

# Role Based Authorization Profile



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# 1 Scope

The Dell Role Based Authorization Profile describes the properties and interfaces for executing system management tasks related to the authorization. The profile standardizes and aggregates the description for the platform's basic properties into a system view representation and provides static methodology for the clients to query the system views 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 DSP1039, *Role Based Authorization Profile 1.0.0*
- 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 1.0*,  
[http://en.community.dell.com/techcenter/extras/m/white\\_papers/20066173.aspx](http://en.community.dell.com/techcenter/extras/m/white_papers/20066173.aspx)
- *Dell WSMAN Licenses and Privileges 1.0*
- Dell Tech Center MOF Library:  
<http://www.delltechcenter.com/page/DCIM.Library.MOF>
- Related Managed Object Format (MOF) files:
  - DCIM\_LocalRolePrivilege.mof
  - DCIM\_CLPPrivilege.mof
  - DCIM\_Role.mof
  - DCIM\_IPMIRole.mof
  - DCIM\_IPMISOLRole.mof
  - DCIM\_CLPRole.mof
  - DCIM\_LocalRoleBasedAuthorizationService.mof
  - DCIM\_IPMIRoleBasedAuthorizationService.mof
  - DCIM\_CLPRoleBasedAuthorizationService.mof
  - DCIM\_LocalRoleBasedManagementCapabilities.mof
  - DCIM\_IPMIRoleBasedManagementCapabilities.mof
  - DCIM\_CLPRoleBasedManagementCapabilities.mof
  - DCIM\_LocalRBAElementCapabilities.mof
  - DCIM\_IPMIRBAElementCapabilities.mof
  - DCIM\_CLPRBAElementCapabilities.mof
  - DCIM\_LocalPrivilegeMemberOfCollection.mof
  - DCIM\_IPMIRBAIdentityMemberOfCollection.mof
  - DCIM\_IPMISOLRBAIdentityMemberOfCollection.mof
  - DCIM\_CLPRBAIdentityMemberOfCollection.mof
  - DCIM\_CLPPrivilegeMemberOfCollection.mof
  - DCIM\_RBAOwningCollectionElement.mof
  - DCIM\_LocalRoleConcreteDependency.mof
  - DCIM\_IPMIRBAServiceAffectsElementRole.mof
  - DCIM\_LocalRBAServiceAffectsElementRole.mof
  - DCIM\_CLPRBAServiceAffectsElementRole.mof
  - DCIM\_LocalServiceServiceDependency.mof

- 185 ○ DCIM\_IPMIServiceServiceDependency.mof
- 186 ○ DCIM\_CLPServiceServiceDependency.mof
- 187 ○ DCIM\_CSRoleLimitedToTarget.mof
- 188 ○ DCIM\_SPHostedRBAPService.mof
- 189 ○ DCIM\_LocalRBALidentityMemberOfCollection.mof
- 190 ○ DCIM\_ElementConformsToProfile.mof
- 191 ○ DCIM\_RegisteredProfile.mof
- 192 ○ DCIM\_LCElementConformsToProfile.mof
- 193 ○ DCIM\_LCRegisteredProfile.mof

## 194 3 Terms and Definitions

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

### 196 3.1

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

### 199 3.2

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

### 202 3.3

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

### 204 3.4

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

### 206 3.5

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

### 208 3.6

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

### 210 3.7

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

### 212 3.8

213 **referencing profile** – Indicates a profile that owns the definition of this class and can include a reference  
214 to this profile in its “Related Profiles” table.

### 215 3.9

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

218 **3.10**  
 219 **shall not** – Indicates requirements to be followed strictly in order to conform to the document and from  
 220 which no deviation is permitted.

221 **3.11**  
 222 **should** – Indicates that among several possibilities, one is recommended as particularly suitable, without  
 223 mentioning or excluding others, or that a certain course of action is preferred but not necessarily required.

224 **3.12**  
 225 **should not** – Indicates that a certain possibility or course of action is deprecated but not prohibited

226 **3.13**  
 227 **FQDD** – Fully Qualified Device Descriptor is used to identify a particular component in a system.

228 **3.14**  
 229 **Interop Namespace** – Interop Namespace is where instrumentation instantiates classes to advertise its  
 230 capabilities for client discovery.

231 **3.15**  
 232 **Implementation Namespace** – Implementation Namespace is where instrumentation instantiates  
 233 classes relevant to executing core management tasks.

234 **3.16**  
 235 **ENUMERATE** – Refers to WS-MAN `ENUMERATE` operation as described in Section 8.2 of  
 236 `DSP0226_V1.1` and Section 9.1 of `DSP0227_V1.0`

237 **3.17**  
 238 **GET** – Refers to WS-MAN `GET` operation as defined in Section 7.3 of `DSP00226_V1.1` and Section 7.1  
 239 of `DSP0227_V1.0`

## 240 **4 Symbols and Abbreviated Terms**

241 **4.1**  
 242 **CIM - Common Information Model**

243 **4.2**  
 244 **iDRAC** - Integrated Dell Remote Access Controller – management controller for blades and monolithic  
 245 servers

246 **4.3**  
 247 **CMC** - Chassis Manager Controller – management controller for the modular chassis

248 **4.4**  
 249 **CLP** - Server Management Command Line Protocol described in DMTF `DSP0214`, Server Management  
 250 Command Line Protocol Specification 1.0

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# 5 Synopsis

**Profile Name:** Role Based Authorization

**Version:** 1.0.0

**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\_LocalRoleBasedAuthorizationService, DCIM\_IPMIRoleBasedAuthorizationService, and DCIM\_CLPRoleBasedAuthorizationService

**Scoping Class:** DCIM\_ComputerSystem

The Dell Role Based Authorization Profile is a component profile that contains the Dell specific implementation requirements for system view.

DCIM\_LocalRoleBasedAuthorizationService, DCIM\_IPMIRoleBasedAuthorizationService, and DCIM\_CLPRoleBasedAuthorizationService shall be the Central Classes.

Table 1 identifies profiles that are related to this profile.

**Table 1 – Related Profiles**

Profile Name	Organization	Version	Relationship
Role Based Authorization	DMTF	1.0	Specialize
Profile Registration	DCIM	1.0	Reference



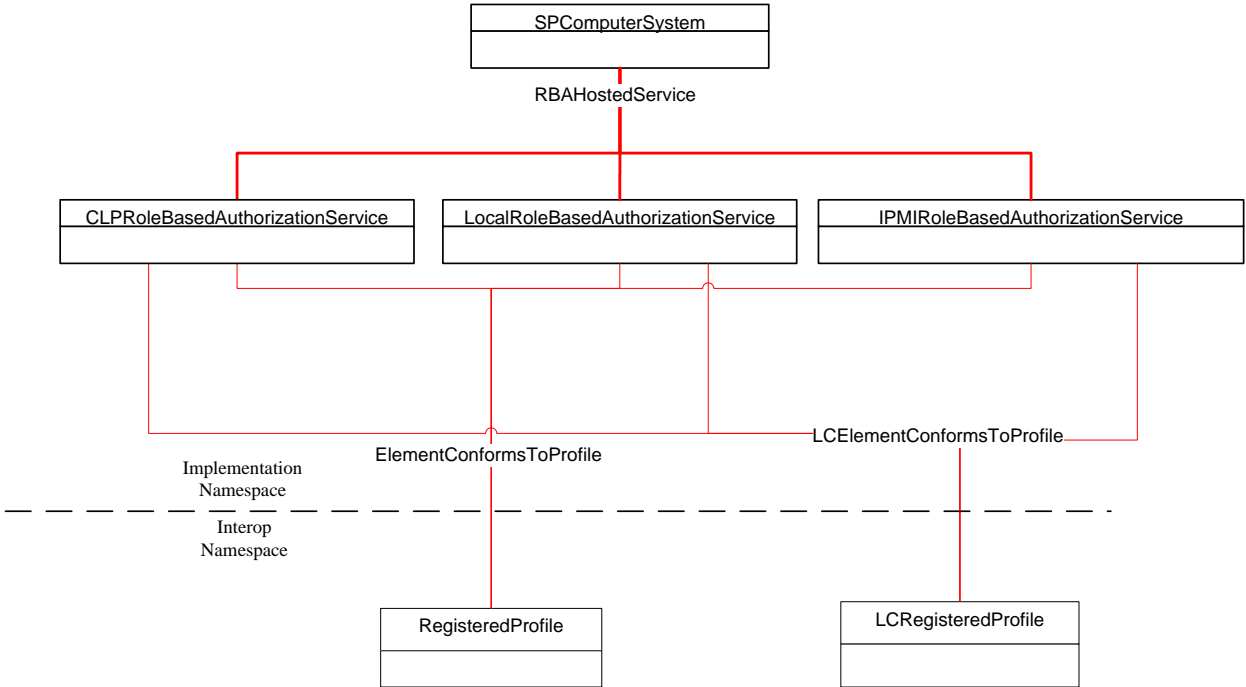
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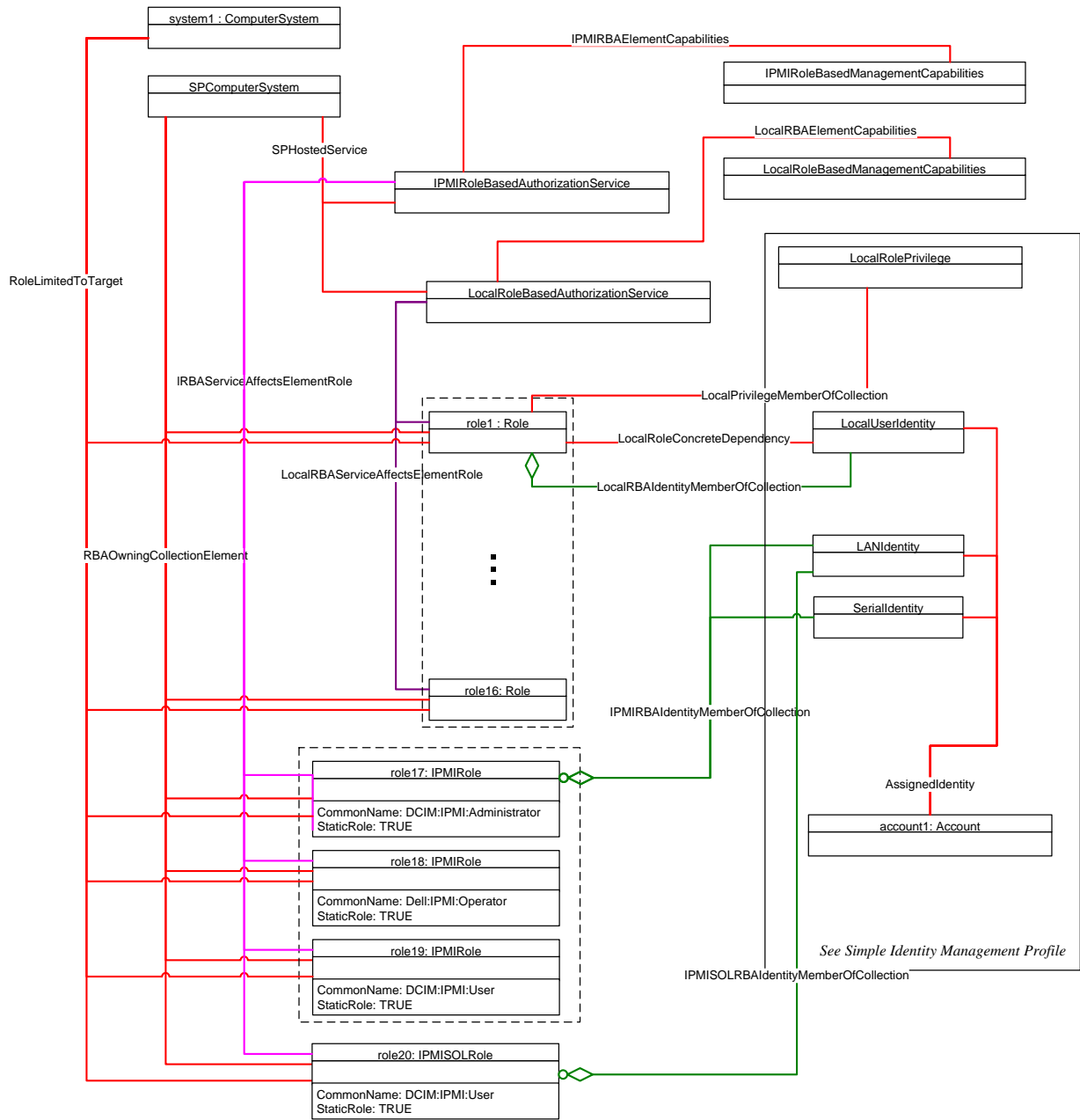
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**Figure 2 – Role Based Authorization Profile**



**Figure 3 – Role Based Authorization Profile Implementation**

## 7 Implementation Description

This section describes the requirements and guidelines for implementing Dell Role Based Authorization Profile.

**Table 2 – Class Requirements: Role Based Authorization Profile**

Element Name	Requirement	Description
<b>Classes</b>		
DCIM_LocalRolePrivilege	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.1.
DCIM_CLPPrivilege	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.2
DCIM_Role	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3
DCIM_IPMIRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.4
DCIM_IPMISOLRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.5
DCIM_CLPRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.6
DCIM_LocalRoleBasedAuthorizationService	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.7
DCIM_IPMIRoleBasedAuthorizationService	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.8
DCIM_CLPRoleBasedAuthorizationService	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.9
DCIM_LocalRoleBasedManagementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.10
DCIM_IPMIRoleBasedManagementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.11
DCIM_CLPRoleBasedManagementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.12
DCIM_LocalRBAElementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.7 and 7.10
DCIM_IPMIRBAElementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.8 and 7.11

Element Name	Requirement	Description
DCIM_CLPRBAElementCapabilities	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.9 and 7.12
DCIM_LocalPrivilegeMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.1 and 7.3
DCIM_LocalRBAIdentityMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3
DCIM_IPMIRBAIdentityMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.4
DCIM_IPMISOLRBAIdentityMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.5
DCIM_CLPRBAIdentityMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.6
DCIM_CLPPrivilegeMemberOfCollection	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.2 and 7.6
DCIM_RBAAwningCollectionElement	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3, 7.4, 7.5 and 7.6
DCIM_LocalRoleConcreteDependency	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3
DCIM_IPMIRBAServiceAffectsElementRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.4 and 7.8
DCIM_LocalRBAServiceAffectsElementRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3 and 7.7
DCIM_CLPRBAServiceAffectsElementRole	Mandatory	The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.6 and 7.9
DCIM_LocalServiceServiceDependency		The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.7
DCIM_IPMIServiceServiceDependency		The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.8
DCIM_CLPServiceServiceDependency		The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.9
DCIM_CSRoleLimitedToTarget		The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.3

Element Name	Requirement	Description
DCIM_SPHostedRBAPService		The class shall be implemented in the <i>Implementation Namespace: root/dcim</i> . See section 7.7, 7.8 and 7.9
DCIM_ElementConformsToProfile	Mandatory	The class shall be implemented in both the <i>Interop: root/interop</i> and <i>Implementation Namespace: root/dcim</i> . See section 7.7, 7.8, 7.9 and 0
DCIM_RegisteredProfile	Mandatory	The class shall be implemented in the <i>Interop Namespace</i> . See section 7.13
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in both the <i>Interop</i> and <i>Implementation Namespace: root/dcim</i> . See section 7.7, 7.8, 7.9 and 7.14
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the <i>Interop Namespace: root/interop</i> . See section 7.14
<b>Indications</b>		
None defined in this profile		

## 7.1 DCIM\_LocalRolePrivilege - Local Role Privilege

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

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

The DCIM\_LocalPrivilegeMemberOfCollection association shall reference DCIM\_LocalRolePrivilege instance and associate it with the DCIM\_Role instance.

### 7.1.1 Resource URIs for WinRM®

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

The key property shall be InstanceID.

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

### 7.1.2 Operations

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

**Table 3 – DCIM\_LocalRolePrivilege – Operations**

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
Set	Mandatory	Instance URI Note: Set operation may modify only the Activities, ActivityQualifiers, and QualifierFormats properties. Also these arrays are indexed. The Activities array elements may only be set to 7

		(Execute), and the QualifierFormats array elements may only be set to 9 (Command Line Instruction).
--	--	---

### 7.1.3 Class Properties

The following table lists the implemented properties for DCIM\_LocalRolePrivilege instance representing a local account role. 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\_LocalRolePrivilege - Properties**

Property Name	Type	Requirements	Additional Requirements
InstanceID	string	Mandatory	The property value shall be “DCIM:Privilege:<N>” where <N> is a number 1 through 16.
RepresentsAuthorizationRights	boolean	Mandatory	The property value shall be TRUE if ActivityQualifiers contains the “Configure Users” privilege
PrivilegeGranted	boolean	Mandatory	The property value shall be TRUE
Activities[]	uint16	Mandatory	The property value shall be an array of the value 7 (Execute) for each entry in ActivityQualifiers. This array shall have the same number of elements as the ActivityQualifiers property array.
ActivityQualifiers[]	string	Mandatory	The property value shall be an array of the possible following values: <ul style="list-style-type: none"> <li>• Login to DRAC (Login)</li> <li>• Configure DRAC (Configure)</li> <li>• Configure Users (Configure Users)</li> <li>• Clear Logs (Logs)</li> <li>• Test Alerts (System Operations)</li> <li>• Execute Server Control Commands (System Control)</li> <li>• Access Console Redirection (Access Virtual Console)</li> <li>• Access Virtual Media (Access Virtual Media)</li> <li>• Execute Diagnostic Methods (Debug)</li> </ul>
QualifierFormats[]	uint16	Mandatory	The property shall be an array of the value 9 (Command Line Instruction) for each entry in ActivityQualifiers. This array shall have the same number of elements as the ActivityQualifiers property array.
ElementName	string	Mandatory	The ElementName property shall be “DCIM Local Privilege <N>”

## 7.2 DCIM\_CLPPrivilege - CLP Privilege

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

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

The DCIM\_CLPPrivilegeMemberOfCollection association shall reference the DCIM\_CLPPrivilege instance and associate it with the DCIM\_CLPRole instance.

### 7.2.1 Resource URIs for WinRM®

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

The key property shall be InstanceID.

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

### 7.2.2 Operations

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

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

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

### 7.2.3 Class Properties

The following table lists the implemented properties for DCIM\_CLPPrivilege instance representing a local account role. 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 – DCIM\_CLPPrivilege - Properties**

Property Name	Type	Requirements	Additional Requirements
InstanceID	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"><li>• DCIM:CLPPrivilege:Administrator</li><li>• DCIM:CLPPrivilege:Operator</li><li>• DCIM:CLPPrivilege:ReadOnly</li></ul>
RepresentsAuthorizationRights	boolean	Mandatory	The property value shall be TRUE if the InstanceID has value “DCIM:CLPPrivilege:Administrator”, otherwise shall be FALSE.
PrivilegeGranted	boolean	Mandatory	The property value shall be TRUE
Activities[]	uint16	Mandatory	The property value shall be an array of the value 7 (Execute) for each entry in ActivityQualifiers. This array shall have the same number of elements as the ActivityQualifiers property array.
ActivityQualifiers[]	string	Mandatory	The property shall be an array of the possible following values: <ul style="list-style-type: none"><li>• cd</li><li>• exit</li><li>• help</li><li>• show</li><li>• version</li><li>• reset</li><li>• start</li><li>• stop</li></ul>



			<ul style="list-style-type: none"> <li>• set</li> <li>• load</li> <li>• dump</li> <li>• create</li> <li>• delete</li> </ul>
QualifierFormats[]	uint16	Mandatory	The property shall be an array of the value 9 (Command Line Instruction) for each entry in ActivityQualifiers. This array shall have the same number of elements as the ActivityQualifiers property array.

### 7.3 DCIM\_Role – Local Role

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

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

The DCIM\_LocalPrivilegeMemberOfCollection association shall reference DCIM\_Role instance and associate it with DCIM\_LocalRolePrivilege instance.

The DCIM\_RBAAwningCollectionElement association shall reference DCIM\_Role instance and associate it with the DCIM\_SPComputerSystem instance.

The DCIM\_LocalRBAServiceAffectsElementRole association shall reference DCIM\_Role instance and associate it with DCIM\_LocalRoleBasedAuthorizationService instance.

The DCIM\_LocalRoleConcreteDependency association shall reference the DCIM\_Role instance and associate it with DCIM\_UserIdentity instance.

The DCIM\_CSRoleLimitedToTarget association shall reference the DCIM\_Role instance and associate it with DCIM\_ComputerSystem instance.

The DCIM\_LocalRBASIdentityMemberOfCollection association shall reference the DCIM\_Role instance and associate it with the DCIM\_LocalUserIdentity instance.

#### 7.3.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

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

“http://schemas.dell.com/wbem/wscim/1/cim-schema/2/

DCIM\_Role?\_\_cimnamespace=root/dcim+CreationClassName=DCIM\_Role+Name=<Name>”

#### 7.3.2 Operations

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

**Table 7 – DCIM\_Role - Operations**

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

### 7.3.3 Class Properties

The following table lists the implemented properties for DCIM\_Role instance representing a local account role. 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 – DCIM\_Role - Properties**

Property Name	Type	Requirements	Additional Requirements
CreationClassName	string	Mandatory	The property value shall be "DCIM_Role"
Name	string	Mandatory	The property value shall be "DCIM:Role:<N>" where <N> is a number 1 through 16.
RoleCharacteristics[]	uint16	Mandatory	The property array shall be empty.
CommonName	string	Mandatory	The property value shall be "DCIM:Role:<N>" where <N> is a number 1 through 16.
ElementName	string	Mandatory	The property shall be "DCIM Local Role <N>" where <N> is a number 1 through 16.

## 7.4 DCIM\_IPMIRole - IPMI Role

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

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

The DCIM\_IPMIRBAIdentityMemberOfCollection association shall reference the DCIM\_IPMIRole instance and associate it with the DCIM\_LANIdentity and DCIM\_SerialIdentity instances.

The DCIM\_RBAOwningCollectionElement association shall reference the DCIM\_IPMIRole instance and associate it with the DCIM\_SPComputerSystem instance.

The DCIM\_IPMIRBAServiceAffectsElementRole association shall reference the DCIM\_IPMIRole instance and associate it with the DCIM\_IPMIRoleBasedAuthorizationService instance.

### 7.4.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

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

"http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_IPMIRole?\_\_cimnamespace=root/dcim+CreationClassName=DCIM\_IPMIRole+Name=<Name>"

### 7.4.2 Operations

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

**Table 9 – DCIM\_IPMIRole - Operations**

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

### 7.4.3 Class Properties

The following table lists the implemented properties for DCIM\_IPMIRole instance representing a local account role. 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 10 – DCIM\_IPMIRole - Properties**

Property Name	Type	Requirements	Additional Requirements
CreationClassName	string	Mandatory	The property value shall be “DCIM_IPMIRole”
Name	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"><li>• DCIM:IPMIRole:Administrator</li><li>• DCIM:IPMIRole:Operator</li><li>• DCIM:IPMIRole:User</li></ul>
RoleCharacteristics[]	uint16	Mandatory	The array property value shall be [2,3].
CommonName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"><li>• IPMIRole:Adminstrator</li><li>• IPMIRole:Operator</li><li>• IPMIRole:ReadOnly</li></ul>
ElementName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"><li>• IPMI Administrator Role</li><li>• IPMI Operator Role</li><li>• IPMI User Role</li></ul>

## 7.5 DCIM\_IPMISOLRole - IPMI SOL Role

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

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

The DCIM\_IPMISOLRBALidentityMemberOfCollection association shall reference the DCIM\_IPMISOLRole instance and associate it with the DCIM\_SerialIdentity instances.

The DCIM\_RBAAwningCollectionElement association shall reference the DCIM\_IPMISOLRole instance and associate it with the DCIM\_SPComputerSystem instance.

The DCIM\_IPMIRBAServiceAffectsElementRole association shall reference the DCIM\_IPMISOLRole instance and associate it with the DCIM\_IPMIRoleBasedAuthorizationService instance.

The DCIM\_CSRoleLimitedToTarget association shall reference DCIM\_IPMISOLRole instance and associate it with DCIM\_ComputerSystem instance.

### 7.5.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

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

"http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_IPMISOLRole?\_\_cimnamespace=root/dcim+CreationClassName=DCIM\_IPMISOLRole+Name=<Name>"

### 7.5.2 Operations

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

**Table 11 – DCIM\_IPMISOLRole - Operations**

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

### 7.5.3 Class Properties

The following table details the implemented properties for DCIM\_IPMISOLRole instance representing a local account role. 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 12 – DCIM\_IPMISOLRole - Properties**

Property Name	Type	Requirements	Additional Requirements
CreationClassName	string	Mandatory	The property value shall be "DCIM_IPMISOLRole"
Name	string	Mandatory	The property value shall be "DCIM:IPMISOLRole:1"
RoleCharacteristics[]	uint16	Mandatory	The array property value shall be [2,3].
CommonName	string	Mandatory	The property shall be "IPMISOLRole:1"
ElementName	string	Mandatory	The property shall be "IPMI SOL Role"

## 7.6 DCIM\_CLPRole - CLP Role

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

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

The DCIM\_CLPPrivilegeMemberOfCollection association shall reference CIM\_CLPRole instance and associate it with DCIM\_CLPPrivilege instance.

The DCIM\_CLPRBAIdentityMemberOfCollection association shall reference DCIM\_CLPRole instance and associate it with DCIM\_CLPIdentity instances.

The DCIM\_RBAAwningCollectionElement association shall reference DCIM\_CLPRole instance and associate it with DCIM\_SPComputerSystem instance.

The DCIM\_CLPRBAServiceAffectsElementRole association shall reference DCIM\_CLPRole instance and associate it with CLPRoleBasedAuthorizationService instance.

The DCIM\_CSRoleLimitedToTarget association shall reference the DCIM\_CLORole instance and associate it with the DCIM\_ComputerSystem instance.

### 7.6.1 Resource URIs for WinRM®

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

The key property shall be the CreationClassName and Name.

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

“http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_CLPRole?\_\_cimnamespace=root/dcim+CreationClassName=DCIM\_CLPRole+Name=<Name>”

### 7.6.2 Operations

The following table details the operations implemented on DCIM\_CLPRole.

**Table 13 – DCIM\_CLPRole - Operations**

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

### 7.6.3 Class Properties

The following table lists the implemented properties for DCIM\_CLPRole instance representing a local account role. 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 14 – DCIM\_CLPRole - Properties**

Property Name	Type	Requirements	Additional Requirements
CreationClassName	string	Mandatory	The property value shall be “DCIM_CLPRole”
Name	string	Mandatory	The property shall be one of the following: <ul style="list-style-type: none"><li>DCIM:CLPRole:Administrator</li><li>DCIM:CLPRole:Operator</li><li>DCIM:CLPRole:ReadOnly</li></ul>

Property Name	Type	Requirements	Additional Requirements
RoleCharacteristics[]	uint16	Mandatory	The array property value shall be [2].
CommonName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"> <li>• DCIM:CLPRole:Administrator</li> <li>• DCIM:CLPRole:Operator</li> <li>• DCIM:CLPRole:ReadOnly</li> </ul>
ElementName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"> <li>• SM CLP Administrator</li> <li>• SM CLP Operator</li> <li>• SM CLP Read Only</li> </ul>

## 7.7 DCIM\_LocalRoleBasedAuthorizationService - Local Role Based Authorization Service

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

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

The DCIM\_LocalRBAAElementCapabilities association shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_LocalRoleBasedManagementCapabilities instance.

The DCIM\_LocalRBAServiceAffectsElementRole association shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_Role instances.

The DCIM\_LocalServiceServiceDependency association shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_LocalUserAccountManagementService instances.

The DCIM\_SPHostedRBAPService association shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_SPComputerSystem instance.

The DCIM\_LCElementConformsToProfile association shall reference the DCIM\_LocalRoleBasedAuthorizationService instance and associate it with the DCIM\_LCRegisteredProfile instance.

The DCIM\_ElementConformsToProfile association shall reference the DCIM\_LocalRoleBasedAuthorizationService instance and associate it with the DCIM\_RegisteredProfile instance.

### 7.7.1 Resource URIs for WinRM®

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

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

The instance Resource URI for DCIM\_LocalRoleBasedAuthorizationService instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_LocalRoleBasedAuthorizationService?\_\_cimnamespace=root/dcim+SystemCreationClassName=DCIM\_SPComputerSystem+SystemName=systemmc+CreationClassName=DCIM\_LocalRoleBasedAuthorizationService+Name= DCIM Local Role Based Authorization Service"

## 7.7.2 Operations

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

**Table 15 – DCIM\_LocalRoleBasedAuthorizationService - Operations**

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

## 7.7.3 Class Properties

The following table lists the implemented properties for DCIM\_LocalRoleBasedAuthorizationService instance representing. 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 16 – DCIM\_LocalRoleBasedAuthorizationService - Properties**

Property Name	Type	Requirements	Additional Requirements
SystemCreationClassName	string	Mandatory	The property value shall be “DCIM_SPComputerSystem”.
SystemName	string	Mandatory	The property value shall be “systemmc”.
CreationClassName	string	Mandatory	The property value shall be "DCIM_LocalRoleBasedAuthorizationService"
Name	string	Mandatory	The property value shall be "DCIM Local Role Based Authorization Service"
ElementName	string	Mandatory	The property value shall be "DCIM Local Role Based Authorization Service"

## 7.8 DCIM\_IPMIRoleBasedAuthorizationService - IPMI Role Based Authorization Service

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

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

The DCIM\_SPHostedRBAPService association shall reference DCIM\_IPMIRoleBasedAuthorizationService instance and associate it with DCIM\_SPComputerSystem instance.

The DCIM\_IPMIRBAElementCapabilities association shall reference DCIM\_IPMIRoleBasedAuthorizationService instance and associate it with DCIM\_IPMIRBAElementCapabilities instance.

The DCIM\_IPMIRBAServiceAffectsElementRole association shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_IPMIRole and DCIM\_IPMISOLRole instances.

The DCIM\_IPMIServiceServiceDependency shall reference DCIM\_LocalRoleBasedAuthorizationService instance and associate it with DCIM\_IPMIAccountManagementService instance.

The DCIM\_LCElementConformsToProfile association shall reference the DCIM\_IPMIRoleBasedAuthorizationService instance and associate it with the DCIM\_LCRegisteredProfile instance.

507 The DCIM\_ElementConformsToProfile association shall reference the  
 508 DCIM\_IPMIRoleBasedAuthorizationService instance and associate it with the DCIM\_RegisteredProfile  
 509 instance.

### 510 **7.8.1 Resource URIs for WinRM®**

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

513 The key property shall be the SystemCreationClassName, SystemName, CreationClassName, and  
 514 Name.

515 The instance Resource URI for DCIM\_IPMIRoleBasedAuthorizationService instance shall be:  
 516 "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/  
 517 DCIM\_IPMIRoleBasedAuthorizationService?\_\_cimnamespace=root/dcim+SystemCreationClassName=D  
 518 CIM\_SPComputerSystem+SystemName=systemmc+CreationClassName=DCIM\_IPMIRoleBasedAuthori  
 519 zationService+Name=DCIM IPMI Role Based Authorization Service"

### 520 **7.8.2 Operations**

521 The following table lists the operations implemented on DCIM\_IPMIRoleBasedAuthorizationService.

522 **Table 17 – DCIM\_IPMIRoleBasedAuthorizationService - Operations**

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

### 523 **7.8.3 Class Properties**

524 The following table lists the implemented properties for DCIM\_IPMIRoleBasedAuthorizationService  
 525 instance representing. The "Requirements" column shall denote whether the property is implemented (for  
 526 requirement definitions, see section 3). The "Additional Requirements" column shall denote either  
 527 possible values for the property, or requirements on the value formulation.

528 **Table 18 – DCIM\_IPMIRoleBasedAuthorizationService - Properties**

Property Name	Type	Requirements	Additional Requirement
SystemCreationClassName	string	Mandatory	The property value shall be "DCIM_SPComputerSystem"
SystemName	string	Mandatory	The property value shall be "systemmc"
CreationClassName	string	Mandatory	The property value shall be "DCIM_IPMIRoleBasedAuthorizationService"
Name	string	Mandatory	The property value shall be "DCIM IPMI Role Based Authorization Service"
ElementName	string	Mandatory	The property value shall be "DCIM IPMI Role Based Authorization Service".

## 529 **7.9 DCIM\_CLPRoleBasedAuthorizationService - CLP Role Based Authorization** 530 **Service**

531 This section describes the implementation for the DCIM\_CLPRoleBasedAuthorizationService class.

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



533 The DCIM\_CLPRBAElementCapabilities association shall reference  
 534 DCIM\_CLPRoleBasedAuthorizationService instance and associate it with  
 535 DCIM\_CLPRBAElementCapabilities instance.

536 The DCIM\_CLPRBAServiceAffectsElementRole association shall reference  
 537 DCIM\_CLPRoleBasedAuthorizationService instance and associate it with DCIM\_CLPRole instances.

538 DCIM\_CLPServiceServiceDependency association shall reference the  
 539 DCIM\_CLPRoleBasedAuthorizationService instance and associate it with  
 540 DCIM\_CLPAccountManagementService.

541 The DCIM\_SPHostedRBAPService association shall reference DCIM\_  
 542 CLPRoleBasedAuthorizationService instance and associate it with DCIM\_SPComputerSystem instance.

543 The DCIM\_LCElementConformsToProfile association shall reference the  
 544 DCIM\_CLPRoleBasedAuthorizationService instance and associate it with the DCIM\_LCRegisteredProfile  
 545 instance.

546 The DCIM\_ElementConformsToProfile association shall reference the  
 547 DCIM\_CLPRoleBasedAuthorizationService instance and associate it with the DCIM\_RegisteredProfile  
 548 instance.

549

## 550 7.9.1 Resource URIs for WinRM®

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

553 The key property shall be the SystemCreationClassName, SystemName, CreationClassName, and  
 554 Name.

555 The instance Resource URI for CLPAccountManagementService instance shall be:  
 556 “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/ DCIM\_  
 557 CLPAccountManagementService?\_\_cimnamespace=root/dcim+SystemCreationClassName=DCIM\_SPC  
 558 omputerSystem+SystemName=systemmc+CreationClassName=DCIM\_CLPRoleBasedAuthorizationServ  
 559 ice+Name=DCIM CLP Role Based Authorization Service”

## 560 7.9.2 Operations

561 The following table lists the operations implemented on DCIM\_CLPRoleBasedAuthorizationService.

562 **Table 19 – DCIM\_CLPRoleBasedAuthorizationService - Operations**

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

## 563 7.9.3 Class Properties

564 The following table lists the implemented properties for DCIM\_CLPRoleBasedAuthorizationService  
 565 instance The “Requirements” column shall denote whether the property is implemented (for requirement  
 566 definitions, see section 3). The “Additional Requirements” column shall denote either possible values for  
 567 the property, or requirements on the value formulation.

568 **Table 20 – DCIM\_CLPRoleBasedAuthorizationService - Properties**

Property Name	Type	Requirements	Additional Requirement
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SystemCreationClassName	string	Mandatory	The property value shall be "DCIM_SPComputerSystem"
SystemName	string	Mandatory	The property value shall be "systemmc"
CreationClassName	string	Mandatory	The property value shall be "DCIM_CLPRoleBasedAuthorizationService"
Name	string	Mandatory	The property value shall be "DCIM CLP Role Based Authorization Service".
ElementName	string	Mandatory	The property value shall be "DCIM CLP Role Based Authorization Service".

569

570

## 7.10 DCIM\_LocalRoleBasedManagementCapabilities - Local User Account Management Capabilities

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

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

The DCIM\_LocalRBAElementCapabilities class shall reference the DCIM\_LocalRoleBasedManagementCapabilities class and associate it with the DCIM\_LocalRoleBasedAuthorizationService class.

### 7.10.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

The instance Resource URI for DCIM\_LocalRoleBasedManagementCapabilities instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_LocalRoleBasedManagementCapabilities?\_\_cimnamespace=root/dcim+InstanceID=DCIM:LocalRoleBasedManagementCapabilities"

### 7.10.2 Operations

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

**Table 21 – DCIM\_LocalRoleBasedManagementCapabilities - Operations**

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

### 7.10.3 Class Properties

The following table lists the implemented properties for DCIM\_LocalRoleBasedManagementCapabilities.

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 22 – DCIM\_LocalRoleBasedManagementCapabilities - Properties**

Property Name	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property value shall be "DCIM:LocalRoleBasedManagementCapabilities".
SharedPrivilegeSupported	boolean	Mandatory	This property value shall be FALSE.
SupportedMethods[]	uint16	Mandatory	This property shall have a value of 8 (ModifyPrivilege)
ElementName	string	Mandatory	This property value shall be "DCIM Local Role Based Management Capabilities".
ActivityQualifiersSupported[]	string	Mandatory	This array property value shall be ["Login to DRAC", "Configure DRAC", "Configure Users", "Clear Logs", "Execute Server Control Commands", "Access Console Redirection", "Access Virtual Media", "Test

Property Name	Type	Requirement	Additional Requirements
			Alerts", "Execute Diagnostic Methods"]
QualifierFormatsSupported[]	uint16	Mandatory	This array property value shall be 9.
ActivitiesSupported[]	uint16	Mandatory	This array property value shall be 7.

## 7.11 DCIM\_IPMIRoleBasedManagementCapabilities – IPMI Role Management Capabilities

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

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

The DCIM\_IPMIRBAElementCapabilities class shall reference the DCIM\_IPMIRoleBasedManagementCapabilities class and associate it with the DCIM\_IPMIRoleBasedAuthorizationService class.

### 7.11.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

The instance Resource URI for DCIM\_IPMIRoleBasedManagementCapabilities instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_IPMIRoleBasedManagementCapabilities?\_\_cimnamespace=root/dcim+InstanceID=DCIM:IPMIRoleBasedManagementCapabilities"

### 7.11.2 Operations

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

**Table 23 – DCIM\_IPMIRoleBasedManagementCapabilities - Operations**

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

### 7.11.3 Class Properties

The following table lists the implemented properties for DCIM\_IPMIRoleBasedManagementCapabilities.

The "Requirements" column shall denote whether the property is implemented (for requirement definitions, see section 3). The "Additional Requirements" column shall denote either possible values for the property, or requirements on the value formulation.

**Table 24 – DCIM\_IPMIRoleBasedManagementCapabilities - Properties**

Property Name	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property value shall be "DCIM:IPMIRoleBasedManagementCapabilities".
SharedPrivilegeSupported	boolean	Mandatory	This property value shall be FALSE.
SupportedMethods[]	uint16	Mandatory	This property shall have a value of 6 (AssignRoles)
ElementName	string	Mandatory	NA

## 7.12 DCIM\_CLPRoleBasedManagementCapabilities - CLIP Role Management Capabilities

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

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

The DCIM\_CLPRBAElementCapabilities class shall reference the DCIM\_CLPRBAElementCapabilities class and associate it with the DCIM\_CLPRoleBasedAuthorizationService class.

### 7.12.1 Resource URIs for WinRM®

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

The key property shall be the InstanceID.

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

"http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM\_CLPRoleBasedManagementCapabilities?\_\_cimnamespace=root/dcim+InstanceID=DCIM:CLPRoleBasedManagementCapabilities"

### 7.12.2 Operations

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

**Table 25 – DCIM\_CLPRoleBasedManagementCapabilities - Operations**

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

### 7.12.3 Class Properties

The following table lists the implemented properties for DCIM\_CLPRoleBasedManagementCapabilities.

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 26 – DCIM\_CLPRoleBasedManagementCapabilities - Properties**

Property Name	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property value shall be "DCIM:CLPRoleBasedManagementCapabilities".
SharedPrivilegeSupported	boolean	Mandatory	This property value shall be FALSE.
SupportedMethods[]	uint16	Mandatory	This property value shall be 6 (AssignRoles)
ElementName	string	Mandatory	This property value shall be "DCIM CLP Role Based Management Capabilities".

## 7.13 DCIM\_RegisteredProfile - DMTF Role Based Authorization Profile Profile Registration

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

This class shall be instantiated in the Interop Namespace.

The DCIM\_ElementConformsToProfile association(s) shall reference the DCIM\_RegisteredProfile instance.

### 7.13.1 Resource URIs

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\_RegisteredProfile?\_\_cimnamespace=root/interop+InstanceID=DCIM:RoleBasedAuthorizationRegisteredProfile:1"

### 7.13.2 Operations

The following table lists the operations implemented on for DCIM\_RegisteredProfile.

**Table 27 – DCIM\_RegisteredProfile - Operations**

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

### 7.13.3 Class Properties

The following table lists the implemented properties for DCIM\_RegisteredProfile instance. 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 28 – DCIM\_RegisteredProfile**

Property Name	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property value shall be "DCIM:RoleBasedAuthorizationRegisteredProfile:1".
RegisteredName	string	Mandatory	This property value shall be "Role Based Authorization".
RegisteredVersion	string	Mandatory	This property value shall be "1.0.0".
RegisteredOrganization	uint16	Mandatory	This property value shall be 2 (DMTF).
AdvertiseTypes[]	uint16	Mandatory	This property value shall be [1,1].
AdvertiseTypeDescriptions[]	string	Mandatory	This property value shall be ["WS-Identify", "Interop Namespace"].

## 7.14 DCIM\_LCRegisteredProfile

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

This class shall be instantiated in the Interop Namespace.

The DCIM\_ElementConformsToProfile association(s) shall reference the DCIM\_LCRegisteredProfile instance.

### 7.14.1 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:RoleBasedAuthorizationRegisteredProfile:1.0.0"

### 7.14.2 Operations

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

**Table 29 – DCIM\_LCRegisteredProfile - Operations**

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

### 7.14.3 Class Properties

The following table lists the implemented properties for DCIM\_LCRegisteredProfile instance. 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 30 – DCIM\_LCRegisteredProfile**

Property Name	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property value shall be "DCIM:RoleBasedAuthorizationRegisteredProfile:1.0.0".
RegisteredName	string	Mandatory	This property value shall be "Role Based Authorization".
RegisteredVersion	string	Mandatory	This property value shall be "1.0.0".
RegisteredOrganization	uint16	Mandatory	This property value shall be 1 (Other).
OtherRegisteredOrganization	string	Mandatory	This property value shall be "DCIM".
AdvertiseTypes[]	uint16	Mandatory	This property value shall be [1(Other),1(Other)].
AdvertiseTypeDescriptions[]	string	Mandatory	This property value shall be ["WS-Identify", "Interop Namespace"].

Property Name	Type	Requirement	Additional Requirements
ProfileRequireLicense[]	string	Mandatory	<p>This property array shall describe the required licenses for this profile.</p> <p>If no license is required for the profile, the property shall have value NULL.</p>
ProfileRequireLicenseStatus[]	string	Mandatory	<p>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:</p> <ul style="list-style-type: none"> <li>• "LICENSED"</li> <li>• "NOT_LICENSED"</li> </ul> <p>If no license is required for the profile, the property shall have value NULL.</p>

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## 8 Methods

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

### 8.1 DCIM\_IPMIRoleBasedAuthorizationService.AssignRoles()

The invocation of “Assign Roles” shall follow the following steps:

1. Enumerate DCIM\_LANIdentity or DCIM\_SerialIdentity
2. Enumerate DCIM\_IPMIRole for LAN Identities or DCIM\_IPMISOLRole for Serial Identities
3. Call AssignRoles with references to an instance of each class.

**Table 31 – DCIM\_IPMIRoleBasedAuthorizationService.AssignRoles() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred.

**Table 32 – DCIM\_IPMIRoleBasedAuthorizationService.AssignRoles() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN	Identity	CIM_Identity REF	Should be a reference to either DCIM_LANIdentity or DCIM_SerialIdentity
IN	Roles	CIM_Role REF	Should be a reference to either DCIM_IPMIRole or DCIM_IPMISOLRole
OUT (optional)	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 (optional)	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT (optional)	MessageArguments[]	string	Substitution variables for dynamic error messages

**Table 33 – DCIM\_IPMIRoleBasedAuthorizationService.AssignRoles() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
USR100	The command was successful	NA
USR101	Resource allocation failure	NA
USR102	Invalid parameter value for <parameter>	Identity, Roles
USR103	Missing parameter(s) <parameter>	Identity, Roles
USR104	Cannot perform the operation due to an unknown error in iDRAC	NA

## 8.2 DCIM\_CLPRoleBasedAuthorizationService.AssignRoles()

User invocation of “Assign Roles” shall follow the following steps:

1. Enumerate DCIM\_CLPIdentity
2. Enumerate DCIM\_CLPRole
3. Call AssignRoles with references to an instance of each class.

**Table 34 – DCIM\_CLPRoleBasedAuthorizationService.AssignRoles() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
2	Error occurred.

**Table 35 – DCIM\_CLPRoleBasedAuthorizationService.AssignRoles() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN	Identity	CIM_Identity REF	Should be a reference to DCIM_CLPIdentity
IN	Roles	CIM_Role REF	Should be a reference to DCIM_CLPRole
OUT (optional)	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 (optional)	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT (optional)	MessageArguments[]	string	Substitution variables for dynamic error messages

**Table 36 – DCIM\_CLPRoleBasedAuthorizationService.AssignRoles() Method: Standard Messages**

MessageID (OUT parameter)	Message	MessageArguments[]
USR100	The command was successful	NA
USR101	Resource allocation failure	NA
USR102	Invalid parameter value for <parameter>	Identity, Roles
USR103	Missing parameter(s) <parameter>	Identity, Roles

## 714 **9 Use Cases**

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

## 716 **10 CIM Elements**

717 No additional details specified.

## 718 **11 Privilege and License Requirement**

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

**Table 37 – Privilege and License Requirements**

<b>Class and Method</b>	<b>Operation</b>	<b>User Privilege Required</b>	<b>License Required</b>
DCIM_LocalRolePrivilege	ENUMERATE, GET	Login	None.
DCIM_LocalRolePrivilege	SET	Login , Configure Users	None.
DCIM_CLPPrivilege	ENUMERATE, GET	Login	None.
DCIM_Role	ENUMERATE, GET	Login	None.
DCIM_IPMIRole	ENUMERATE, GET	Login	None.
DCIM_IPMISOLRole	ENUMERATE, GET	Login	None.
DCIM_CLPRole	ENUMERATE, GET	Login	None.
DCIM_LocalRoleBasedAuthorizationService	ENUMERATE, GET	Login	None.
DCIM_IPMIRoleBasedAuthorizationService	ENUMERATE, GET	Login	None.
DCIM_IPMIRoleBasedAuthorizationService.AssignRoles()	INVOKE	Login, Configure Users	None.
DCIM_CLPRoleBasedAuthorizationService	ENUMERATE, GET	Login	None.
DCIM_CLPRoleBasedAuthorizationService.AssignRoles()	INVOKE	Login, Configure Users	None.
DCIM_LocalRoleBasedManagementCapabilities	ENUMERATE, GET	Login	None.
DCIM_IPMIRoleBasedManagementCapabilities	ENUMERATE, GET	Login	None.
DCIM_CLPRoleBasedManagementCapabilities	ENUMERATE, GET	Login	None.
DCIM_LocalRBAElementCapabilities	ENUMERATE, GET	Login	None.
DCIM_IPMIRBAElementCapabilities	ENUMERATE, GET	Login	None.
DCIM_CLPRBAElementCapabilities	ENUMERATE, GET	Login	None.
DCIM_LocalPrivilegeMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_IPMIRBAIdentityMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_IPMISOLRBAIdentityMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_CLPRBAIdentityMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_CLPPrivilegeMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_RBAAwningCollectionElement	ENUMERATE, GET	Login	None.
DCIM_LocalRoleConcreteDependency	ENUMERATE, GET	Login	None.
DCIM_IPMIRBAServiceAffectsElementRole	ENUMERATE, GET	Login	None.
DCIM_LocalRBAServiceAffectsElementRole	ENUMERATE, GET	Login	None.

Class and Method	Operation	User Privilege Required	License Required
DCIM_CLPRBAServiceAffectsElementRole	ENUMERATE, GET	Login	None.
DCIM_LocalServiceServiceDependency	ENUMERATE, GET	Login	None.
DCIM_IPMIServiceServiceDependency	ENUMERATE, GET	Login	None.
DCIM_CLPServiceServiceDependency	ENUMERATE, GET	Login	None.
DCIM_CSRoleLimitedToTarget	ENUMERATE, GET	Login	None.
DCIM_SPHostedRBAPService	ENUMERATE, GET	Login	None.
DCIM_LocalRBAIdentityMemberOfCollection	ENUMERATE, GET	Login	None.
DCIM_ElementConformsToProfile	ENUMERATE, GET	Login	None.
DCIM_RegisteredProfile	ENUMERATE, GET	Login	None.
DCIM_LCElementConformsToProfile	ENUMERATE, GET	Login	None.
DCIM_LCRegisteredProfile	ENUMERATE, GET	Login	None.

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