dependency	String	Optional	The property shall be formatted as XML describing the attributes dependence on other attribute(s).
MinLength	uint64	Mandatory	The property value shall be the value in the “MinLength” column at the corresponding row in in Tables in section 7.5. 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 in Tables in section 7.5 The omission or NULL shall denote that no known constraint exists on the CurrentValue and PendingValue properties.

## 403 **7.4 DCIM\_iDRACCardInteger**

404 This section describes the implementation for the DCIM\_iDRACCardInteger class.

405 Each DCIM\_iDRACCardInteger instance is logically associated to a DCIM\_iDRACCardView instance,  
 406 where the DCIM\_iDRACCardInteger.FQDD property is equal to the FQDD property on the  
 407 DCIM\_iDRACCardView instance.

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

### 409 **7.4.1 Resource URIs for WinRM®**

410 The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-  
 411 schema/2/DCIM\_iDRACCardInteger?\_\_cimnamespace=root/dcim”

412 The key property shall be the InstanceID.

413 The instance Resource URI for DCIM\_iDRACCardInteger instance shall be:

414 "http://schemas.dell.com/wbem/wscim/1/cim-

415 schema/2/DCIM\_iDRACCardInteger?\_\_cimnamespace=root/dcim+InstanceID=<FQDD>#<GroupID>#<At  
416 tributeName>"

## 417 7.4.2 Operations

418 The following table lists the implemented operations on DCIM\_iDRACCardInteger.

419 **Table 9 – DCIM\_iDRACCardInteger - Operations**

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

420

## 421 7.4.3 Class Properties

422 The following table details the implemented properties for DCIM\_iDRACCardInteger instance

423 representing a iDRAC integer attribute. The "Requirements" column shall denote whether the property is

424 implemented (for requirement definitions, see section 3). The "Additional Requirements" column shall

425 denote either possible values for the property, or requirements on the value formulation.

**Table 10 – Class: DCIM\_iDRACCardInteger**

Properties	Type	Requirement	Additional Requirements
InstanceID	String	Mandatory	The property value shall be formed as follows: “<FQDD property value>#<GroupID>#<AttributeName property value>”.
AttributeName	String	Mandatory	The property value shall be from the “AttributeName” column in Tables in section 7.5.
AttributeDisplayName	String	Mandatory	The property value shall be from the “AttributeDisplayName” column in Tables in section 7.5.
GroupID	String	Mandatory	See section 7.5.
GroupDisplayName	String	Mandatory	See section 7.5.
CurrentValue[]	String	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Tables in section 7.5.
PendingValue[]	String	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Tables in section 7.5.
DefaultValue[]	String	Mandatory	The property value shall represent the default value of the attribute.
IsReadOnly	Boolean	Mandatory	The property value shall be from the “IsReadOnly” column in Tables in section 7.5.
FQDD	String	Mandatory	FQDD of the iDRAC that the attribute belongs to.
DisplayOrder	uint16	Mandatory	The property shall represent the sequence number denoting the preferred placement of the attribute in the list of all iDRAC attributes.
Dependency	String	Optional	The property shall be formatted as XML describing the attributes dependence on other attribute(s).
LowerBound	uint64	Mandatory	The property value shall be the value in the “LowerBound” column at the corresponding row in Tables in section 7.5. The omission or NULL shall denote that no known constraint exists on the CurrentValue and PendingValue properties.
UpperBound	uint64	Mandatory	The property value shall be the value in the “UpperBound” column at the corresponding row in Tables in section 7.5. The omission or NULL shall denote that no known constraint exists on the CurrentValue and PendingValue properties.

## 428 **7.5 iDRAC Attributes**

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

### 430 **7.5.1 Active Directory**

431 This section describes the attributes for iDRAC’s Active Directory Configuration.

432 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 433 DCIM\_iDRACCardInteger shall be "ActiveDirectory.1".

434 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 435 DCIM\_iDRACCardInteger shall be "Active Directory".

436 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
 437 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
 438 Description column contains the description for each of the attribute. Each row contains the values for the  
 439 properties listed in the column headings. The PossibleValues property is an array property represented in  
 440 the table as comma delimited list.

441 **Table 11 – DCIM\_iDRACCardEnumeration Active Directory**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Active Directory Enable	FALSE	771	"Disabled", "Enabled"
Schema	Active Directory Schema Type	FALSE	775	"Extended Schema", "Standard Schema"
CertValidationEnable	Certificate Validation Enable	FALSE	782	"Disabled", "Enabled"
SSOEnable	SSO Enable	FALSE	1063	"Disabled", "Enabled"
DCLookupEnable	Domain Controller Lookup Enable	FALSE	785	"Disabled", "Enabled"
DCLookupByUserDomain	Domain Controller Lookup By User Domain	FALSE	788	"Disabled", "Enabled"
GCLookupEnable	Global Catalog Server Lookup Enable	FALSE	784	"Disabled", "Enabled"

442 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
 443 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
 444 column contains constraints on string value formulation. Each row contains the values for the properties  
 445 listed in the column headings.

446 **Table 12 – DCIM\_iDRACCardString Active Directory**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
RacName	Active Directory RAC Name	FALSE	772	0	254
RacDomain	Active Directory RAC Domain	FALSE	773	0	254
DomainController1	Domain Controller 1	FALSE	776	0	254
DomainController2	Domain Controller 2	FALSE	777	0	254
DomainController3	Domain Controller 3	FALSE	778	0	254
GlobalCatalog1	Global Catalog 1	FALSE	779	0	254
GlobalCatalog2	Global Catalog 2	FALSE	780	0	254
GlobalCatalog3	Global Catalog 3	FALSE	781	0	254

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
DCLookupDomainName	Active Directory Lookup Domain Name	FALSE	787	0	254
GCRootDomain	Active Directory Root Domain	FALSE	786	0	254

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 13 – DCIM\_iDRACCardInteger Active Directory**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
AuthTimeout	Active Directory Authentication Timeout	FALSE	774	15	300

## 7.5.2 Active Directory Group Configuration

This section describes the attributes for iDRAC's Active Directory Group Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "ADGroup.<#>" where "<#>" is a number 1 through 5.

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "AD Group Configuration".

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 14 – DCIM\_iDRACCardString AD Group Configuration**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
Name	AD Role Group Name	FALSE	801, 811, 821, 831, 841	0	254
Domain	AD Group Domain	FALSE	802, 812, 822, 832, 842	0	254

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

465

**Table 15 – DCIM\_iDRACCardInteger AD Group Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Privilege	AD Group Privilege	FALSE	803, 813, 823, 833, 843,	0	511

### 466 7.5.3 Email Alert

467 This section describes the attributes for iDRAC's Email Alert Configuration.

468 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
469 DCIM\_iDRACCardInteger shall be "EmailAlert.<#>" where <#> is a number 1 through 4.

470 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
471 DCIM\_iDRACCardInteger shall be "RAC Email Alert".

472 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
473 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
474 Description column contains the description for each of the attribute. Each row contains the values for the  
475 properties listed in the column headings. The PossibleValues property is an array property represented in  
476 the table as comma delimited list.

477 **Table 16 – DCIM\_iDRACCardEnumeration RAC Email Alert**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable Email Alerts	FALSE	471, 491, 511, 521	"Disabled", "Enabled"

478 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
479 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
480 column contains constraints on string value formulation. Each row contains the values for the properties  
481 listed in the column headings.

482 **Table 17 – DCIM\_iDRACCardString RAC Email Alert**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
Address	Email Alert Address	FALSE	472, 492, 512, 522	0	64
CustomMsg	Email Alert Custom Message	FALSE	473, 493, 513, 523	0	32

#### 7.5.4 iDRAC Information

This section describes the attributes for iDRAC's Active Directory Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Info.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RAC Information".

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 18 – DCIM\_iDRACCardString RAC Information**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
Product	iDRAC Product Information	TRUE	1	0	63
Description	iDRAC Description Information	TRUE	2	0	255
Version	iDRAC Version Information	TRUE	3	0	63
Build	iDRAC Build Information	TRUE	4	0	16
Name	iDRAC Name	TRUE	5	0	15

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 19 – DCIM\_iDRACCardEnumeration RAC Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Type	iDRAC Type	TRUE	6	"12G Monolithic", "12G Modular"

#### 7.5.5 IP Blocking

This section describes the attributes for iDRAC's IP Blocking Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IPBlocking.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IP Blocking".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

511

**Table 20 – DCIM\_iDRACCardEnumeration IP Blocking**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
RangeEnable	Tune IP Range Enable	FALSE	721	“Disabled”, “Enabled”
BlockEnable	Tune IP Range Enable	FALSE	724	“Disabled”, “Enabled”

512 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
 513 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
 514 column contains constraints on string value formulation. Each row contains the values for the properties  
 515 listed in the column headings.

516

**Table 21 – DCIM\_iDRACCardString IP Blocking**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
RangeAddr	Tune IP Range Address	FALSE	722	0	16
RangeMask	Tune IP Range Mask	FALSE	723	0	16

517 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
 518 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
 519 values for the properties listed in the column headings.

520

**Table 22 – DCIM\_iDRACCardInteger IP Blocking**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
FailCount	Tune IP Block Fail Count	FALSE	731	2	16
FailWindow <sup>1</sup>	Tune IP Block Fail Window	FALSE	732	10	65535
PenaltyTime	Tune IP Block Penalty Time	FALSE	733	2	65535

521 NOTE: 1 – Defines the time span (in seconds) that the failed attempts are counted. When failure attempts age  
 522 beyond this limit, they are dropped from the count.

## 523 7.5.6 IPMI LAN

524 This section describes the attributes for iDRAC’s IPMI LAN Configuration.

525 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 526 DCIM\_iDRACCardInteger shall be “IPMILan.1”.

527 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 528 DCIM\_iDRACCardInteger shall be “IPMI LAN Information”.

529 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
 530 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
 531 Description column contains the description for each of the attribute. Each row contains the values for the  
 532 properties listed in the column headings. The PossibleValues property is an array property represented in  
 533 the table as comma delimited list.



534

**Table 23 – DCIM\_iDRACCardEnumeration IPMI Lan**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable or Disable IPMI over LAN	FALSE	201	"Disabled", "Enabled"
PrivLimit	Privilege Limit	FALSE	202	"Administrator", "User", "Operator"
AlertEnable	Enable or Disable Alerts over LAN	FALSE	205	"Disabled", "Enabled"

535 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
 536 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
 537 column contains constraints on string value formulation. Each row contains the values for the properties  
 538 listed in the column headings.

539

**Table 24 – DCIM\_iDRACCardString IPMI Lan**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
EncryptionKey	Encryption Key	FALSE	203	0	20
CommunityName	Community Name	FALSE	204	0	18

## 540 7.5.7 IPMI Serial

541 This section describes the attributes for iDRAC's IPMI Serial Configuration.

542 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 543 DCIM\_iDRACCardInteger shall be "IPMISerial.1".

544 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 545 DCIM\_iDRACCardInteger shall be "RAC IPMI Serial".

546 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
 547 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
 548 Description column contains the description for each of the attribute. Each row contains the values for the  
 549 properties listed in the column headings. The PossibleValues property is an array property represented in  
 550 the table as comma delimited list.

551

**Table 25 – DCIM\_iDRACCardEnumeration IPMI Serial**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
ConnectionMode	IPMI Serial Connection Mode	FALSE	621	"Basic", "Terminal"
BaudRate	IPMI Serial Baud Rate	FALSE	622	9600, 19200, 57600, 115200
FlowControl	IPMI Serial Flow Control	FALSE	623	"None", "CTS/RTS"
ChanPrivLimit	IPMI Serial Channel Privilege Limit	FALSE	624	"Administrator", "User", "Operator"
LineEdit	IPMI Serial Line Edit	FALSE	625	"Disabled", "Enabled"
DeleteControl <sup>1</sup>	IPMI Serial Delete Control	FALSE	626	"Disabled", "Enabled"

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
EchoControl <sup>2</sup>	IPMI Serial Echo Control	FALSE	627	"Disabled", "Enabled"
HandshakeControl	IPMI Serial Handshake Control	FALSE	628	"Disabled", "Enabled"
NewLineSeq	IPMI Serial New Line Sequence	FALSE	629	None, CR-LF, NULL, CR, LF-CR, LF
InputNewLineSeq	IPMI Serial Input New Line Sequence	FALSE	630	Enter, Null

NOTE: 1 – Enables or disables delete control on the IPMI serial interface. See *Intelligent Platform Management Interface Specification* for more details.

NOTE: 2 – Enables or disables echo control on the IPMI serial interface. See *Intelligent Platform Management Interface Specification* for more details.

### 7.5.8 IPMI Serial-over-LAN

This section describes the attributes for iDRAC's IPMI SOL Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IPMISOL.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IPMI SOL".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 26 – DCIM\_iDRACCardEnumeration IPMI Serial-over-LAN**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	IPMI SOL Enable	FALSE	641	"Disabled", "Enabled"
BaudRate	IPMI SOL Baud Rate	FALSE	642	9600, 19200, 57600, 115200
MinPrivilege	IPMI SOL Min Privilege	FALSE	633	"Administrator", "User", "Operator"

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 27 – DCIM\_iDRACCardInteger IPMI Serial-over-LAN**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
---------------	----------------------	------------	---------------	------------	------------

AccumulateInterval <sup>1</sup>	IPMI SOL Accumulate Interval	FALSE	644	1	255
SendThreshold	IPMI SOL Send Threshold	FALSE	645	1	255

NOTE: 1 – The typical amount of time in 5 ms increments that the BMC will wait before transmitting a partial SOL character data packet. See *Intelligent Platform Management Interface Specification* for more details.

## 7.5.9 IPv4 Information

This section describes the attributes for iDRAC's Active Directory Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IPv4.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "IPv4 Information".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 28 – DCIM\_iDRACCardEnumeration IPv4 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	IPv4 Enable	FALSE	101	"Disabled", "Enabled"
DHCPEnable	IPv4 DHCP Enable	FALSE	102	"Disabled", "Enabled"
DNSFromDHCP	DNS Servers From DHCP	FALSE	106	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 29 – DCIM\_iDRACCardString IPv4 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Address	IPv4 Address	FALSE	103	0	16
Netmask	Net Mask	FALSE	104	0	16
Gateway	Gateway	FALSE	105	0	16
DNS1	DNS Server 1	FALSE	107	0	16
DNS2	DNS Server 2	FALSE	108	0	16

## 7.5.10 IPv6 Information

This section describes the attributes for iDRAC's IPv6 Information Configuration.

593 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
594 DCIM\_iDRACCardInteger shall be "IPv6.1".

595 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
596 DCIM\_iDRACCardInteger shall be "IPv6 Information".

597 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
598 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
599 Description column contains the description for each of the attribute. Each row contains the values for the  
600 properties listed in the column headings. The PossibleValues property is an array property represented in  
601 the table as comma delimited list.

602

603 **Table 30 – DCIM\_iDRACCardEnumeration IPv6 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	IPv6 Enable	FALSE	151	"Disabled", "Enabled"
AutoConfig <sup>1</sup>	IPv6 Auto Config	FALSE	152	"Disabled", "Enabled"
DNSFromDHCP6	DNS Server From DHCP6	FALSE	153	"Disabled", "Enabled"

604 NOTE: 1 – Enabling or Disabling stateless IPv6 address autoconfiguration.

605 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
606 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
607 column contains constraints on string value formulation. Each row contains the values for the properties  
608 listed in the column headings.

609

610

611

612 **Table 31 – DCIM\_iDRACCardString IPv6 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
---------------	----------------------	------------	---------------	-----------	-----------

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Gateway	IPv6 Gateway	FALSE	155	0	63
LinkLocalAddress	IPv6 Link Local Address	FALSE	156	0	63
DNS1	IPv6 DNS Server1	FALSE	158	0	63
DNS2	IPv6 DNS Server2	FALSE	159	0	63
Address1	IPv6 Address 1	TRUE	154	0	63
Address2	IPv6 Address 2	TRUE	161	0	63
Address3	IPv6 Address 3	TRUE	162	0	63
Address4	IPv6 Address 4	TRUE	163	0	63
Address5	IPv6 Address 5	TRUE	164	0	63
Address6	IPv6 Address 6	TRUE	165	0	63
Address7	IPv6 Address 7	TRUE	166	0	63
Address8	IPv6 Address 8	TRUE	167	0	63
Address9	IPv6 Address 9	TRUE	168	0	63
Address10	IPv6 Address 10	TRUE	169	0	63
Address11	IPv6 Address 11	TRUE	170	0	63
Address12	IPv6 Address 12	TRUE	171	0	63
Address13	IPv6 Address 13	TRUE	172	0	63
Address14	IPv6 Address 14	TRUE	173	0	63
Address15	IPv6 Address 15	TRUE	174	0	63

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 32 – DCIM\_iDRACCardInteger IPv6 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
---------------	----------------------	------------	---------------	------------	------------

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
PrefixLength	IPV6 Link Local Prefix Length	FALSE	157	1	128
IPV6NumOfExtAddress	Total Number of Extended IP	FALSE	160	0	255

### 7.5.11 LDAP

This section describes the attributes for iDRAC's LDAP Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "LDAP.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "LDAP".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 33 – DCIM\_iDRACCardEnumeration LDAP**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	LDAP Enable	FALSE	1081	"Disabled", "Enabled"
GroupAttributesDN	LDAP Group Attribute Is Domain Name	FALSE	1087	"Disabled", "Enabled"
CertValidationEnable	Enable LDAP Certificate Validation	FALSE	1091	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 34 – DCIM\_iDRACCardString LDAP**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
---------------	----------------------	------------	---------------	-----------	-----------

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Server	LDAP Server	FALSE	1082	0	1024
BaseDN <sup>1</sup>	LDAP Base Domain Name	FALSE	1084	0	254
UserAttribute	LDAP User Attribute	FALSE	1085	0	254
GroupAttribute	LDAP Group Attribute	FALSE	1086	0	254
BindDN <sup>2</sup>	LDAP Bind Distinguished Name	FALSE	1088	0	254
BindPassword	LDAP Bind Password	FALSE* (this attribute is for setting only)	1089	0	255
SearchFilter	LDAP Search Filter	FALSE	1090	0	1024

NOTE: 1 - Domain Name of the branch of the directory where all searches should start from.

NOTE: 2 - The distinguished name (DN) of a user used to bind to the server when searching for the login user's DN. If not provided an anonymous bind will be used.

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 35 – DCIM\_iDRACCardInteger LDAP**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Port	LDAP Port	FALSE	1083	1	65535

## 7.5.12 LDAP Group

This section describes the attributes for iDRAC's LDAP Group Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "LDAPRoleGroup.<#>" where <#> is a number 1 through 5.

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "LDAP Group".

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 36 – DCIM\_iDRACCardString LDAP Group**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
DN	LDAP Role Group Domain Name	FALSE	1101, 1111, 1121, 1131, 1141	0	1024

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 37 – DCIM\_iDRACCardInteger LDAP Group**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Privilege <sup>1</sup>	LDAP Group Privilege	FALSE	1102, 1112, 1122, 1132, 1142	0	511

NOTE: 1 – See ANNEX A for information on mapping into iDRAC privileges.

### 7.5.13 Local Security

This section describes the attributes for iDRAC's Active Directory Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "LocalSecurity.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Local Security".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 38 – DCIM\_iDRACCardEnumeration Local Security**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
PrebootConfig	Preboot Config	FALSE	741	"Disabled", "Enabled"
LocalConfig	Local Config	FALSE	742	"Disabled", "Enabled"

### 7.5.14 NIC Information

This section describes the attributes for iDRAC's NIC Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "NIC.1".



684 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
685 DCIM\_iDRACCardInteger shall be "NIC Information".

686 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
687 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
688 Description column contains the description for each of the attribute. Each row contains the values for the  
689 properties listed in the column headings. The PossibleValues property is an array property represented in  
690 the table as comma delimited list.

691

692

693 **Table 39 – DCIM\_iDRACCardEnumeration NIC Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	NIC Enable	FALSE	51	"Disabled", "Enabled"
Selection	NIC Selection	FALSE	53	"Dedicated", "LOM1", "LOM2", "LOM3", "LOM4"
Failover	NIC Failover	FALSE	54	"None", "LOM1", "LOM2", "LOM3", "LOM4", "All"
Speed	NIC Speed	FALSE	56	"10", "100", "1000"
Autoneg	NIC Auto Negotiation	FALSE	55	"Disabled", "Enabled"
Duplex	NIC Duplex	FALSE	57	"Half", "Full"
DNSRegister	DNS Register RAC	FALSE	10	"Disabled", "Enabled"
DNSDomainFromDHCP	DNS Domain Name from DHCP	FALSE	180	"Disabled", "Enabled"
VLANenable	Enable VLAN	FALSE	63	"Disabled", "Enabled"

694 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
695 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
696 column contains constraints on string value formulation. Each row contains the values for the properties  
697 listed in the column headings.

698 **Table 40 – DCIM\_iDRACCardString NIC Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
MACAddress	MAC Address	TRUE	52	0	17
DNSRacName	DNS RAC Name	FALSE	59	0	63
DNSDomainName	DNS Domain Name	FALSE	181	0	254

699 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
700 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
701 values for the properties listed in the column headings.

**Table 41 – DCIM\_iDRACCardInteger NIC Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
MTU	NIC MTU	FALSE	58	576	1500
VlanID	VLAN ID	FALSE	65	0	4094
VlanPriority	VLAN Priority	FALSE	64	0	7

### 7.5.15 OS-BMC Passthru Configuration

This section describes the attributes for iDRAC's OS-BMC Passthru Configuration..

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "OS-BMC.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "OS-BMC Passthru Configuration".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 42 – DCIM\_iDRACCardEnumeration OS-BMC Passthru Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
AdminState	LC and Host Private Channel State	FALSE	1241	"Disabled", "Enabled"

### 7.5.16 Remote Racadm Configuration

This section describes the attributes for iDRAC's Remote Racadm Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Racadm.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Remote Racadm Configuration".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 43 – DCIM\_iDRACCardEnumeration Remote Racadm Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Remote Enable	FALSE	591	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 44 – DCIM\_iDRACCardInteger Remote Racadm Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Timeout	Remote Timeout	FALSE	592	10	1920

NOTE: Defines the idle timeout (in seconds) for the Remote RACADM interface. If a remote RACADM session remains inactive for more than the specified sessions, the session is closed.

### 7.5.17 RAC Remote Hosts

This section describes the attributes for iDRAC's RAC Remote Hosts Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RemoteHosts.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RAC Remote Hosts".

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 45 – DCIM\_iDRACCardString RAC Remote Hosts**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
SMTPServerIPAddress	SMTP Server IP Address	FALSE	541	0	255

### 7.5.18 RAC Certificate

This section describes the attributes for iDRAC's RAC Certificate Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Security.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RAC Certificate".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 46 – DCIM\_iDRACCardEnumeration RAC Certificate**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
CsrKeySize	CSR Key Size	FALSE	768	1024, 2048

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 47 – DCIM\_iDRACCardString RAC Certificate**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
CsrCommonName	CSR Common Name	FALSE	761	0	254
CsrOrganizationName	CSR Organization Name	FALSE	762	0	254
CsrOrganizationUnit	CSR Organization Unit	FALSE	763	0	254
CsrLocalityName	CSR Locality Name	FALSE	764	0	254
CsrStateName	CSR State Name	FALSE	765	0	254
CsrCountryCode	CSR Country Code	FALSE	766	0	2
CsrEmailAddr	CSR Email Address	FALSE	767	0	254

## 7.5.19 Serial Configuration

This section describes the attributes for iDRAC's Serial Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Serial.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Serial Configuration".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 48 – DCIM\_iDRACCardEnumeration Serial Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Serial Console Enable	FALSE	601	"Disabled", "Enabled"
BaudRate	Serial Baud Rate	FALSE	602	9600, 19200, 38400, 57600, 115200

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
NoAuth	Serial Console No Authentication	FALSE	604	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 49 – DCIM\_iDRACCardString Serial Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Command <sup>1</sup>	Serial Console Command	FALSE	606	0	128

NOTE: 1 – Specifies a serial command that is executed after a user logs into the serial console interface.

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 50 – DCIM\_iDRACCardInteger Serial Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
IdleTimeout	Serial Console Idle Timeout	FALSE	603	60	1920
HistorySize	Serial History Size	FALSE	605	0	8192

## 7.5.20 RAC Serial Redirection

This section describes the attributes for iDRAC's RAC Serial Redirection Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SerialRedirection.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RAC Serial Redirection".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 51 – DCIM\_iDRACCardEnumeration RAC Serial Redirection**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Serial Communication Redirection Enable	FALSE	611	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 52 – DCIM\_iDRACCardString RAC Serial Redirection**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
QuitKey	Serial Console Quit Key	FALSE	612	0	2

## 7.5.21 Smart Card Configuration

This section describes the attributes for iDRAC's Smart Card Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SmartCard.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Smart Card Configuration".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 53 – DCIM\_iDRACCardEnumeration Smart Card Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
SmartCardLogonEnable	Smart Card Logon Enable	FALSE	1061	"Disabled", "Enabled"
SmartCardCRLEnable	Smart Card CRL Enable	FALSE	1062	"Disabled", "Enabled"

## 7.5.22 SNMP Configuration

This section describes the attributes for iDRAC's SNMP Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SNMP.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SNMP Configuration".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

831

**Table 54 – DCIM\_iDRACCardEnumeration SNMP Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
AgentEnable	SNMP Agent Enable	FALSE	701	“Disabled”, “Enabled”

832 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
 833 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
 834 column contains constraints on string value formulation. Each row contains the values for the properties  
 835 listed in the column headings.

836

**Table 55 – DCIM\_iDRACCardString SNMP Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
AgentCommunity	SNMP Agent Community	FALSE	702	0	31

### 837 7.5.23 SNMP Trap IPv4

838 This section describes the attributes for iDRAC’s SNMP Trap IPv4 Configuration.

839 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 840 DCIM\_iDRACCardInteger shall be “SNMPTrapIPv4.<#>” where <#> is a number from 1 to 4.

841 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 842 DCIM\_iDRACCardInteger shall be “SNMP Trap IPv4”.

843 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
 844 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
 845 Description column contains the description for each of the attribute. Each row contains the values for the  
 846 properties listed in the column headings. The PossibleValues property is an array property represented in  
 847 the table as comma delimited list.

848

**Table 56 – DCIM\_iDRACCardEnumeration SNMP Trap IPv4**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
State	State	FALSE	1192, 1202, 1212, 1222	“Disabled”, “Enabled”

850 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
 851 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
 852 column contains constraints on string value formulation. Each row contains the values for the properties  
 853 listed in the column headings.

854

**Table 57 – DCIM\_iDRACCardString SNMP Trap IPv4**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
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AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
DestIPv4Addr	Destination IPv4 Address	FALSE	1193, 1203, 1213, 1223	0	15

855 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
856 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
857 values for the properties listed in the column headings.

858 **Table 58 – DCIM\_iDRACCardInteger SNMP Trap IPv4**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
DestinationNum	Destination Number	TRUE	1191, 1201, 1211, 1221	1	4



## 7.5.24 SNMP Trap IPv6

This section describes the attributes for iDRAC's SNMP Trap IPv6 Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SNMPTrapIPv6.<#>" where <#> is a number from 1 to 4.

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "SNMP Trap IPv6".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 59 – DCIM\_iDRACCardEnumeration SNMP Trap IPv6**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
State	State	FALSE	1152, 1162, 1172, 1182	"Disabled", "Enabled"

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 60 – DCIM\_iDRACCardString SNMP Trap Ipv6**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
DestIPv6Addr	Destination IPv6 Address	FALSE	1153, 1163, 1173, 1183	0	39

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 61 – DCIM\_iDRACCardInteger SNMP Trap Ipv6**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
DestinationNum	Destination Number	TRUE	1151, 1161, 1171, 1181	1	4

## 7.5.25 RAC SSH

This section describes the attributes for iDRAC's SSH Configuration.

884 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
885 DCIM\_iDRACCardInteger shall be "SSH.1".

886 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
887 DCIM\_iDRACCardInteger shall be "RAC SSH".

888 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
889 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
890 Description column contains the description for each of the attribute. Each row contains the values for the  
891 properties listed in the column headings. The PossibleValues property is an array property represented in  
892 the table as comma delimited list.

893 **Table 62 – DCIM\_iDRACCardEnumeration RAC SSH**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	561	"Disabled", "Enabled"

894 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
895 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
896 values for the properties listed in the column headings.

897 **Table 63 – DCIM\_iDRACCardInteger RAC SSH**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Port	SSH Port	FALSE	562	10	65535
Timeout <sup>1</sup>	SSH Idle Timeout	FALSE	563	60	10800

898 NOTE: 1 - Specifies the number of seconds after which an idle Telnet session is automatically terminated.

## 899 **7.5.26 RAC Telnet**

900 This section describes the attributes for iDRAC's Telnet Configuration.

901 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
902 DCIM\_iDRACCardInteger shall be "Telnet.1".

903 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
904 DCIM\_iDRACCardInteger shall be "Telnet Configuration".

905 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
906 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
907 Description column contains the description for each of the attribute. Each row contains the values for the  
908 properties listed in the column headings. The PossibleValues property is an array property represented in  
909 the table as comma delimited list.

910 **Table 64 – DCIM\_iDRACCardEnumeration Telnet Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	551	"Disabled", "Enabled"

911 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
912 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
913 values for the properties listed in the column headings.

914

915

**Table 65 – DCIM\_iDRACCardInteger Telnet Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Port	Telnet Port	FALSE	552	10	65535
Timeout <sup>1</sup>	Timeout	FALSE	553	60	10800

916 NOTE: 1 - Specifies the number of seconds after which an idle Telnet session is automatically terminated.

## 917 7.5.27 Sys Log

918 This section describes the attributes for iDRAC's Sys Log Configuration.

919 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
920 DCIM\_iDRACCardInteger shall be "SysLog.1".

921 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
922 DCIM\_iDRACCardInteger shall be "Sys Log".

923 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
924 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
925 Description column contains the description for each of the attribute. Each row contains the values for the  
926 properties listed in the column headings. The PossibleValues property is an array property represented in  
927 the table as comma delimited list.

928

**Table 66 – DCIM\_iDRACCardEnumeration Sys Log**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
SysLogEnable	Sys Log Enable	FALSE	1071	"Disabled", "Enabled"

929 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
930 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
931 column contains constraints on string value formulation. Each row contains the values for the properties  
932 listed in the column headings.

933

**Table 67 – DCIM\_iDRACCardString Sys Log**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Server1	Sys Log Server 1	FALSE	1073	0	63
Server2	Sys Log Server 2	FALSE	1074	0	63

934 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
935 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
936 values for the properties listed in the column headings.

937

938

**Table 68 – DCIM\_iDRACCardInteger Sys Log**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Port	Sys Log Port	FALSE	1072	1	65535

939

**940 7.5.28 iDRAC Firmware Update**

941 This section describes the attributes for iDRAC's Update Configuration.

942 The GroupID property for the DCIM\_iDRACCardEnumeration and DCIM\_iDRACCardString shall be  
943 "Update.1".

944 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration and DCIM\_iDRACCardString  
945 shall be "Firmware Update".

946 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
947 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
948 Description column contains the description for each of the attribute. Each row contains the values for the  
949 properties listed in the column headings. The PossibleValues property is an array property represented in  
950 the table as comma delimited list.

951

**Table 69 – DCIM\_iDRACCardEnumeration Update**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
FwUpdateTFTPEnable	Enable or Disable TFTP for Firmware Update	FALSE	451	"Disabled", "Enabled"

952 The following table describes the values for the DCIM\_iDRACCardString of this group. Each column  
953 heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression  
954 column contains constraints on string value formulation. Each row contains the values for the properties  
955 listed in the column headings.

956

**Table 70 – DCIM\_iDRACCardString Update**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
FwUpdateIPAddr	Firmware Update IP Address	FALSE	452	0	
FwUpdatePath	Firmware Update File Path	FALSE	453	0	255

957

**958 7.5.29 User Domain**

959 This section describes the attributes for iDRAC's User Domain Configuration.

960 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
961 DCIM\_iDRACCardInteger shall be "UserDomain.<#>" where "<#>" is a number 1 through 40.

962 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
963 DCIM\_iDRACCardInteger shall be "User Domain".

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

**Table 71 – DCIM\_iDRACCardString User Domain**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Name	User Domain Name	FALSE	851, 855, 1046	0	255

### 7.5.30 iDRAC Users

This section describes the attributes for iDRAC's Users Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Users.<#>" where <#> is a number from 1 to 16.

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "iDRAC Users".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 72 – DCIM\_iDRACCardEnumeration Users**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
IpmlanPrivilege	User Admin IPMI LAN Privilege	FALSE <sup>1</sup>	254, 264, , 404	User, Operator, Administrator, No Access
IpmlSerialPrivilege	User Admin IPMI Serial Privilege	FALSE <sup>1</sup>	255, 265, ... , 405	User, Operator, Administrator, No Access
Enable	User Admin Enable	FALSE <sup>1</sup>	256, 266, , 406	"Disabled", "Enabled"
SolEnable	User Admin SOL Enable	FALSE <sup>1</sup>	257, 267, , 407	"Disabled", "Enabled"

NOTE: 1 – IpmlanPrivilege, IpmlSerialPrivilege, Enable, and SolEnable attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the attribute is settable.

The following table describes the values for the DCIM\_iDRACCardString of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardString class. The Value Expression column contains constraints on string value formulation. Each row contains the values for the properties listed in the column headings.

990

**Table 73 – DCIM\_iDRACCardString iDRAC Users**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
UserName	User Admin User Name	FALSE <sup>1</sup>	251, 261, ... , 401	0	16
Password <sup>2</sup>	User Admin Password	FALSE	252, 262, ... , 402	0	20

991 NOTE: 1 – UserName attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the  
 992 attribute is settable.

993 NOTE: 2 – Password attribute is write-only, and thus its value is never returned in the CurrentValue, PendingValue,  
 994 and DefaultValue properties.

995 The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column  
 996 heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the  
 997 values for the properties listed in the column headings.

998

999

**Table 74 – DCIM\_iDRACCardInteger iDRAC Users**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Privilege <sup>3</sup>	User Admin Privilege	FALSE <sup>1</sup>	253, 263, ... , 403	0	511

1000 NOTE: 1 – Privilege attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the  
 1001 attribute is settable.

1002 NOTE: 3 – See ANNEX A for information on mapping into iDRAC privileges.

### 1003 7.5.31 Virtual Console Configuration

1004 This section describes the attributes for iDRAC's Virtual Console Configuration.

1005 The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 1006 DCIM\_iDRACCardInteger shall be "VirtualConsole.1".

1007 The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and  
 1008 DCIM\_iDRACCardInteger shall be "Virtual Console Configuration".

1009 The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each  
 1010 column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The  
 1011 Description column contains the description for each of the attribute. Each row contains the values for the  
 1012 properties listed in the column headings. The PossibleValues property is an array property represented in  
 1013 the table as comma delimited list.

1014

**Table 75 – DCIM\_iDRACCardEnumeration Virtual Console Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	581	"Disabled", "Enabled"

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
LocalVideo	Local Video	FALSE	583	"Disabled", "Enabled"
PluginType	Plugin Type	FALSE	584	"Active X", "Java"
EncryptEnable	Encrypt Enable	FALSE	582	"None", "AES"

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 76 – DCIM\_iDRACCardInteger Virtual Console Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Timeout <sup>1</sup>	Timeout	FALSE	587	60	10800
MaxSessions	Max Sessions	FALSE	585	1	4
Port	vKVM Port	FALSE	586	1	65535

NOTE: 1 – Timeout in seconds.

## 7.5.32 Virtual Media Configuration

This section describes the attributes for iDRAC's Virtual Media Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "VirtualMedia.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Virtual Media".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 77 – DCIM\_iDRACCardEnumeration Virtual Media Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Attached	RAC Virtual Media Attached	FALSE	711	"Detached", "Attached", "AutoAttach"
BootOnce	Virtual Media Boot Once	FALSE	712	"Disabled", "Enabled"
KeyEnable	Virtual Media Key Enable	FALSE	713	"Disabled", "Enabled"
FloppyEmulation	Virtual Media Floppy Emulation	FALSE	714	"Disabled", "Enabled"

### 7.5.33 RAC Web Server

This section describes the attributes for iDRAC's Web Server Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "WebServer.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RAC Web Server".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 78 – DCIM\_iDRACCardEnumeration Web Server**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	571	"Disabled", "Enabled"
LowerEncryptionBitLength	Lower Encryption Bit Length	FALSE	575	"Disabled", "Enable"

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 79 – DCIM\_iDRACCardInteger Web Server**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
HttpPort	Http Port	FALSE	572	10	65535
HttpsPort	Https Port	FALSE	573	1	65535
Timeout	Timeout	FALSE	574	60	10800

### 7.5.34 Time Zone Configuration

This section describes the attributes for iDRAC's Web Server Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Time.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Time Zone Configuration Information".

The following table describes the values for the DCIM\_iDRACCardInteger of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardInteger class. Each row contains the values for the properties listed in the column headings.

**Table 80 – DCIM\_iDRACCardInteger Time Zone Configuration Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
TimeZoneOffset	Tune Time Zone Offset	FALSE	751	0	46800



AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
DaylightOffset	Tune Day Light Offset	FALSE	752	0	60

### 7.5.35 Remote File Share Configuration

This section describes the attributes for iDRAC's Remote File Share Configuration.

The GroupID property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "RFS.1".

The GroupDisplayName property for the DCIM\_iDRACCardEnumeration, DCIM\_iDRACCardString, and DCIM\_iDRACCardInteger shall be "Remote File Share".

The following table describes the values for the DCIM\_iDRACCardEnumeration of this group. Each column heading corresponds to a property name on the DCIM\_iDRACCardEnumeration class. The Description column contains the description for each of the attribute. Each row contains the values for the properties listed in the column headings. The PossibleValues property is an array property represented in the table as comma delimited list.

**Table 81 – DCIM\_iDRACCardEnumeration Remote File Share**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
MediaAttachState	Media Attach State	TRUE	1231	Attached / Detached
AttachMode	Media Attach Mode	FALSE	1232	Attach / Auto Attach

## 7.6 DCIM\_iDRACCardService – iDRAC CardService

This section describes the implementation for the DCIM\_iDRACCardService class. It is used to host the ApplyAttributes method which is used to change the values of the iDRAC Card attribute values.

### 7.6.1 Resource URIs for WinRM®

The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardService?\_\_cimnamespace=root/dcim"

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

The instance Resource URI for DCIM\_iDRACCardService instance shall be:

"http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_iDRACCardService?\_\_cimnamespace=root/dcim+ SystemCreationClassName= DCIM\_ComputerSystem +CreationClassName= DCIM\_iDRACCardService + SystemName= DCIM:ComputerSystem +Name= DCIM:iDRACCardService"

The following table lists the implemented operations on DCIM\_iDRACCardService.

**Table 10 – DCIM\_iDRACCardService - Operations**

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

## 7.6.2 Class Properties

The following table details the implemented properties for DCIM\_iDRACCardService instance representing the integer type attributes of a remote access card in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

**Table 11 – DCIM\_iDRACCardService - Properties**

Properties and Methods	Requirements	Type	Requirement and description
SystemCreationClassName	Mandatory	string	Key(This property value shall be “DCIM_ComputerSystem”)
CreationClassName	Mandatory	string	Key (This property value shall be “DCIM_iDRACService”)
SystemName	Mandatory	string	Key (This property value shall be “DCIM:ComputerSystem”)
Name	Mandatory	string	This property shall have value of "DCIM:iDRACCardService".

## 7.7 iDRAC Card Profile Profile Registration

This section describes the implementation for the DCIM\_LCRegisteredProfile class.

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

### 7.7.1 Resource URIs for WinRM®

The class Resource URI shall be "http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM\_RegisteredProfile?\_\_cimnamespace=root/interop"

The key property shall be the InstanceID property.

The instance Resource URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_LCRegisteredProfile?\_\_cimnamespace=root/interop+InstanceID=DCIM:iDRACCard:1.0.0"

### 7.7.2 Operations

The following table lists the implemented operations on DCIM\_LCRegisteredProfile.

**Table 18 – DCIM\_LCRegisteredProfile - Operations**

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

### 7.7.3 Class Properties

The following table details the implemented properties for DCIM\_LCRegisteredProfile instance representing iDRAC Card Profile implementation. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

**Table 19 – DCIM\_LCRegisteredProfile - Properties**

Property Name	Requirement	Type	Additional Requirements
InstanceID	Mandatory	String	DCIM:iDRACCard:1.0.0
RegisteredName	Mandatory	String	This property shall have a value of "iDRAC Card".
RegisteredVersion	Mandatory	String	This property shall have a value of "1.2.0".
RegisteredOrganization	Mandatory	Uint16	This property shall have a value of 1 (Other).
OtherRegisteredOrganization	Mandatory	String	The property value shall match "DCIM".
AdvertisedTypes[]	Mandatory	Uint16	This property array shall contain [1(Other), 1 (Other)].
AdvertiseTypeDescriptions[]	Mandatory	String	This property array shall contain ["WS-Identify", "Interop Namespace"].
ProfileRequireLicense[]	Mandatory	String	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[]	Mandatory	String	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: <ul style="list-style-type: none"><li>“LICENSED”</li><li>“NOT_LICENSED”</li></ul> If no license is required for the profile, the property shall have value NULL.

## 8 Methods

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

### 8.1 DCIM\_iDRACCardService.SetAttribute()

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

Invocation of the SetAttribute() method shall change the value of the DCIM\_IDRACCardAttribute.CurrentValue or DCIM\_IDRACCardAttribute.PendingValue property to the value specified by the AttributeValue parameter if the DCIM\_IDRACCardAttribute.IsReadOnly property is FALSE.

Invocation of this method when the DCIM\_IDRACCardAttribute.IsReadOnly property is TRUE shall result in no change to the value of the DCIM\_IDRACCardAttribute.CurrentValue property. The results of changing this value is described with the SetResult parameter.

Return code values for the SetAttribute() method are specified in Table 82 and parameters are specified in Table 83 –. Invoking the SetAttribute() method multiple times can result in the earlier requests being overwritten or lost.

1131

1132

**Table 82 – SetAttribute() Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

1133

**Table 83 – SetAttribute() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	FQDD of the iDRAC Card
IN, REQ	AttributeName	String	Shall be formatted in the following way: <GroupID property value>#<AttributeName property value>. Example: "MyGroup#MyAttribute"
IN, REQ	AttributeValue[]	String	Shall contain the required attribute value. For non-array attributes, only the first element shall be populated. If the value is valid, the CurrentValue or PendingValue property of the specified attribute will be modified.
OUT	SetResult	String	Returns: <ul style="list-style-type: none"> <li>"Set CurrentValue" when the attributes current value is set.</li> <li>"Set PendingValue" when the attributes pending value is set.</li> </ul>
OUT	RebootRequired	String	Returns: <ul style="list-style-type: none"> <li>"Yes" if reboot is required,</li> <li>"No" if reboot is not required.</li> </ul>
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

1134

**Table 84 – SetAttribute() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC010	Invalid character value	
RAC011	Job already exists Cannot process more Sets	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC017	Job created to apply the attribute value	
RAC018	Completed with Errors	
RAC019	Job did not complete successfully.	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC034	Job Control Failed to Create a Job	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name <parameter name>	
JCP017	Job creation request unsuccessful. Maximum number of jobs reached.	
JCP018	Cannot create new jobs until the existing Export job is completed or the job is cancelled.	
JCP019	Cannot create new jobs until the existing Import System Profile job is completed or cancelled.	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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## 1136 **8.2 DCIM\_iDRACCardService.SetAttributes()**

1137 The SetAttributes() method is used to set or change the values of a group of attributes.

1138 Invocation of the SetAttributes() method shall change the values of the

1139 DCIM\_iDRACCardAttribute.CurrentValue or PendingValue properties that correspond to the names

1140 specified by the `AttributeName` parameter and the values specified by the `AttributeValue` parameter if the  
 1141 respective `DCIM_IDRACCardAttribute.IsReadOnly` property is `FALSE`. Invocation of this method when  
 1142 the respective `DCIM_IDRACCardAttribute.IsReadOnly` property is `TRUE` shall result in no change to the  
 1143 corresponding value of the `DCIM_IDRACCardAttribute.CurrentValue` property.

1144 NOTE: If setting numerous attributes at the same time, please make sure that WSMAN client has a timeout of at  
 1145 least 120 seconds.

1146 Return code values for the `SetAttributes()` method are specified in Table 85, and parameters are  
 1147 specified in Table 86.

1148 Invoking the `SetAttributes()` method multiple times can result in the earlier requests being overwritten or  
 1149 lost.

1150 **Table 85 – SetAttributes() Method: Return Code Values**

Value	Description
0	Completed with no error
2	Failed

1151 **Table 86 – SetAttributes() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	FQDD of the iDRAC Card
IN, REQ	AttributeName[]	String	An array of values where each value shall be formatted in the following way: <GroupID property value>#<AttributeName property value>. Example: "MyGroup#MyAttribute"
IN, REQ	AttributeValue[]	String	Shall contain the desired attribute values. Array attributes shall not be set using this method. If the value is valid, the <code>CurrentValue</code> or <code>PendingValue</code> property of the specified attribute will be modified.
OUT	SetResult[]	String	Returns: <ul style="list-style-type: none"> <li>" Set CurrentValue" when the attributes current value is set.</li> <li>"Set PendingValue" when the attributes pending value is set.</li> </ul>
OUT	RebootRequired[]	String	Returns: <ul style="list-style-type: none"> <li>"Yes" if reboot is required,</li> <li>"No" if reboot is not required.</li> </ul>
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

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**Table 87 – SetAttributes() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	
RAC010	Invalid character value	
RAC011	Job already exists Cannot process more Sets	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC017	Job created to apply the attribute value	
RAC018	Completed with Errors	
RAC019	Job did not complete successfully.	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	



MessageID (OUT parameter)	Message	MessageArguments[]
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC034	Job Control Failed to Create a Job	
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name <parameter name>	
JCP017	Job creation request unsuccessful. Maximum number of jobs reached.	
JCP018	Cannot create new jobs until the	

MessageID (OUT parameter)	Message	MessageArguments[]
	existing Export job is completed or the job is cancelled.	
JCP019	Cannot create new jobs until the existing Import System Profile job is completed or cancelled.	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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### 1155 8.3 DCIM\_iDRACCardService.CreateTargetedConfigJob()

1156 The CreateTargetedConfigJob() method is used to apply the pending values created by the SetAttribute  
1157 and SetAttributes methods. The successful execution of this method creates a job to apply the pending  
1158 attribute values.

1159 The CreateTargetedConfigJob() method supports the following optional input parameters:

- 1160 1. RebootJobType: When provided in the input parameters, creates a specific reboot job to  
1161 "PowerCycle", "Graceful Reboot without forced shutdown", or "Graceful Reboot with forced  
1162 shutdown". This parameter only creates the RebootJob and does not schedule it.
- 1163 2. ScheduledStartTime: When provided in the input parameters, schedules the "configuration job"  
1164 and the optional "reboot job" at the specified start time. A special value of "TIME\_NOW"  
1165 schedules the job(s) immediately.
- 1166 3. UntilTime: This parameter has a dependency on "ScheduledStartTime". The  
1167 "ScheduledStartTime" and "UntilTime" define a time window for scheduling the job(s). Once  
1168 scheduled, jobs are executed within the time window.

1169 If CreateTargetedConfigJob() method is executed without the three optional parameters discussed above,  
1170 then the configuration job is created but not scheduled. However, this configuration job can be scheduled  
1171 later using the DCIM\_JobService.SetupJobQueue() method from the "Job Control Profile".  
1172 DCIM\_JobService.SetupJobQueue () can be executed to schedule several configuration jobs including  
1173 the reboot job. See the "Job Control Profile" for more details.

1174 Return code values for the CreateTargetedConfigJob() method are specified in Table 88, and parameters  
1175 are specified in Table 89.

1176 Subsequent calls to CreateTargetedConfigJob after the first CreateTargetedConfigJob results in error  
1177 until the first job is completed.

1178 **Table 88 – CreateTargetedConfigJob() Method: Return Code Values**

Value	Description
2	Failed
4096	Job Created

1179 **Table 89 – CreateTargetedConfigJob() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	FQDD of the iDRAC Card

Qualifiers	Name	Type	Description/Values
IN	RebootJobType	Uint16	Shall contain the requested reboot type: <ul style="list-style-type: none"> <li>1 - PowerCycle</li> <li>2 - Graceful Reboot without forced shutdown</li> <li>3 - Graceful Reboot with forced shutdown.</li> </ul>
IN	ScheduledStartTime	String	Start time for the job execution in format: yyyyymmddhhmmss. The string "TIME_NOW" means immediate.
IN	UntilTime	String	End time for the job execution in format: yyyyymmddhhmmss. If this parameter is not NULL, then ScheduledStartTime parameter shall also be specified.
OUT	Job	CIM_ConcreteJob REF	Reference to the newly created pending value application job.
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Job Completed Error Message in English
OUT	MessageArguments[]	String	Substitution variables for dynamic error message.

1180

**Table 90 – CreateTargetedConfigJob() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	
RAC010	Invalid character value	
RAC011	Job already exists Cannot process more Sets	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC017	Job created to apply the attribute value	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC018	Completed with Errors	
RAC019	Job did not complete successfully.	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependancy not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC034	Job Control Failed to Create a Job	
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter	

MessageID (OUT parameter)	Message	MessageArguments[]
	settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name <parameter name>	
JCP017	Job creation request unsuccessful. Maximum number of jobs reached.	
JCP018	Cannot create new jobs until the existing Export job is completed or the job is cancelled.	
JCP019	Cannot create new jobs until the existing Import System Profile job is completed or cancelled.	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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#### 1183 **8.4 DCIM\_iDRACCardService.DeletePendingConfiguration()**

1184 The DeletePendingConfiguration() method is used to cancel the pending values created by the  
 1185 SetAttribute and SetAttributes methods. The DeletePendingConfiguration() method cancels the pending  
 1186 configuration changes made before the configuration job is created with CreateTargetedConfigJob(). This  
 1187 method only operates on the pending changes prior to CreateTargetedConfigJob() being called. After the  
 1188 configuration job is created, the pending changes can only be canceled by calling DeleteJobQueue()  
 1189 method in the Job Control profile.

1190 Return code values for the DeletePendingConfiguration() method are specified in Table 91 , and  
 1191 parameters are specified in Table 92.

1192 **Table 91 – DeletePendingConfiguration() Method: Return Code Values**

Value	Description
0	Success
2	Failed

1193

1194

**Table 92 – DeletePendingConfiguration() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	FQDD of the iDRAC Card
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 93 – DeletePendingConfiguration() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	
RAC010	Invalid character value	
RAC011	Job already exists Cannot process more Sets	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC017	Job created to apply the attribute value	
RAC018	Completed with Errors	
RAC019	Job did not complete successfully.	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMLan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC034	Job Control Failed to Create a Job	
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	



MessageID (OUT parameter)	Message	MessageArguments[]
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name <parameter name>	
JCP017	Job creation request unsuccessful. Maximum number of jobs reached.	
JCP018	Cannot create new jobs until the existing Export job is completed or the job is cancelled.	
JCP019	Cannot create new jobs until the existing Import System Profile job is completed or cancelled.	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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## 1200 **8.5 DCIM\_iDRACCardService.ApplyAttributes()**

1201 The ApplyAttributes() method is used to set or change the value of a iDRAC Card attribute.

1202 NOTE: If setting numerous attributes at the same time, please make sure that WSMAN client has a timeout of at  
1203 least 120 seconds.

1204 **Table 94 – ApplyAttributes() Method: Return Code Values**

Value	Description
2	Error
4096	Job Created

1205 **Table 95 – ApplyAttributes() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	Target	String	FQDD of the iDRAC Card
IN, REQ	AttributeName[]	String	An array of values, where each value shall be formatted in the following way: <GroupID property value>#<AttributeName property value>. Example: "MyGroup#MyAttribute"
IN, REQ	AttributeValue[]	String	Shall contain the desired attribute values. If the value is valid, the CurrentValue or PendingValue property of the specified attribute will be modified.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of concrete job status
OUT	MessageID[]	String	Error message IDs may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message[]	String	Error messages in English corresponding to MessageID is returned if an attribute set fails

1206 **Table 96 – ApplyAttributes() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was succesful	
RAC002	General failure	
RAC003	Missing required <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribtute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String Exceeds max length	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC010	Invalid character value	
RAC011	Job already exists, cannot process more sets	
RAC012	User is not authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid attribute was entered	
RAC015	Not one of the possible values for AttributeName	AttributeName
RAC016	Invalid AttributeName %s	AttributeName
RAC017	Job created to apply the attribute value	
RAC018	Completed with errors	
RAC019	Failed	
RAC020	Completed	
RAC021	DHCP is enabled. Therefore, cannot set static values for IPAddress Net mask or Gateway.	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege.	
RAC023	The User Password is not configured, cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege.	
RAC024	VLAN is disabled, cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled, cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled, cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled, cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled, cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this attribute is dependent on has incorrect value	
RAC031	Invalid value specified for the User name	
RAC032	Invalid value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC034	Job Control failed to create a job	
RAC035	No pending configurations	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC037	Attribute dependency failed	
RAC038	The command failed	
RAC039	Invalid parameter value for %s	AttributeName, AttributeValue, Target
RAC040	Missing parameter(s) %s	AttributeName, AttributeValue, Target
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.	

## 8.6 DCIM\_iDRACCardService.SendTestEmailAlert()

This method is used to to send a test email alert for a particular attribute.

Return code values for the SendTestEmailAlert() method are specified in Table 97, and parameters are specified in Table 98.

**Table 97 – SendTestEmailAlert() Method: Return Code Values**

Value	Description
0	Completed with No Error
2	Failed

**Table 98 – SendTestEmailAlert ( ) Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	InstanceID	String	The property shall have the value of the InstanceID property of the attribute for which the test email alert is generated.
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
OUT	MessageArguments[]	String	Substitution variables for dynamic error message.

**Table 99 – SendTestEmailAlert ( ) Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and	

MessageID (OUT parameter)	Message	MessageArguments[]
	AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	
RAC010	Invalid character value	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC018	Completed with Errors	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	

MessageID (OUT parameter)	Message	MessageArguments[]
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name <parameter name>	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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## 1215 8.7 DCIM\_iDRACCardService.SendTestSNMPTrap()

1216 This method is used to to send a test snmp alert for a particular attribute.

1217 Return code values for the SendTestSNMPTrap() method are specified in Table 100, and parameters are  
1218 specified in Table 101.

1219 **Table 100 – SendTestSNMPTrap() Method: Return Code Values**

Value	Description
0	Completed with No Error
2	Failed

1220

**Table 101 – SendTestSNMPTrap() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	InstanceID	String	The property shall have the value of the InstanceID property of the attribute for which the test email alert is generated.
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
OUT	MessageArguments[]	String	Substitution variables for dynamic error message.

1221

**Table 102 – SendTestSNMPTrap() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	
RAC002	General failure	
RAC003	Missing required parameter <parameter>	AttributeName, AttributeValue, Target
RAC004	Invalid parameter value for <parameter>	AttributeName, AttributeValue, Target
RAC005	Mismatch in AttributeName and AttributeValue count	
RAC006	AttributeValue cannot be changed for ReadOnly Attribute Name	
RAC007	Input out of range	
RAC008	Invalid boolean Value	
RAC009	String exceeds maximum length	
RAC010	Invalid character value	
RAC012	User is not Authorized to perform this operation	
RAC013	Invalid FQDD	
RAC014	Invalid Attribute was Entered	
RAC015	Not one of the Possible Values for AttributeName	AttributeName
RAC016	Invalid AttributeName	
RAC018	Completed with Errors	
RAC020	Completed	
RAC021	DHCP is Enabled so cannot set static values for IPAddress Net mask or Gateway	
RAC022	The User Name is not configured so cannot Enable the User or set values for User Password IPMILan IPMISerial or User Admin Privilege	
RAC023	The User Password is not configured so cannot Enable the User or set values for IPMILan IPMISerial or User Admin Privilege	
RAC024	VLAN is Disabled so cannot set	

MessageID (OUT parameter)	Message	MessageArguments[]
	VLAN Priority	
RAC025	DNS from DHCP is Enabled so cannot set values for DNS1 or DNS2	
RAC026	Domain Name from DHCP Enabled so cannot set DNS Domain Name	
RAC027	Auto negotiation is Enabled so cannot set values for Speed or Duplex	
RAC028	DHCP is Disabled so cannot Enable DNS Domain Name From DHCP or DNS From DHCP	
RAC029	Required Dependency not found in input	
RAC030	Required Attribute that this Attribute is dependent on has incorrect value	
RAC031	Invalid Value specified for the User name	
RAC032	Invalid Value specified for the DNS RAC name	
RAC033	IPv4 is Disabled so cannot enable attribute	
RAC035	No Pending Configurations	
RAC037	No pending configurations to delete.	
RAC038	Unable to perform the operation due to an unknown error in iDRAC.	
RAC039	Invalid parameter value for <parameter>.	AttributeName, AttributeValue, Target
RAC040	Missing parameters <parameters>.	AttributeName, AttributeValue, Target
RAC041	The set operation on the event filters failed.	
RAC042	Invalid number of input parameters.	
RAC043	Unable to update some event filter settings.	
RAC044	Unable to update some event filter settings.	
RAC045	Event filter does not exist for input parameter combination.	
RAC046	Unsupported event notification for the event filter specified.	
RAC047	Unsupported event action for the specified event filter.	
RAC048	The operation was successful.	
RAC049	Resource allocation failure.	
RAC050	Invalid country code	
RAC051	Unsupported parameter name	



MessageID (OUT parameter)	Message	MessageArguments[]
	<parameter name>	
FM002	Feature(s) not available.	
FM003	A required license is missing or expired. The following features are not enabled: <features>	

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1223

## 1224 9 Use Cases

1225 See *Lifecycle Controller (LC) Integration Best Practices Guide*.

## 1226 10 CIM Elements

1227 No additional details specified.

1228

## 1229 11 Privilege and License Requirement

1230 The following table describes the privilege and license requirements for the listed operations . For the  
1231 detailed explanation of the privileges and licenses, refer to the Dell WSMAN Licenses and Privileges  
1232 specification.

1233 **Table 103 – Privilege and License Requirements**

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
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Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardView		ENUMERATE, GET	Login	None.
DCIM_iDRACCardService		ENUMERATE, GET	Login	None.
DCIM_iDRACCardService. ApplyAttributes()		INVOKE	Login, Configure	LM_REMOTE_CONFIG URATION & ONE_OF_THE_BELOW
DCIM_iDRACCardService. SetAttribute()		INVOKE	Login, Configure	LM_REMOTE_CONFIG URATION & ONE_OF_THE_BELOW
DCIM_iDRACCardService. SetAttributes()		INVOKE	Login, Configure	LM_REMOTE_CONFIG URATION & ONE_OF_THE_BELOW
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.UserName	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.Password	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.IpmiLanPrivilege	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.IpmiSerialPrivilege	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.Enable	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.SolEnable	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.Privilege	INVOKE	Login, Configure Users	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. CreateTargetedConfigJob()		INVOKE	Login, Configure	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. DeletePendingConfiguration()		INVOKE	Login, Configure	LM_REMOTE_CONFIG URATION
DCIM_iDRACCardService. SendTestEmailAlert()		INVOKE	Login, System Operations	LM_REMOTE_CONFIG URATION & LM_EMAIL_ALERTING
DCIM_iDRACCardService. SendTestSNMPTrap()		INVOKE	Login, System Operations	LM_REMOTE_CONFIG URATION & LM_SNMP
DCIM_LCElementConformsToPro file		ENUMERA TE, GET	Login	None.
DCIM_LCRegisteredProfile		ENUMERA TE, GET	Login	None.
DCIM_iDRACCardEnumeration	NIC.DNSRegister	ENUMERA TE, GET	Login	LM_DYNAMIC_DNS
DCIM_iDRACCardString	NIC.DNSRacName	ENUMERA TE, GET	Login	LM_DYNAMIC_DNS
DCIM_iDRACCardEnumeration	IPv6.DNSFromDHCP6	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.DNS1	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.DNS2	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardEnumeration	IPv6.Enable	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardEnumeration	IPv6.AutoConfig	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address1	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Gateway	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.LinkLocalAddress	ENUMERA TE, GET E	Login	LM_IPV6
DCIM_iDRACCardInteger	IPv6.PrefixLength	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address2	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardInteger	IPv6.IPv6NumOfExtAd dress	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address3	ENUMERA TE, GET	Login	LM_IPV6

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardString	IPv6.Address4	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address5	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address6	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address7	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address8	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address9	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address10	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address11	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address12	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address13	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address14	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address15	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address16	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardInteger	SNMPTrapIpv6.Destin ationNum	ENUMERA TE, GET	Login	LM_IPV6 & LM_SNMP
DCIM_iDRACCardEnumeration	SNMPTrapIpv6.State	ENUMERA TE, GET	Login	LM_IPV6 & LM_SNMP
DCIM_iDRACCardString	SNMPTrapIpv6.DestIP v6Addr	ENUMERA TE, GET	Login	LM_IPV6 & LM_SNMP
DCIM_iDRACCardEnumeration	EmailAlert.Enable	ENUMERA TE, GET	Login	LM_EMAIL_ALERTING
DCIM_iDRACCardString	EmailAlert.Address	ENUMERA TE, GET	Login	LM_EMAIL_ALERTING
DCIM_iDRACCardString	EmailAlert.CustomMsg	ENUMERA TE, GET	Login	LM_EMAIL_ALERTING
DCIM_iDRACCardEnumeration	SNMP.AgentEnable	ENUMERA TE, GET	Login	LM_SNMP
DCIM_iDRACCardString	SNMP.AgentCommunit y	ENUMERA TE, GET	Login	LM_SNMP
DCIM_iDRACCardEnumeration	IPBlocking.RangeEnab le	ENUMERA TE, GET	Login	LM_SECURITY_LOCKO UT
DCIM_iDRACCardString	IPBlocking.RangeAddr	ENUMERA TE, GET	Login	LM_SECURITY_LOCKO UT
DCIM_iDRACCardString	IPBlocking.RangeMask	ENUMERA TE, GET	Login	LM_SECURITY_LOCKO UT

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardEnumeration	IPBlocking.BlockEnable	ENUMERATE, GET	Login	LM_SECURITY_LOCKOUT
DCIM_iDRACCardInteger	IPBlocking.FailCount	ENUMERATE, GET	Login	LM_SECURITY_LOCKOUT
DCIM_iDRACCardInteger	IPBlocking.FailWindow	ENUMERATE, GET	Login	LM_SECURITY_LOCKOUT
DCIM_iDRACCardInteger	IPBlocking.PenaltyTime	ENUMERATE, GET	Login	LM_SECURITY_LOCKOUT
DCIM_iDRACCardEnumeration	SysLog.SyslogEnable	ENUMERATE, GET	Login	LM_REMOTE_SYSLOG
DCIM_iDRACCardString	SysLog.Port	ENUMERATE, GET	Login	LM_REMOTE_SYSLOG
DCIM_iDRACCardString	SysLog.Server1	ENUMERATE, GET	Login	LM_REMOTE_SYSLOG
DCIM_iDRACCardString	SysLog.Server2	ENUMERATE, GET	Login	LM_REMOTE_SYSLOG
DCIM_iDRACCardString	SysLog.Server3	ENUMERATE, GET	Login	LM_REMOTE_SYSLOG
DCIM_iDRACCardString	Users.UserName	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardString	Users.Password	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardEnumeration	Users.IpmiLanPrivilege	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardEnumeration	Users.IpmiSerialPrivilege	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardEnumeration	Users.Enable	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardEnumeration	Users.SolEnable	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardInteger	Users.Privilege	ENUMERATE, GET	Login	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardEnumeration	AD.Enable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.RacName	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.RacDomain	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardInteger	AD.AuthTimeout	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.Schema	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.DomainController1	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.DomainController2	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.DomainController3	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardString	AD.GlobalCatalog1	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.GlobalCatalog2	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.GlobalCatalog3	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.CertValidationEnable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.SSOEnable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.DCLookupEnable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.DCLookupByUserDomain	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.DCLookupDomainName	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	AD.GCLookupEnable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	AD.GCRootDomain	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	LDAP.Enable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.Server	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardInteger	LDAP.Port	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.BaseDN	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.UserAttribute	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.GroupAttribute	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	LDAP.GroupAttributesDN	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.BindDN	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.BindPassword	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAP.SearchFilter	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	LDAP.CertValidationEnable	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardString	LDAPRoleGroup.DN	ENUMERATE, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardInteger	LDAPRoleGroup.Privilege	ENUMERATE	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	SmartCard.SmartCardLogonEnable	ENUMERATE, GET	Login	LM_TWO_FACTOR_AUTH

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardEnumeration	SmartCard.SmartCard CRLEnable	ENUMERA TE, GET	Login	LM_TWO_FACTOR_AU THEN
DCIM_iDRACCardEnumeration	VirtualMedia.Attached	ENUMERA TE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.BootOnce	ENUMERA TE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.FloppyEm ulation	ENUMERA TE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.Encryptio nEnable	ENUMERA TE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualConsole.Enable	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardString	VirtualConsole.Encrypt Enable	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VirtualConsole.LocalVi deo	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VirtualConsole.PluginT ype	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.MaxSe ssions	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.Port	ENUMERA TE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.Timeou t	ENUMERA TE, GET	Login	LM_VCONSOLE

## ANNEX A (Informative)

### Privilege Information

The following annex describes the mapping for iDRAC privileges. The integer value returned for the privilege represents a bit mask, where each bit represents a specific privilege. If a particular bit is set, then the corresponding privilege exists. Table 104 represents the bitmask mapping to the iDRAC privileges.

**Table 104 – Privilege Bit Mask**

Bit	Privilege
1	Login
2	Configure
3	Configure Users
4	Logs
5	System Control
6	Access Virtual Console
7	Access Virtual Media
8	System Operations
9	Debug

For example, a privilege value equal to decimal 91 can be arithmetically decoded into the appropriate privileges:

- $91 \text{ mod } 2 = 1$ , then Login privilege exists.
- $91 \text{ div } 2 = 45$ ,  $45 \text{ mod } 2 = 1$ , then Configure privilege exists.
- $45 \text{ div } 2 = 22$ ,  $22 \text{ mod } 2 = 0$ , then Configure Users privilege does not exist.
- $22 \text{ div } 2 = 11$ ,  $11 \text{ mod } 2 = 1$ , then Logs privilege exists.
- $11 \text{ div } 2 = 5$ ,  $5 \text{ mod } 2 = 1$ , then System Control privilege exists.
- $5 \text{ div } 2 = 2$ ,  $2 \text{ mod } 2 = 0$ , then Access Virtual Console privilege does not exist.
- $2 \text{ div } 2 = 1$ ,  $1 \text{ mod } 2 = 1$ , then Access Virtual Media privilege exists.

The same privilege value of decimal 91 can be decoded through binary operations:

- $91 \text{ and } 1 = 1$ , then Login privilege exists.
- $91 \text{ and } 2 = 2$ , then Configure privilege exists.
- $91 \text{ and } 4 = 0$ , then Configure Users privilege does not exist.
- $91 \text{ and } 8 = 8$ , then Logs privilege exists.
- $91 \text{ and } 16 = 16$ , then System Control privilege exists.
- $91 \text{ and } 32 = 0$ , then Access Virtual Console privilege does not exist.
- $91 \text{ and } 64 = 64$ , then Access Virtual Media privilege exists.