

iDRAC Card Profile

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1 Scope

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

2 Normative References

Refer to the following documents for more information.

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

- DMTF DSP1033, *Profile Registration Profile 1.0.0*
- DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*
- DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*
- *Dell Lifecycle Controller Best Practices Guide v1.0*, <link TBD>
- *Intelligent Platform Management Interface Specification v2.0*,
http://download.intel.com/design/servers/ipmi/IPMIV2_0rev1_0.pdf
- Dell Tech Center MOF Library:
 - <http://www.delltechcenter.com/page/DCIM.Library.MOF>
- Related Managed Object Format (MOF) files:
 - DCIM_iDRACCardView.mof
 - DCIM_iDRACCardAttribute.mof
 - DCIM_iDRACCardInteger.mof
 - DCIM_iDRACCardService.mof
 - DCIM_iDRACCardEnumeration.mof
 - DCIM_iDRACCardString.mof
 - DCIM_LCElementConformsToProfile.mof
 - DCIM_LCRegisteredProfile.mof

256 **3 Terms and Definitions**

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

258 **3.1**

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

260 **3.2**

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

262 **3.3**

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

265 **3.4**

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

268 **3.5**

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

270 **3.6**

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

272 **3.7**

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

274 **3.8**

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

277 **3.9**

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

280 **3.10**

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

283 **3.11**

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

286 **3.12**

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

288 **3.13**
289 **Interop Namespace: root/interop**
290 Interop Namespace: root/interop is where instrumentation instantiates classes to advertise its capabilities
291 for client discovery.

292 **3.14**
293 **Implementation Namespace: root/dcim**
294 Implementation Namespace: root/dcim is where instrumentation instantiates classes relevant to executing
295 core management tasks.

296 **3.15**
297 **ENUMERATE** – Refers to WS-MAN **ENUMERATE** operation as described in Section 8.2 of
298 **DSP0226_V1.1** and Section 9.1 of **DSP0227_V1.0**

299 **3.16**
300 **GET** – Refers to WS-MAN **GET** operation as defined in Section 7.3 of **DSP00226_V1.1** and Section
301 7.1 of **DSP0227_V1.0**

302 **4 Symbols and Abbreviated Terms**

303 **4.1**
304 **CIM** - Common Information Model

305 **4.2**
306 **iDRAC** - Integrated Dell Remote Access Controller – management controller for blades and monolithic
307 servers

308 **4.3**
309 **CMC** - Chassis Manager Controller – management controller for the modular chassis

310 **4.4**
311 **WBEM** - Web-Based Enterprise Management

312 **4.5**
313 **SSO** - Single Sign On

314 **4.6**
315 **CSR** - Certificate Signing Request

316
317
318

5 Synopsis

Profile Name: iDRAC Card

Version: 1.3.0

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.

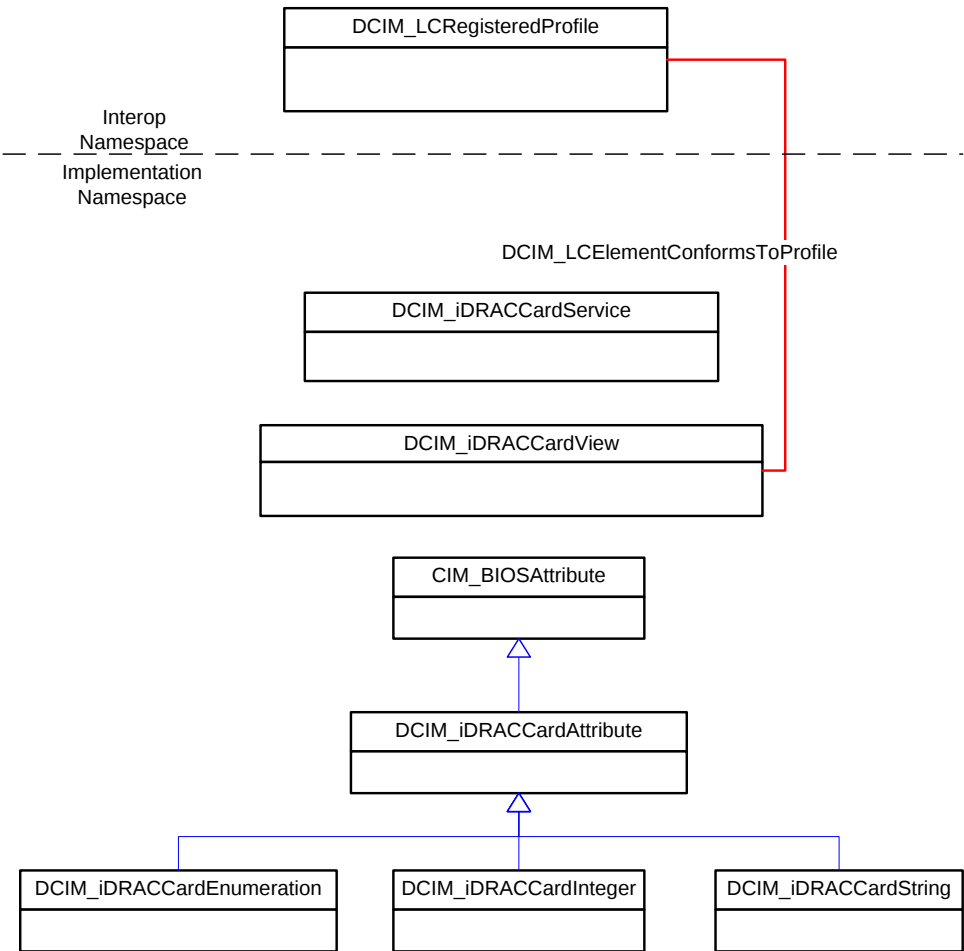


Figure 1 – iDRAC Card Profile Implementation

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
Classes		
DCIM_iDRACCardView	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.1.
DCIM_iDRACCardEnumeration	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.2 and 7.5.
DCIM_iDRACCardString	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3 and 7.5.
DCIM_iDRACCardInteger	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.4 and 7.5.
DCIM_iDRACCardService	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . 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> . See section 7.7.
Indications		
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.
DeviceDescription	Mandatory	string	A string containing the friendly Fully Qualified Device Description, a property that describes the device and its location
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.
DNSRacName	Mandatory	string	A string containing the host name for the iDRAC.
DNSDomainName	Mandatory	string	A string containing the domain name for the iDRAC.
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.SetAttributte()	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 NULL.
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 NULL.
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.

419 **7.4 DCIM_iDRACCardInteger**

420 This section describes the implementation for the DCIM_iDRACCardInteger class.

421 Each DCIM_iDRACCardInteger instance is logically associated to a DCIM_iDRACCardView instance,
 422 where the DCIM_iDRACCardInteger.FQDD property is equal to the FQDD property on the
 423 DCIM_iDRACCardView instance.

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

425 **7.4.1 Resource URIs for WinRM®**

426 The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-
 427 schema/2/DCIM_iDRACCardInteger?__cimnamespace=root/dcim”

428 The key property shall be the InstanceID.

429 The instance Resource URI for DCIM_iDRACCardInteger instance shall be:

430 “http://schemas.dell.com/wbem/wscim/1/cim-

431 schema/2/DCIM_iDRACCardInteger?__cimnamespace=root/dcim+InstanceID=<FQDD>#<GroupID>#<At-
432 tributeName>”

433 7.4.2 Operations

434 The following table lists the implemented operations on DCIM_iDRACCardInteger.

435 **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

436

437 7.4.3 Class Properties

438 The following table details the implemented properties for DCIM_iDRACCardInteger instance
439 representing a iDRAC integer attribute. The “Requirements” column shall denote whether the property is
440 implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall
441 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 NULL.
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.

444 7.5 iDRAC Attributes

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

446 7.5.1 Active Directory

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

448 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
449 DCIM_iDRACCardInteger shall be “ActiveDirectory.1”.

450 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
 451 DCIM_iDRACCardInteger shall be "Active Directory".

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

457 **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"

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

462 **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
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.

Table 15 – DCIM_iDRACCardInteger AD Group Configuration

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

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

7.5.3 Email Alert

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

The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "EmailAlert.<#>" where <#> is a number 1 through 4.

The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "RAC Email Alert".

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 16 – DCIM_iDRACCardEnumeration RAC Email Alert

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

527

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"

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

532

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

533 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
 534 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
 535 values for the properties listed in the column headings.

536

Table 22 – DCIM_iDRACCardInteger IP Blocking

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

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

539 7.5.6 IPMI LAN

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

541 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
 542 DCIM_iDRACCardInteger shall be "IPMILan.1".

543 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
 544 DCIM_iDRACCardInteger shall be "IPMI LAN Information".

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

550

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"

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

555

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

556 7.5.7 IPMI Serial

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

558 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
559 DCIM_iDRACCardInteger shall be "IPMISerial.1".

560 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
561 DCIM_iDRACCardInteger shall be "RAC IPMI Serial".

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

567

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 ¹	IPMI Serial Delete Control	FALSE	626	"Disabled", "Enabled"

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
EchoControl ²	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 ¹	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.

609 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
610 DCIM_iDRACCardInteger shall be "IPv6.1".

611 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
612 DCIM_iDRACCardInteger shall be "IPv6 Information".

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

618

619 **Table 30 – DCIM_iDRACCardEnumeration IPv6 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	IPV6 Enable	FALSE	151	"Disabled", "Enabled"
AutoConfig ¹	IPV6 Auto Config	FALSE	152	"Disabled", "Enabled"
DNSFromDHCP6	DNS Server From DHCP6	FALSE	153	"Disabled", "Enabled"

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

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

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628 **Table 31 – DCIM_iDRACCardString IPv6 Information**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
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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	TRUE	160	0	255

637

638 7.5.11 LDAP

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

640 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
641 DCIM_iDRACCardInteger shall be "LDAP.1".

642 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
643 DCIM_iDRACCardInteger shall be "LDAP".

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

649 **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"

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

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660 **Table 34 – DCIM_iDRACCardString LDAP**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Server	LDAP Server	FALSE	1082	0	1024
BaseDN ¹	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 ²	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

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

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

664 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
665 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
666 values for the properties listed in the column headings.

667 **Table 35 – DCIM_iDRACCardInteger LDAP**

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

668 7.5.12 LDAP Group

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

670 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
671 DCIM_iDRACCardInteger shall be "LDAPRoleGroup.<#>" where <#> is a number 1 through 5.

672 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
673 DCIM_iDRACCardInteger shall be "LDAP Group".

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

678 **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

679 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
680 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
681 values for the properties listed in the column headings.

682 **Table 37 – DCIM_iDRACCardInteger LDAP Group**

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

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

684 7.5.13 Local Security

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

686 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
687 DCIM_iDRACCardInteger shall be "LocalSecurity.1".

688 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
689 DCIM_iDRACCardInteger shall be "Local Security".

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

695 **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"

696 7.5.14 NIC Information

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

698 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
699 DCIM_iDRACCardInteger shall be "NIC.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "NIC 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 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"
DHCPConfiguration	DHCP Configuration enable	FALSE	69	"Disabled", "Enable Once", "Enable Once After Reset", "Enable Always"
VLANenable	Enable VLAN	FALSE	63	"Disabled", "Enabled"
AutoDetect	Auto NIC Enable	FALSE	66	"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 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

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 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
DedicatedNICScanTime	Shared to Dedicated Failover Timeout	FALSE	67	5	255
SharedNICScanTime	Dedicated to Shared Failover Timeout	FALSE	68	5	255

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"
PTCapability	OSBMC Pass Through Capability	TRUE	1240	"Not Capable", "Capable", "Unavailable"
PTMode	OS-BMC PT Mode	FALSE	1244	lom-p2p, usb-p2p

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 43 – DCIM_iDRACCardString OS-BMC Passthru Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
OsIpAddress	OS-BMC PT iDRAC PT Endpoint IP Address	FALSE	1243	0	16

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 44 – 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 45 – 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 46 – DCIM_iDRACCardString RAC Remote Hosts

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

Table 47 – DCIM_iDRACCardInteger RAC Remote Hosts

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
SMTPPort	SMTP Port	FALSE	542	1	65535

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 47 – DCIM_iDRACCardEnumeration RAC Certificate

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 48 – DCIM_iDRACCardString RAC Certificate

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
CsrCommonName	CSR Common Name	FALSE	761	0	254
CsrOrganizationName	CSR Organization	FALSE	762	0	254

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
	Name				
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 49 – 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
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 51 – DCIM_iDRACCardString Serial Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Command ¹	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 52– 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 53 – DCIM_iDRACCardEnumeration RAC Serial Redirection

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 50 – 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 51 – 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.

Table 52 – DCIM_iDRACCardEnumeration SNMP Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
AgentEnable	SNMP Agent Enable	FALSE	701	“Disabled”, “Enabled”
TrapFormat	SNMP Trap Format	FALSE	703	“SNMPv1”, “SNMPv2”
SNMPProtocol	SNMP Protocol	FALSE	704	“All”, “SNMPv3”

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 53 – DCIM_iDRACCardString SNMP Configuration

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

861
862
863
864

Table 58 – DCIM_iDRACCardInteger SNMP Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
AlertPort	Alert Port	FALSE	706	1	65535
DiscoveryPort	Discovery Port	FALSE	705	1	65535

865

866 7.5.23 SNMP Alert Destination¹

867 This section describes the attributes for iDRAC's SNMP Alert Destination configuration.

868 The GroupID property for the DCIM_iDRACCardEnumeration and DCIM_iDRACCardString shall be
869 "SNMPAlert.<#>" where <#> is a number from 1 to 8.

870 The GroupDisplayName property for the DCIM_iDRACCardEnumeration and DCIM_iDRACCardString
871 shall be "SNMP Alert Destination".

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

877

878 **Table 54 – DCIM_iDRACCardEnumeration SNMP Alert Destination**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
State	State	FALSE	1602, 1604, 1606, 1608, 1610, 1612, 1614, 1616	"Disabled", "Enabled"

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

883 **Table 60 – DCIM_iDRACCardString SNMP Alert Destination**

AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
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AttributeName	Attribute Description	IsReadOnly	Display Order	MinLength	MaxLength
Destination ²	Alert Destination	FALSE	1601, 1603, 1605, 1607, 1609, 1611, 1613, 1615	0	255

884

885 NOTE: 1 - These attributes are in lieu of the SNMP Trap IPv4 and SNMP Trap IPv6 attributes. Although the SNMP
886 Trap IPv4 and SNMP Trap IPv6 attributes are deprecated, they shall still be functional for backwards compatibility.
887 The SNMPTrapIPv4.1 through SNMPTrapIPv4.4 attributes shall be mapped to this group's SNMPAlert.1 through
888 SNMPAlert.4 attributes, and the SNMPTrapIPv6.1 through SNMPTrapIPv6.4 attributes shall be mapped to this
889 group's SNMPAlert.5 through SNMPAlert.8 attributes.

890 NOTE: 2 - The attribute value, the CurrentValue and PendingValue properties, may be an IPv4 address, an IPv6
891 address or a fully qualified domain name (FQDN).

892 7.5.24 RAC SSH

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

894 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
895 DCIM_iDRACCardInteger shall be "SSH.1".

896 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
897 DCIM_iDRACCardInteger shall be "RAC SSH".

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

903 **Table 61 – DCIM_iDRACCardEnumeration RAC SSH**

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

904 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
905 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
906 values for the properties listed in the column headings.

907 **Table 55 – DCIM_iDRACCardInteger RAC SSH**

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

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

7.5.25 RAC Telnet

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

The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "Telnet.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "Telnet 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 63– DCIM_iDRACCardEnumeration Telnet Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	551	"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 56 – DCIM_iDRACCardInteger Telnet Configuration

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

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

7.5.26 Sys Log

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

The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "SysLog.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "Sys Log".

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 65 – DCIM_iDRACCardEnumeration Sys Log

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
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AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
SysLogEnable	Sys Log Enable	FALSE	1071	"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 66 – 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

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 67– DCIM_iDRACCardInteger Sys Log

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

7.5.27 iDRAC Firmware Update

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

The GroupID property for the DCIM_iDRACCardEnumeration and DCIM_iDRACCardString shall be "Update.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration and DCIM_iDRACCardString shall be "Firmware Update".

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 57 – DCIM_iDRACCardEnumeration Update

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

964 column contains constraints on string value formulation. Each row contains the values for the properties
965 listed in the column headings.

966 **Table 58 – 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

967

968 7.5.28 User Domain

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

970 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
971 DCIM_iDRACCardInteger shall be "UserDomain.<#>" where "<#>" is a number 1 through 40.

972 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
973 DCIM_iDRACCardInteger shall be "User Domain".

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

978 **Table 70 – DCIM_iDRACCardString User Domain**

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

979

980 7.5.29 iDRAC Users

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

982 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
983 DCIM_iDRACCardInteger shall be "Users.<#>" where "<#>" is a number from 1 to 16.

984 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
985 DCIM_iDRACCardInteger shall be "iDRAC Users".

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

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992

993

Table 71 – DCIM_iDRACCardEnumeration Users

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
IpmlanPrivilege	User Admin IPMI LAN Privilege	FALSE ¹	254, 264, ... , 404	User, Operator, Administrator, No Access
IpmiSerialPrivilege	User Admin IPMI Serial Privilege	FALSE ¹	255, 265, ... , 405	User, Operator, Administrator, No Access
Enable	User Admin Enable	FALSE ¹	256, 266, ... , 406	"Disabled", "Enabled"
SolEnable	User Admin SOL Enable	FALSE ¹	257, 267, ... , 407	"Disabled", "Enabled"
ProtocolEnable	SNMP V3 Protocol Enable	FALSE ¹	258,268 ,278,..., 408	"Disabled", "Enabled"
AuthenticationProtocol	SNMP V3 Authentication Protocol	FALSE ¹	259,269 ,279,..., 409	"None" "MD5" "SHA"
PrivacyProtocol	SNMP V3 Privacy Protocol	FALSE ¹	260,270 ,280,..., 410	"None" "DES" "AES"

994 NOTE: 1 – IpmlanPrivilege, IpmiSerialPrivilege, Enable, SolEnable, ProtocolEnable, AuthenticationProtocol and
 995 PrivacyProtocol attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the attribute is
 996 settable.

997 The following table describes the values for the DCIM_iDRACCardString of this group. Each column
 998 heading corresponds to a property name on the DCIM_iDRACCardString class. The Value Expression
 999 column contains constraints on string value formulation. Each row contains the values for the properties
 1000 listed in the column headings.

1001

Table 59 – DCIM_iDRACCardString iDRAC Users

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

1002 NOTE: 1 – UserName attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the
 1003 attribute is settable.

1004 NOTE: 2 – Password attribute is write-only, and thus its value is never returned in the CurrentValue, PendingValue,
 1005 and DefaultValue properties.

1006 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
 1007 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
 1008 values for the properties listed in the column headings.

1009

1010

Table 73 – DCIM_iDRACCardInteger iDRAC Users

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

1011 NOTE: 1 – Privilege attribute for Users.1 GroupID is Read-Only, but for the GroupID Users.2 to Users.16, the
 1012 attribute is settable.

1013 NOTE: 3 – See ANNEX A for information on mapping into iDRAC privileges.

1014 7.5.30 Virtual Console Configuration

1015 This section describes the attributes for iDRAC's Virtual Console Configuration.

1016 The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
 1017 DCIM_iDRACCardInteger shall be "VirtualConsole.1".

1018 The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and
 1019 DCIM_iDRACCardInteger shall be "Virtual Console Configuration".

1020 The following table describes the values for the DCIM_iDRACCardEnumeration of this group. Each
 1021 column heading corresponds to a property name on the DCIM_iDRACCardEnumeration class. The
 1022 Description column contains the description for each of the attribute. Each row contains the values for the
 1023 properties listed in the column headings. The PossibleValues property is an array property represented in
 1024 the table as comma delimited list.

1025 **Table 60 – DCIM_iDRACCardEnumeration Virtual Console Configuration**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	581	"Disabled", "Enabled"
LocalVideo	Local Video	FALSE	583	"Disabled", "Enabled"
PluginType	Plugin Type	FALSE	584	"Active X", "Java"
EncryptEnable	Encrypt Enable	FALSE	582	"None", "AES"
AccessPrivilege	Default action upon session sharing request timeout	FALSE	588	"Deny Access", "Read Only Access", "Full Access"

1026 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
 1027 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
 1028 values for the properties listed in the column headings.

1029 **Table 61 – DCIM_iDRACCardInteger Virtual Console Configuration**

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

1030 NOTE: 1 – Timeout in seconds.

7.5.31 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 62 – 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"

7.5.32 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 77 – 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 63 – 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

7.5.33 Time Zone Configuration

This section describes the attributes for iDRAC's Time Zone 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 64 – DCIM_iDRACCardInteger Time Zone Configuration Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
TimeZoneOffset	Tune Time Zone Offset	FALSE	751	0	46800
DaylightOffset	Tune Day Light Offset	FALSE	752	0	60

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 80– DCIM_iDRACCardString Time Zone Configuration Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
TimeZone	Time Zone String	FALSE	753	0	32

The time zone string would be what is supported by Linux (/usr/share/zoneinfo)

7.5.34 NTP Configuration

This section describes the attributes for iDRAC's NTP Configuration

The GroupID property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "NTPConfigGroup.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration, DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "NTP Configuration 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 81– DCIM_iDRACCardString NTP Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
NTP1	NTP Server 1	FALSE	2001	0	254
NTP2	NTP Server 2	FALSE	2002	0	254
NTP3	NTP Server 3	FALSE	2003	0	254

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 82 – DCIM_iDRACCardEnumeration NTP Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
NTPEnable	NTP Enable	FALSE	2000	"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. 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 83 – DCIM_iDRACCardInteger NTP Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	Lower Bound	Upper Bound
NTPMaxDist	NTP Maximum Distance	FALSE	2005	1	128

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 65 – 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”

7.5.36 NIC Static Information

This section describes the attributes for iDRAC’s NIC Static Configuration.

The GroupID property for the DCIM_iDRACCardString shall be “NICStatic.1”.

The GroupDisplayName property for the DCIM_iDRACCardString shall be “NIC Static 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 85– DCIM_iDRACCardString NIC Static Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
DNSDomainName	DNS Domain Name	FALSE	182	0	254

7.5.37 IPv4 Static Information

This section describes the attributes for iDRAC’s IPv4 Static Information.

The GroupID property for the DCIM_iDRACCardString shall be “Pv4Static.1”.

The GroupDisplayName property for the DCIM_iDRACCardString shall be “IPv4 Static 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 86– DCIM_iDRACCardString IPv4 Static Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Address	IPv4 Address	FALSE	183	0	16
Netmask	Net Mask	FALSE	184	0	16
Gateway	Gateway	FALSE	185	0	16

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
DNS1	DNS Server 1	FALSE	186	0	16
DNS2	DNS Server 2	FALSE	187	0	16

7.5.38 IPv6 Static Information

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

The GroupID property for the DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "IPv6Static.1".

The GroupDisplayName property for the DCIM_iDRACCardString, and DCIM_iDRACCardInteger shall be "IPv6 Static 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 87 – DCIM_iDRACCardString IPv6 Static Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Address1	IPv6 Address 1	FALSE	188	0	63
Gateway	IPv6 Gateway	FALSE	189	0	63
DNS1	IPv6 DNS Server1	FALSE	191	0	63
DNS2	IPv6 DNS Server2	FALSE	192	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 66 – DCIM_iDRACCardInteger IPv6 Static Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
PrefixLength	IPv6 Link Local Prefix Length	FALSE	190	1	128

7.5.39 Default Credential Mitigation Configuration

This section describes the attributes for iDRAC's credential mitigation configuration.

The GroupID property for the DCIM_iDRACCardEnumeration shall be "DefaultCredentialMitigationConfigGroup.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration shall be "Default Credential Mitigation 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 89 – DCIM_iDRACCardEnumeration Default Credential Mitigation Configuration

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
DefaultCredentialMitigation	Default Credential Mitigation	FALSE	1700	"Enabled", "Disabled"

7.5.40 IPv6 URL Information

This section describes the attributes for iDRAC's IPv6 URL information.

The GroupID property for the DCIM_iDRACCardString shall be "IPv6URL.1".

The GroupDisplayName property for the DCIM_iDRACCardString shall be "iDRAC IPv6 URL".

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 90 – DCIM_iDRACCardString IPv6 URL Information

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
URL	IPv6 URL	TRUE	2120	0	80

7.5.41 iDRAC Logging

This section describes the attributes for iDRAC's iDRAC Logging information.

The GroupID property for the DCIM_iDRACCardEnumeration shall be "Logging.1".

The GroupDisplayName property for the DCIM_iDRACCardEnumeration shall be "iDRAC Logging".

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 91 – DCIM_iDRACCardEnumeration iDRAC Logging

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
SELOEMEventFilterEnable	SEL OEM Event Filter Enable	FALSE	2130	"Disabled", "Enabled"

7.5.42 IO Identity Optimization

This section describes the attributes for iDRAC's IO Identity Optimization

1180 The GroupID property for the DCIM_iDRACCardEnumeration shall be "IOIDOpt.1".

1181 The GroupDisplayName property for the DCIM_iDRACCardEnumeration shall be "IO Identity
1182 Optimization".

1183 The following table describes the values for the DCIM_iDRACCardEnumeration of this group. Each
1184 column heading corresponds to a property name on the DCIM_iDRACCardEnumeration class. The
1185 Description column contains the description for each of the attribute. Each row contains the values for the
1186 properties listed in the column headings. The PossibleValues property is an array property represented in
1187 the table as comma delimited list.

1188 **Table 92 – DCIM_iDRACCardEnumeration iDRAC Logging**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
IOIDOptEnable	IOIDOpt Enable	FALSE	2140	"Disabled","Enabled"

1189

1190 **7.5.43 VNC Server**

1191 This section describes the attributes for iDRAC's VNC Server

1192 The GroupID property for the DCIM_iDRACCardEnumeration shall be "VNCServer.1".

1193 The GroupDisplayName property for the DCIM_iDRACCardEnumeration shall be "RAC VNC Server".

1194 The following table describes the values for the DCIM_iDRACCardEnumeration of this group. Each
1195 column heading corresponds to a property name on the DCIM_iDRACCardEnumeration class. The
1196 Description column contains the description for each of the attribute. Each row contains the values for the
1197 properties listed in the column headings. The PossibleValues property is an array property represented in
1198 the table as comma delimited list.

1199 **Table 93 – DCIM_iDRACCardEnumeration VNC Server**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	PossibleValues
Enable	Enable	FALSE	2162	"Disabled","Enabled"
LowerEncryptionBitLength	Lower Encryption Bit Length	FALSE	2165	"Disabled","Enabled" (note 1)

1200

1201 The following table describes the values for the DCIM_iDRACCardString of this group. Each column
1202 heading corresponds to a property name on the DCIM_iDRACCardString class. The Value Expression
1203 column contains constraints on string value formulation. Each row contains the values for the properties
1204 listed in the column headings.

1205 **Table 94 – DCIM_iDRACCardString VNC Server**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
Password	Password	FALSE	2163	0	9

1206 The following table describes the values for the DCIM_iDRACCardInteger of this group. Each column
 1207 heading corresponds to a property name on the DCIM_iDRACCardInteger class. Each row contains the
 1208 values for the properties listed in the column headings.

1209 **Table 95 – DCIM_iDRACCardInteger VNC Server**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	LowerBound	UpperBound
Port	Port	FALSE	2164	1024	65535
Timeout	Timeout	FALSE	2166	60	10800

1210 7.5.44 ServiceModule

1211 This section describes the attributes for ServiceModule on host machine

1212 The GroupID property for the DCIM_iDRACCardEnumeration shall be “ServiceModule.1”

1213 The GroupDisplayName property for the DCIM_iDRACCardEnumeration shall be “ServiceModule”.

1214 The following table describes the values for the DCIM_iDRACCardEnumeration of this group. Each
 1215 column heading corresponds to a property name on the DCIM_iDRACCardEnumeration class. The
 1216 Description column contains the description for each of the attribute. Each row contains the values for the
 1217 properties listed in the column headings. The PossibleValues property is an array property represented in
 1218 the table as comma delimited list.

1219 **Table 96 – DCIM_iDRACCardEnumeration ServiceModule**

[1] AttributeName	AttributeDisplayName	Display Order	IsReadO nly	PossibleValues
OSInfo	Sharing of OS Information via ServiceModule	2151	FALSE	0 – “Disabled” 1 – “Enabled” Default: 1
WatchdogState	Watchdog timer via ServiceModule	2160	FALSE	0 – “Disabled” 1 – “Enabled” Default: 0
WatchdogRecoveryActi on	Recovery action on watchdog alert	2154	FALSE	0 – none; 1 – reboot; 2 – poweroff; 3 – powercycle Default:None The value cannot be set if WatchdogState is Disabled
SNMPOnHostOS (Not Supported in Espada 1.4)	SNMP forwarding on the host		FALSE	0 – “Disabled” 1 – “Enabled” Default: 0

LCLReplication	LCL replication in OS Log	2156	FALSE	0 – “Disabled” 1 – “Enabled” Default: 0 This value of this object will be automatically set to disabled if OMSA is detected. An attempt to enable it when OMSA is detected will return an appropriate error.
WMIInfo (Not Supported in Espada 1.4)	Populate WMI information via ServiceModule		FALSE	0 – “Disabled” 1 – “Enabled” Default: 0
ServiceModuleEnable	ServiceModuleEnable	2159	FALSE	0 – “Disabled” 1-“Enabled” Default: 1
ServiceModuleState	ServiceModule service state on host	2160	TRUE	0 – Not Installed; 1 – Installed But Not Running; 2- Installed and Running Default:0-Not Installed
OMSAPresence	OMSA Presence on Host	2150	True	Default: 1 – Present 0-Not Present

1220 The following table describes the values for the DCIM_iDRACCardString of this group. Each column
1221 heading corresponds to a property name on the DCIM_iDRACCardString class. The Value Expression
1222 column contains constraints on string value formulation. Each row contains the values for the properties
1223 listed in the column headings.

1224 **Table 97 – DCIM_iDRACCardString ServiceModule**

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
ServiceModuleVersion	Version of installed ServiceModule	True	2158	1 Default: NA Version Number	16

AttributeName	AttributeDisplayName	IsReadOnly	Display Order	MinLength	MaxLength
				if ServiceModule installed	

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 98 – DCIM_iDRACCardInteger ServiceModule

AttributeName	AttributeDisplayName	IsReadOnly	DisplayOrder	LowerBound	UpperBound
WatchdogResetTime	System reset time on watchdog alert	FALSE	2153	60 Default: 480 The value cannot be set if WatchdogState is Disabled	480

Note:ServiceModule needs to be installed on the machine's OS, in order to be able to set watchdog attributes, otherwise appropriate error message will be displayed in such cases

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 92 – 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 93 – 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_iDRACCardService")
SystemName	Mandatory	string	Key (This property value shall be "DCIM:ComputerSystem")
Name	Mandatory	string	This property shall have value of "DCIM:iDRACCardService".
ElementName	Mandatory	string	This property shall have value of ""DRAC Service".

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 67 – 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 68 – 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 "1.3.0".
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: • "LICENSED" • "NOT_LICENSED" 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 and parameters are specified in Table 70 –. Invoking the SetAttribute() method multiple times can result in the earlier requests being overwritten or lost.

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Table 69 – SetAttribute() Method: Return Code Values

Value	Description
0	Completed with no error
2	Failed

1295

Table 70 – 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: "Set CurrentValue" when the attributes current value is set. "Set PendingValue" when the attributes pending value is set.
OUT	RebootRequired	String	Returns: "Yes" if reboot is required, "No" if reboot is not required.
OUT	MessageID	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message	String	Error Message 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 71 – 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>	
RAC053	OS to iDRAC pass-through is disabled.	
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.	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	
LC062	An instance of Export or Import System Configuration is already running.	

8.2 DCIM_iDRACCardService.SetAttributes()

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

Invocation of the SetAttributes() method shall change the values of the DCIM_IDRACCardAttribute.CurrentValue or PendingValue properties that correspond to the names specified by the AttributeName parameter and the values specified by the AttributeValue parameter if the respective DCIM_IDRACCardAttribute.IsReadOnly property is FALSE. Invocation of this method when the respective DCIM_IDRACCardAttribute.IsReadOnly property is TRUE shall result in no change to the corresponding value of the DCIM_IDRACCardAttribute.CurrentValue property.

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

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

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

Table 72 – SetAttributes() Method: Return Code Values

Value	Description
0	Completed with no error
2	Failed

Table 100 – 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 CurrentValue or PendingValue property of the specified attribute will be modified.
OUT	SetResult[]	String	Returns: " Set CurrentValue" when the attributes current value is set. "Set PendingValue" when the attributes pending value is set.
OUT	RebootRequired[]	String	Returns: "Yes" if reboot is required, "No" if reboot is not required.
OUT	MessageID[]	String	Error Message ID may be used to look-up in the Dell Message registry files. For more information, see Error Message Registry.
OUT	Message[]	String	Error Message 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 101 – 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>	
RAC053	OS to iDRAC pass-through is disabled.	

MessageID (OUT parameter)	Message	MessageArguments[]
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.	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	
LC062	An instance of Export or Import System Configuration is already running.	

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1317 **8.3 DCIM_iDRACCardService.CreateTargetedConfigJob()**

1318 The CreateTargetedConfigJob() method is used to apply the pending values created by the SetAttribute
1319 and SetAttributes methods. The successful execution of this method creates a job to apply the pending
1320 attribute values.

1321 The CreateTargetedConfigJob() method supports the following optional input parameters:

- 1322 1. ScheduledStartTime: When provided in the input parameters, schedules the “configuration job”
1323 and the optional “reboot job” at the specified start time. A special value of “TIME_NOW”
1324 schedules the job(s) immediately.
- 1325 2. UntilTime: This parameter has a dependency on “ScheduledStartTime”. The
1326 “ScheduledStartTime” and “UntilTime” define a time window for scheduling the job(s). Once
1327 scheduled, jobs are executed within the time window.

1328 If CreateTargetedConfigJob() method is executed without the three optional parameters discussed above,
1329 then the configuration job is created but not scheduled. However, this configuration job can be scheduled
1330 later using the DCIM_JobService.SetupJobQueue() method from the “Job Control Profile”.
1331 DCIM_JobService.SetupJobQueue () can be executed to schedule several configuration jobs including
1332 the reboot job. See the “Job Control Profile” for more details.

1333 Return code values for the CreateTargetedConfigJob() method are specified in Table , and parameters
1334 are specified in Table .

1335 Subsequent calls to CreateTargetedConfigJob after the first CreateTargetedConfigJob results in error
1336 until the first job is completed.

1337 **Table 102 – CreateTargetedConfigJob() Method: Return Code Values**

Value	Description
2	Failed
4096	Job Created

Table 103– CreateTargetedConfigJob() Method: Parameters

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

Table 73 – 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	
RAC018	Completed with Errors	
RAC019	Job did not complete successfully.	

MessageID (OUT parameter)	Message	MessageArguments[]
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	
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	

MessageID (OUT parameter)	Message	MessageArguments[]
	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.	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	
LC062	An instance of Export or Import System Configuration is already running.	

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1342 **8.4 DCIM_iDRACCardService.DeletePendingConfiguration()**

1343 The DeletePendingConfiguration() method is used to cancel the pending values created by the
 1344 SetAttribute and SetAttributes methods. The DeletePendingConfiguration() method cancels the pending
 1345 configuration changes made before the configuration job is created with CreateTargetedConfigJob(). This
 1346 method only operates on the pending changes prior to CreateTargetedConfigJob() being called. After the
 1347 configuration job is created, the pending changes can only be canceled by calling DeleteJobQueue()
 1348 method in the Job Control profile.

1349 Return code values for the DeletePendingConfiguration() method are specified in Table , and parameters
 1350 are specified in Table .

1351 **Table 74 – DeletePendingConfiguration() Method: Return Code Values**

Value	Description
0	Success
2	Failed

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Table 75 – 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

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Table 76 – 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.	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	
LC062	An instance of Export or Import System Configuration is already running.	

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1359 **8.5 DCIM_iDRACCardService.ApplyAttributes()**

1360 The ApplyAttributes() method is used to set or change the value of a iDRAC Card attribute.

1361 NOTE: If setting numerous attributes at the same time, please make sure that WSMAN client has a timeout of at
1362 least 120 seconds.

1363 **Table 77 – ApplyAttributes() Method: Return Code Values**

Value	Description
2	Error
4096	Job Created

1364 **Table 78 – 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

1365 **Table 79 – 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
RAC053	OS to iDRAC pass-through is disabled.	
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.	
LC062	An instance of Export or Import System Configuration is already running.	

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 , and parameters are specified in Table .

Table 111 – SendTestEmailAlert() Method: Return Code Values

Value	Description
0	Completed with No Error
2	Failed

Table 112 – 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 80 – SendTestEmailAlert () Method: Standard Messages

MessageID (OUT parameter)	Message	MessageArguments[]
RAC001	The command was successful	

MessageID (OUT parameter)	Message	MessageArguments[]
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 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	

MessageID (OUT parameter)	Message	MessageArguments[]
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 <parameter name>	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	

1373

1374 **8.7 DCIM_iDRACCardService.SendTestSNMPTrap()**

1375 This method is used to to send a test snmp alert for a particular attribute.

1376 Return code values for the SendTestSNMPTrap() method are specified in Table , and parameters are
1377 specified in Table .

1378

Table 81 – SendTestSNMPTrap() Method: Return Code Values

Value	Description
0	Completed with No Error
2	Failed

1379

Table 82 – 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.

1380

Table 83 – 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	

MessageID (OUT parameter)	Message	MessageArguments[]
	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	
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>	
LIC502	Feature(s) not available.	
LIC503	A required license is missing or expired. The following features are not enabled: <features>	

1381

1382

1383 9 Use Cases

1384 See *Lifecycle Controller (LC) Integration Best Practices Guide*.

1385 10 CIM Elements

1386 No additional details specified.

1387

1388 11 Privilege and License Requirement

1389 The following table describes the privilege and license requirements for the listed operations.

1390 **Table 84 – 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, System Control	LM_REMOTE_CONFIGURATION & one of the below if shown
DCIM_iDRACCardService. SetAttribute()		INVOKE	Login, System Control	LM_REMOTE_CONFIGURATION & one of the below if shown
DCIM_iDRACCardService. SetAttributes()		INVOKE	Login, System Control	LM_REMOTE_CONFIGURATION & one of the below if shown
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.UserName	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.Password	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.IpmiLanPrivilege	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.IpmiSerialPrivilege	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.Enable	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	Users.SolEnable	INVOKE	Login, System Control, Configure Users	LM_REMOTE_CONFIGURATION

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, System Control, Configure Users	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	RemoteHosts.SMTP Port	INVOKE	Login, System Control, Configure	LM_EMAIL_ALERTING
DCIM_iDRACCardService. CreateTargetedConfigJob()		INVOKE	Login, System Control	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. DeletePendingConfiguration()		INVOKE	Login, System Control	LM_REMOTE_CONFIGURATION
DCIM_iDRACCardService. SendTestEmailAlert()		INVOKE	Login, System Operations	LM_REMOTE_CONFIGURATION & LM_EMAIL_ALERTING
DCIM_iDRACCardService. SendTestSNMPTrap()		INVOKE	Login, System Operations	LM_REMOTE_CONFIGURATION & LM_SNMP
DCIM_LCElementConformsToProfile		ENUMERATE, GET	Login	None.
DCIM_LCRegisteredProfile		ENUMERATE, GET	Login	None.
DCIM_iDRACCardEnumeration		ENUMERATE, GET	Login	None, unless shown below
DCIM_iDRACCardInteger		ENUMERATE, GET	Login	None, unless shown below
DCIM_iDRACCardString		ENUMERATE, GET	Login	None, unless shown below
DCIM_iDRACCardEnumeration	NIC.DNSRegister	ENUMERATE, GET	Login	LM_DYNAMIC_DNS
DCIM_iDRACCardString	NIC.DNSRacName	ENUMERATE, GET	Login	LM_DYNAMIC_DNS
DCIM_iDRACCardEnumeration	NIC.AutoDetect	ENUMERATION, GET	Login	LM_DEDICATED_NIC
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	NIC.DHCPConfiguration	INVOKE	Login, System Control, Configure	LM_DHCP_CONFIGURE
DCIM_iDRACCardString	NIC. DedicatedNICScanTime	ENUMERATION, GET	Login	LM_DEDICATED_NIC

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardString	NIC. SharedNICScanTime	ENUMERA TION,GET	Login	LM_DEDICATED_NIC
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
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

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardString	IPv6.Address15	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6.Address16	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6Static.Address1	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6Static.Gateway	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6Static.DNS1	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardString	IPv6Static.DNS2	ENUMERA TE, GET	Login	LM_IPV6
DCIM_iDRACCardInteger	IPv6Static.Prefix	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_ALERTIN G
DCIM_iDRACCardString	EmailAlert.Address	ENUMERA TE, GET	Login	LM_EMAIL_ALERTIN G
DCIM_iDRACCardString	EmailAlert.CustomMsg	ENUMERA TE, GET	Login	LM_EMAIL_ALERTIN G
DCIM_iDRACCardEnumeration	SNMP.AgentEnable	ENUMERA TE, GET	Login	LM_SNMP
DCIM_iDRACCardEnumeration	SNMP.TrapFormat	ENUMERA TE, GET	Login	LM_SNMP
DCIM_iDRACCardString	SNMP.AgentCommunit y	ENUMERA TE, GET	Login	LM_SNMP
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	SNMP.AlertPort	INVOKE	Login, System Control, Configure	LM_SNMP
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	SNMP.DiscoveryPort	INVOKE	Login, System Control, Configure	LM_SNMP
DCIM_iDRACCardEnumeration	IPBlocking.RangeEnab le	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardString	IPBlocking.RangeAddr	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardString	IPBlocking.RangeMask	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardEnumeration	IPBlocking.BlockEnabl e	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardInteger	IPBlocking.FailCount	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardInteger	IPBlocking.FailWindow	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardInteger	IPBlocking.PenaltyTim e	ENUMERA TE, GET	Login	LM_SECURITY_LOCK OUT
DCIM_iDRACCardEnumeration	SysLog.SyslogEnable	ENUMERA TE, GET	Login	LM_REMOTE_SYSLO G
DCIM_iDRACCardString	SysLog.Port	ENUMERA TE, GET	Login	LM_REMOTE_SYSLO G
DCIM_iDRACCardString	SysLog.Server1	ENUMERA TE, GET	Login	LM_REMOTE_SYSLO G
DCIM_iDRACCardString	SysLog.Server2	ENUMERA TE, GET	Login	LM_REMOTE_SYSLO G
DCIM_iDRACCardString	SysLog.Server3	ENUMERA TE, GET	Login	LM_REMOTE_SYSLO G
DCIM_iDRACCardString	Users.UserName	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardString	Users.Password	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.IpmiLanPrivilege	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.IpmiSerialPrivile ge	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.Enable	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.SolEnable	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardInteger	Users.Privilege	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.AuthenticationPr otocol	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.ProtocolEnable	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	Users.PrivacyProtocol	ENUMERA TE, GET	Login	LM_REMOTE_CONFI GURATION
DCIM_iDRACCardEnumeration	AD.Enable	ENUMERA TE, GET	Login	LM_DIRECTORY_SE RVICES
DCIM_iDRACCardString	AD.RacName	ENUMERA TE, GET	Login	LM_DIRECTORY_SE RVICES
DCIM_iDRACCardString	AD.RacDomain	ENUMERA TE, GET	Login	LM_DIRECTORY_SE RVICES
DCIM_iDRACCardInteger	AD.AuthTimeout	ENUMERA TE, GET	Login	LM_DIRECTORY_SE RVICES

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
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
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

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
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, GET	Login	LM_DIRECTORY_SERVICES
DCIM_iDRACCardEnumeration	SmartCard.SmartCardLogonEnable	ENUMERATE, GET	Login	LM_TWO_FACTOR_AUTHEN
DCIM_iDRACCardEnumeration	SmartCard.SmartCardCRLEnable	ENUMERATE, GET	Login	LM_TWO_FACTOR_AUTHEN
DCIM_iDRACCardEnumeration	VirtualMedia.Attached	ENUMERATE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.BootOnce	ENUMERATE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.FloppyEmulation	ENUMERATE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualMedia.EncryptionEnable	ENUMERATE, GET	Login	LM_VMEDIA
DCIM_iDRACCardEnumeration	VirtualConsole.Enable	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardString	VirtualConsole.EncryptEnable	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VirtualConsole.LocalVideo	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VirtualConsole.PluginType	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.MaxSessions	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.Port	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VirtualConsole.Timeout	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VNCServer.Port	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardInteger	VNCServer.Timeout	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardString	VNCServer.Password	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VNCServer.Enable	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardEnumeration	VNCServer.LowerEncryptionBitLength	ENUMERATE, GET	Login	LM_VCONSOLE
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	VNCServer. Port	INVOKE	Login, System Control, Configure	LM_VCONSOLE

Class and Method	Instance (GroupID.Attribute Name)	Operation	Required User Privilege	Required License
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	VNCServer.Timeout	INVOKE	Login, System Control, Configure	LM_VCONSOLE
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	VNCServer.Password	INVOKE	Login, System Control, Configure	LM_VCONSOLE
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	VNCServer.Enable	INVOKE	Login, System Control, Configure	LM_VCONSOLE
DCIM_iDRACCardService. SetAttribute(); DCIM_iDRACCardService. SetAttributes(); DCIM_iDRACCardService. ApplyAttributes()	VNCServer. LowerEncryptionBitLen gth	INVOKE	Login, System Control, Configure	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 represents the bitmask mapping to the iDRAC privileges.

Table 85 – 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.

ANNEX B (informative)

Change Log

Version	Date	Description
1.3.0		Added IPv4 Static Information and IPv6 Static Information attribute groups. Added Default Credential Mitigation Configuration attribute group. Added LC062 error message to the SetAttribute(), SetAttributes(), CreateTargetedConfigJob(), DeletePendingConfiguration(), and ApplyAttributes() methods. Replaced SNMP Trap IPv4 and SNMP Trap IPv6 with generic SNMP Trap Destination attribute group that takes both IPv4 and IPv6 addresses as well as FQDNs.
1.3.0	6/25/2012	Corrected "Default Credential Mitigation Configuration".
1.3.1	09/06/2013	Minor Changes