

1 Role Based Authorization
2 Profile

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140 1 Scope

141 The Dell Role Based Authorization Profile describes the properties and interfaces for executing system
142 management tasks related to the authorization. The profile standardizes and aggregates the description
143 for the platform's basic properties into a system view representation and provides static methodology for
144 the clients to query the system views without substantial traversal of the model.

145 2 Normative References

146 Refer to the following documents for more information.

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

- 149 • DMTF DSP1039, *Role Based Authorization Profile 1.0.0*
- 150 • DMTF DSP1033, *Profile Registration Profile 1.0.0*
- 151 • DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*
- 152 • DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*
- 153 • *Dell Lifecycle Controller Best Practices Guide 1.0*,
- 154 http://en.community.dell.com/techcenter/extras/m/white_papers/20066173.aspx
- 155 • *Dell WSMAN Licenses and Privileges 1.0*
- 156 • Dell Tech Center MOF Library:
157 <http://www.delltechcenter.com/page/DCIM.Library.MOF>
- 158 • Related Managed Object Format (MOF) files:
 - 159 ○ DCIM_LocalRolePrivilege.mof
 - 160 ○ DCIM_CLPPrivilege.mof
 - 161 ○ DCIM_Role.mof
 - 162 ○ DCIM_IPMIRole.mof
 - 163 ○ DCIM_IPMISOLRole.mof
 - 164 ○ DCIM_CLPRole.mof
 - 165 ○ DCIM_LocalRoleBasedAuthorizationService.mof
 - 166 ○ DCIM_IPMIRoleBasedAuthorizationService.mof
 - 167 ○ DCIM_CLPRoleBasedAuthorizationService.mof
 - 168 ○ DCIM_LocalRoleBasedManagementCapabilities.mof
 - 169 ○ DCIM_IPMIRoleBasedManagementCapabilities.mof
 - 170 ○ DCIM_CLPRoleBasedManagementCapabilities.mof
 - 171 ○ DCIM_LocalRBAElementCapabilities.mof
 - 172 ○ DCIM_IPMIRBAElementCapabilities.mof
 - 173 ○ DCIM_CLPRBAElementCapabilities.mof
 - 174 ○ DCIM_LocalPrivilegeMemberOfCollection.mof
 - 175 ○ DCIM_IPMIRBAIdentityMemberOfCollection.mof
 - 176 ○ DCIM_IPMISOLRBAIdentityMemberOfCollection.mof
 - 177 ○ DCIM_CLPRBAIdentityMemberOfCollection.mof
 - 178 ○ DCIM_CLPPrivilegeMemberOfCollection.mof
 - 179 ○ DCIM_RBAOwningCollectionElement.mof
 - 180 ○ DCIM_LocalRoleConcreteDependency.mof
 - 181 ○ DCIM_IPMIRBAServiceAffectsElementRole.mof
 - 182 ○ DCIM_LocalRBAServiceAffectsElementRole.mof
 - 183 ○ DCIM_CLPRBAServiceAffectsElementRole.mof
 - 184 ○ DCIM_LocalServiceServiceDependency.mof

- 185 ○ DCIM_IPMIServiceServiceDependency.mof
- 186 ○ DCIM_CLPServiceServiceDependency.mof
- 187 ○ DCIM_CSRoleLimitedToTarget.mof
- 188 ○ DCIM_SPHostedRBAPService.mof
- 189 ○ DCIM_LocalRBAIdentityMemberOfCollection.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

251
252

253 **5 Synopsis**

254 **Profile Name:** Role Based Authorization

255 **Version:** 1.0.0

256 **Organization:** Dell

257 **CIM Schema Version:** 2.26 Experimental

258 **Dell Schema Version:** 1.0.0

259 **Interop Namespace:** root/interop

260 **Implementation Namespace:** root/dcim

261 **Central Class:** DCIM_LocalRoleBasedAuthorizationService, DCIM_IPMIRoleBasedAuthorizationService,
262 and DCIM_CLPRoleBasedAuthorizationService

263 **Scoping Class:** DCIM_ComputerSystem

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

266 DCIM_LocalRoleBasedAuthorizationService, DCIM_IPMIRoleBasedAuthorizationService, and
267 DCIM_CLPRoleBasedAuthorizationService shall be the Central Classes.

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

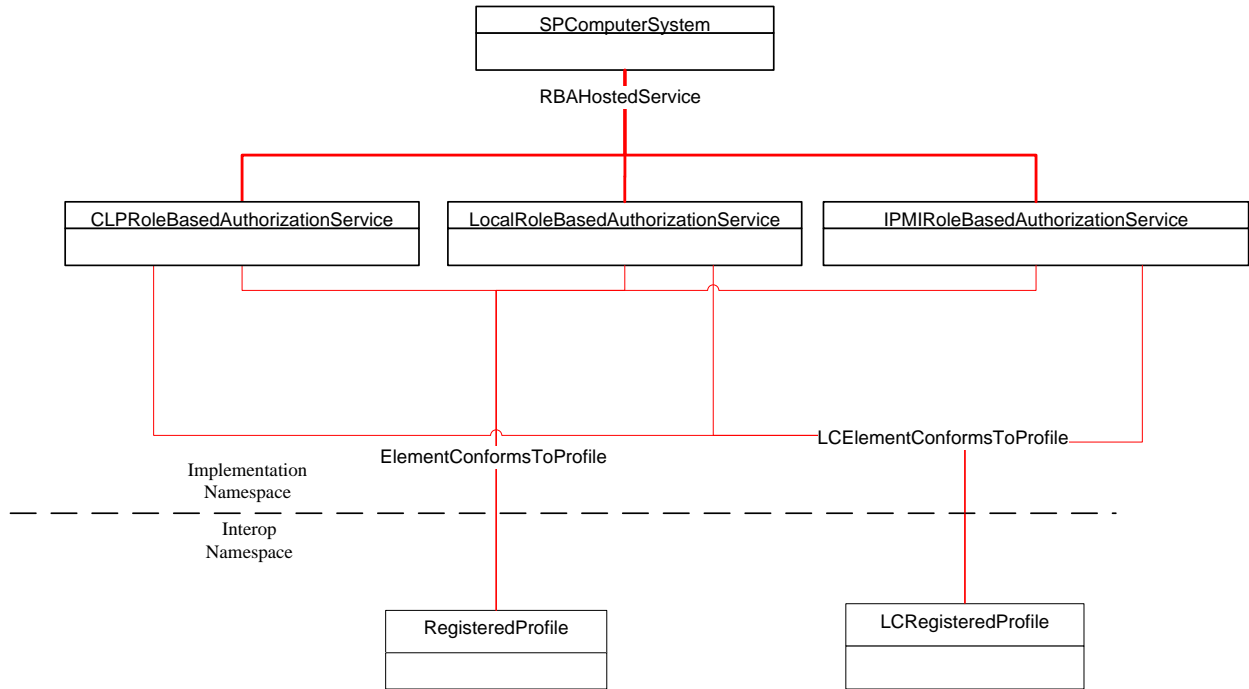
269

Table 1 – Related Profiles

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

275

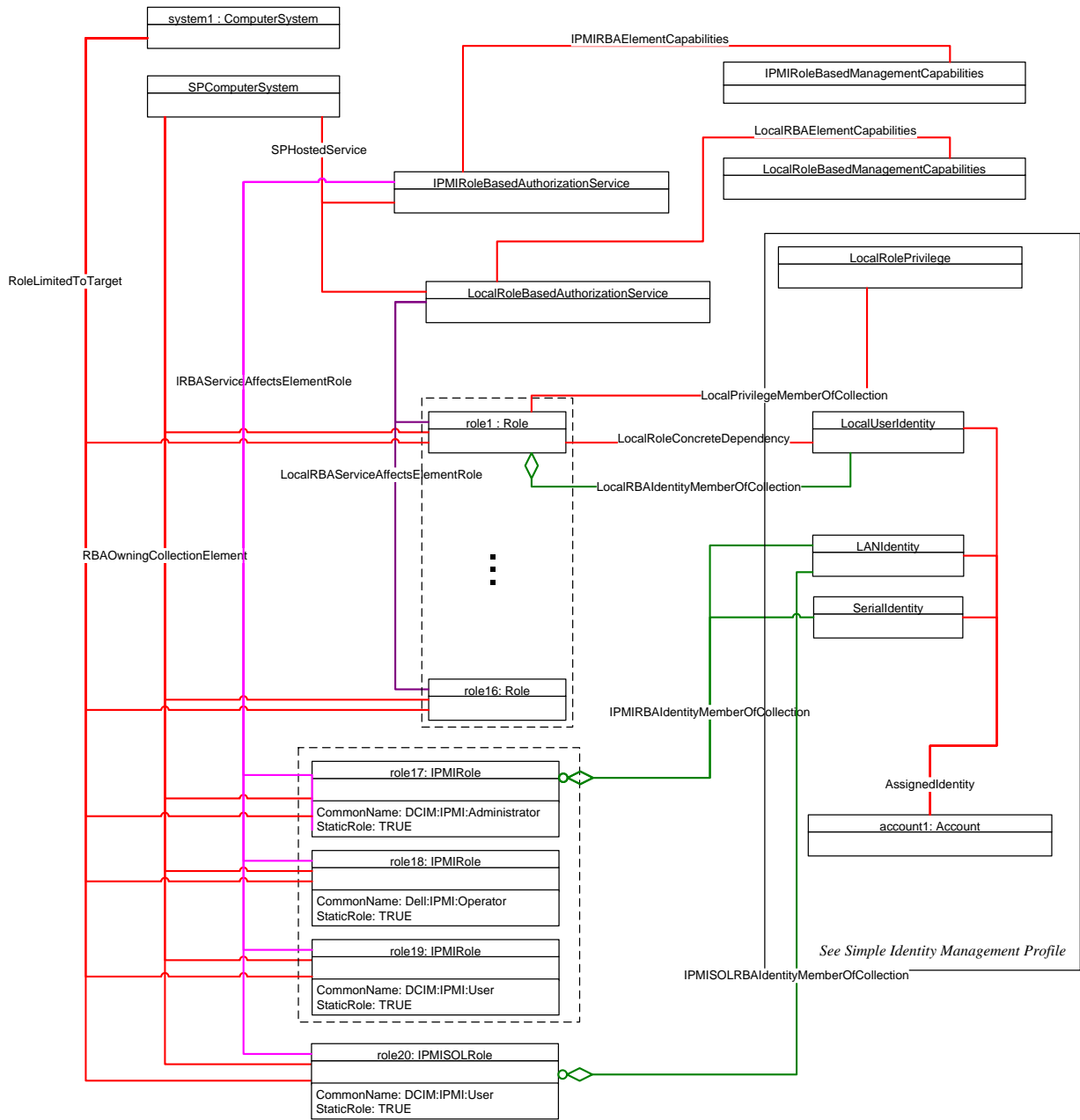
276 Figure 2 and Figure 3 details typical Dell Role Based Authorization Profile implementation for a platform.



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Figure 2 – Role Based Authorization Profile



280

281

Figure 3 – Role Based Authorization Profile Implementation

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283

284 **7 Implementation Description**

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

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

Element Name	Requirement	Description
Classes		
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_RBAOwningCollectionElement	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 Interop Namespace. 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
Indications		
None defined in this profile		

288 7.1 DCIM_LocalRolePrivilege - Local Role Privilege

289 This section describes the implementation for the DCIM_LocalRolePrivilege class.

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

291 The DCIM_LocalPrivilegeMemberOfCollection association shall reference DCIM_LocalRolePrivilege
292 instance and associate it with the DCIM_Role instance.

293 7.1.1 Resource URIs for WinRM®

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

296 The key property shall be InstanceID.

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

300 7.1.2 Operations

301 The following table lists the operations implemented on DCIM_LocalRolePrivilege.

302 **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).
--	--	---

303 **7.1.3 Class Properties**

304 The following table lists the implemented properties for DCIM_LocalRolePrivilege instance representing a
 305 local account role. The “Requirements” column shall denote whether the property is implemented (for
 306 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
 307 possible values for the property, or requirements on the value formulation.

308 **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"> • Login to DRAC (Login) • Configure DRAC (Configure) • Configure Users (Configure Users) • Clear Logs (Logs) • Test Alerts (System Operations) • Execute Server Control Commands (System Control) • Access Console Redirection (Access Virtual Console) • Access Virtual Media (Access Virtual Media) • Execute Diagnostic Methods (Debug)
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>”

309 **7.2 DCIM_CLPPrivilege - CLP Privilege**

310 This section describes the implementation for the DCIM_CLPPrivilege class.

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

312 The DCIM_CLPPrivilegeMemberOfCollection association shall reference the DCIM_CLPPrivilege instance
 313 and associate it with the DCIM_CLPRole instance.

314 **7.2.1 Resource URIs for WinRM®**

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

317 The key property shall be InstanceID.

318 The instance Resource URI for DCIM_CLPPrivilege instance shall be:
319 “http://schemas.dell.com/wbem/wscim/1/cim-
320 schema/2/DCIM_CLPPrivilege?__cimnamespace=root/dcim+InstanceID=<InstanceID>”

321 **7.2.2 Operations**

322 The following table lists the operations implemented on DCIM_LocalRolePrivilege.

323 **Table 5 – DCIM_SystemView - Operations**

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

324

325 **7.2.3 Class Properties**

326 The following table lists the implemented properties for DCIM_CLPPrivilege instance representing a local
327 account role. The “Requirements” column shall denote whether the property is implemented (for
328 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
329 possible values for the property, or requirements on the value formulation.

330 **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"> • DCIM:CLPPrivilege:Administrator • DCIM: CLPPrivilege:Operator • DCIM:CLPPrivilege:ReadOnly
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"> • cd • exit • help • show • version • reset • start • stop

			<ul style="list-style-type: none"> • set • load • dump • create • delete
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.

331 7.3 DCIM_Role – Local Role

332 This section describes the implementation for the DCIM_Role class.

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

334 The DCIM_LocalPrivilegeMemberOfCollection association shall reference DCIM_Role instance and
335 associate it with DCIM_LocalRolePrivilege instance.

336 The DCIM_RBAAwningCollectionElement association shall reference DCIM_Role instance and associate
337 it with the DCIM_SPCoMputerSystem instance.

338 The DCIM_LocalRBAServiceAffectsElementRole association shall reference DCIM_Role instance and
339 associate it with DCIM_LocalRoleBasedAuthorizationService instance.

340 The DCIM_LocalRoleConcreteDependency association shall reference the DCIM_Role instance and
341 associate it with DCIM_UserIdentity instance.

342 The DCIM_CSRoleLimitedToTarget association shall reference the DCIM_Role instance and associate it
343 with DCIM_CoMputerSystem instance.

344 The DCIM_LocalRBAIdentityMemberOfCollection association shall reference the DCIM_Role instance
345 and associate it with the DCIM_LocalUserIdentity instance.

346 7.3.1 Resource URIs for WinRM®

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

349 The key property shall be the InstanceID.

350 The instance Resource URI for DCIM_SystemView instance shall be:

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

352 DCIM_Role?__cimnamespace=root/dcim+CreationClassName=DCIM_Role+Name=<Name>”

353 7.3.2 Operations

354 The following table lists the operations implemented on DCIM_Role.

355 **Table 7 – DCIM_Role - Operations**

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

356 **7.3.3 Class Properties**

357 The following table lists the implemented properties for DCIM_Role instance representing a local account
 358 role. The “Requirements” column shall denote whether the property is implemented (for requirement
 359 definitions, see section 3). The “Additional Requirements” column shall denote either possible values for
 360 the property, or requirements on the value formulation..

361 **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.

362 **7.4 DCIM_IPMIRole - IPMI Role**

363 This section describes the implementation for the DCIM_IPMIRole class.

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

365 The DCIM_IPMIRBAIdentityMemberOfCollection association shall reference the DCIM_IPMIRole
 366 instance and associate it with the DCIM_LANIdentity and DCIM_SerialIdentity instances.

367 The DCIM_RBAAwningCollectionElement association shall reference the DCIM_IPMIRole instance and
 368 associate it with the DCIM_SPCoMputerSystem instance.

369 The DCIM_IPMIRBAServiceAffectsElementRole association shall reference the DCIM_IPMIRole instance
 370 and associate it with the DCIM_IPMIRoleBasedAuthorizationService instance.

371 **7.4.1 Resource URIs for WinRM®**

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

374 The key property shall be the InstanceID.

375 The instance Resource URI for DCIM_IPMIRole instance shall be:

376 “http://schemas.dell.com/wbem/wscim/1/cim-
 377 schema/2/DCIM_IPMIRole?__cimnamespace=root/dcim+CreationClassName=DCIM_IPMIRole+Name=<
 378 Name>”

379 **7.4.2 Operations**

380 The following table lists the operations implemented on DCIM_IPMIRole.

381 **Table 9 – DCIM_IPMIRole - Operations**

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

382 **7.4.3 Class Properties**

383 The following table lists the implemented properties for DCIM_IPMIRole instance representing a local
 384 account role. The “Requirements” column shall denote whether the property is implemented (for
 385 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
 386 possible values for the property, or requirements on the value formulation.

387 **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"> • DCIM:IPMIRole:Administrator • DCIM:IPMIRole:Operator • DCIM:IPMIRole:User
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"> • IPMIRole:Adminstrator • IPMIRole:Operator • IPMIRole:ReadOnly
ElementName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"> • IPMI Administrator Role • IPMI Operator Role • IPMI User Role

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389

390 **7.5 DCIM_IPMISOLRole - IPMI SOL Role**

391 This section describes the implementation for the DCIM_IPMISOLRole class.

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

393 The DCIM_IPMISOLRBALidentityMemberOfCollection association shall reference the
394 DCIM_IPMISOLRole instance and associate it with the DCIM_SerialIdentity instances.

395 The DCIM_RBAAwningCollectionElement association shall reference the DCIM_IPMISOLRole instance
396 and associate it with the DCIM_SPCComputerSystem instance.

397 The DCIM_IPMIRBAServiceAffectsElementRole association shall reference the DCIM_IPMISOLRole
398 instance and associate it with the DCIM_IPMIRoleBasedAuthorizationService instance.

399 The DCIM_CSRoleLimitedToTarget association shall reference DCIM_IPMISOLRole instance and
400 associate it with DCIM_ComputerSystem instance.

401 **7.5.1 Resource URIs for WinRM®**

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

404 The key property shall be the InstanceID.

405 The instance Resource URI for DCIM_IPMISOLRole instance shall be:
406 “http://schemas.dell.com/wbem/wscim/1/cim-
407 schema/2/DCIM_IPMISOLRole?__cimnamespace=root/dcim+CreationClassName=DCIM_IPMISOLRole
408 +Name=<Name>”

409 **7.5.2 Operations**

410 The following table lists the operations implemented on DCIM_IPMISOLRole.

411 **Table 11 – DCIM_IPMISOLRole - Operations**

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

412 **7.5.3 Class Properties**

413 The following table details the implemented properties for DCIM_IPMISOLRole instance representing a
414 local account role. The “Requirements” column shall denote whether the property is implemented (for
415 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
416 possible values for the property, or requirements on the value formulation.

417 **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”

418 **7.6 DCIM_CLPRole - CLP Role**

419 This section describes the implementation for the DCIM_CLPRole class.

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

421 The DCIM_CLPPrivilegeMemberOfCollection association shall reference CIM_CLPRole instance and
422 associate it with DCIM_CLPPrivilege instance.

423 The DCIM_CLPRBAIdentityMemberOfCollection association shall reference DCIM_CLPRole instance
424 and associate it with DCIM_CLPIdentity instances.

425 The DCIM_RBAAwningCollectionElement association shall reference DCIM_CLPRole instance and
426 associate it with DCIM_SPComputerSystem instance.

427 The DCIM_CLPRBAServiceAffectsElementRole association shall reference DCIM_CLPRole instance and
428 associate it with CLPRoleBasedAuthorizationService instance.

429 The DCIM_CSRoleLimitedToTarget association shall reference the DCIM_CLORole instance and
430 associate it with the DCIM_ComputerSystem instance.

431 **7.6.1 Resource URIs for WinRM®**

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

434 The key property shall be the CreationClassName and Name.

435 The instance Resource URI for DCIM_CLPRole instance shall be:

436 “http://schemas.dell.com/wbem/wscim/1/cim-
437 schema/2/DCIM_CLPRole?__cimnamespace=root/dcim+CreationClassName=DCIM_CLPRole+Name=<
438 Name>”

439 **7.6.2 Operations**

440 The following table details the operations implemented on DCIM_CLPRole.

441 **Table 13 – DCIM_CLPRole - Operations**

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

442 **7.6.3 Class Properties**

443 The following table lists the implemented properties for DCIM_CLPRole instance representing a local
444 account role. The “Requirements” column shall denote whether the property is implemented (for
445 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
446 possible values for the property, or requirements on the value formulation.

447 **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">• DCIM:CLPRole:Administrator• DCIM:CLPRole:Operator• DCIM:CLPRole:ReadOnly

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"> • DCIM:CLPRole:Administrator • DCIM:CLPRole:Operator • DCIM:CLPRole:ReadOnly
ElementName	string	Mandatory	The property value shall be one of the following: <ul style="list-style-type: none"> • SM CLP Administrator • SM CLP Operator • SM CLP Read Only

448 **7.7 DCIM_LocalRoleBasedAuthorizationService - Local Role Based**
449 **Authorization Service**

450 This section describes the implementation for the DCIM_LocalRoleBasedAuthorizationService class.

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

452 The DCIM_LocalRBAElementCapabilities association shall reference
453 DCIM_LocalRoleBasedAuthorizationService instance and associate it with
454 DCIM_LocalRoleBasedManagementCapabilities instance.

455 The DCIM_LocalRBAServiceAffectsElementRole association shall reference
456 DCIM_LocalRoleBasedAuthorizationService instance and associate it with DCIM_Role instances.

457 The DCIM_LocalServiceServiceDependency association shall reference
458 DCIM_LocalRoleBasedAuthorizationService instance and associate it with
459 DCIM_LocalUserAccountManagementService instances.

460 The DCIM_SPHostedRBAPService association shall reference
461 DCIM_LocalRoleBasedAuthorizationService instance and associate it with DCIM_SPCoMputerSystem
462 instance.

463 The DCIM_LCElementConformsToProfile association shall reference the
464 DCIM_LocalRoleBasedAuthorizationService instance and associate it with the
465 DCIM_LCRegisteredProfile instance.

466 The DCIM_ElementConformsToProfile association shall reference the
467 DCIM_LocalRoleBasedAuthorizationService instance and associate it with the DCIM_RegisteredProfile
468 instance.

469 **7.7.1 Resource URIs for WinRM®**

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

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

474 The instance Resource URI for DCIM_LocalRoleBasedAuthorizationService instance shall be:
475 "http://schemas.dell.com/wbem/wscim/1/cim-
476 schema/2/DCIM_LocalRoleBasedAuthorizationService?__cimnamespace=root/dcim+SystemCreationCla
477 ssName=DCIM_SPCoMputerSystem+SystemName=systemmc+CreationClassName=DCIM_LocalRoleB
478 asedAuthorizationService+Name= DCIM Local Role Based Authorization Service"

479 7.7.2 Operations

480 The following table lists the operations implemented on DCIM_LocalRoleBasedAuthorizationService.

481 **Table 15 – DCIM_LocalRoleBasedAuthorizationService - Operations**

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

482 7.7.3 Class Properties

483 The following table lists the implemented properties for DCIM_LocalRoleBasedAuthorizationService
484 instance representing. The “Requirements” column shall denote whether the property is implemented (for
485 requirement definitions, see section 3). The “Additional Requirements” column shall denote either
486 possible values for the property, or requirements on the value formulation.

487 **Table 16 – DCIM_LocalRoleBasedAuthorizationService - Properties**

Property Name	Type	Requirements	Additional Requirements
SystemCreationClassName	string	Mandatory	The property value shall be “DCIM_SPCComputerSystem”.
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"

488 7.8 DCIM_IPMIRoleBasedAuthorizationService - IPMI Role Based Authorization 489 Service

490 This section describes the implementation for the DCIM_IPMIRoleBasedAuthorizationService class.

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

492 The DCIM_SPHostedRBAPService association shall reference
493 DCIM_IPMIRoleBasedAuthorizationService instance and associate it with DCIM_SPCComputerSystem
494 instance.

495 The DCIM_IPMIRBAElementCapabilities association shall reference
496 DCIM_IPMIRoleBasedAuthorizationService instance and associate it with
497 DCIM_IPMIRBAElementCapabilities instance.

498 The DCIM_IPMIRBAServiceAffectsElementRole association shall reference
499 DCIM_LocalRoleBasedAuthorizationService instance and associate it with DCIM_IPMIRole and
500 DCIM_IPMISOLRole instances.

501 The DCIM_IPMIServiceServiceDependency shall reference reference
502 DCIM_LocalRoleBasedAuthorizationService instance and associate it with
503 DCIM_IPMIAccountManagementService instance.

504 The DCIM_LCElementConformsToProfile association shall reference the
505 DCIM_IPMIRoleBasedAuthorizationService instance and associate it with the DCIM_LCRegisteredProfile
506 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
---------------	------	--------------	------------------------

SystemCreationClassName	string	Mandatory	The property value shall be "DCIM_SPCComputerSystem"
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".

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571 **7.10 DCIM_LocalRoleBasedManagementCapabilities - Local User Account**
 572 **Management Capabilities**

573 This section describes the implementation for the DCIM_LocalRoleBasedManagementCapabilities class.

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

575 The DCIM_LocalRBAElementCapabilities class shall reference the
 576 DCIM_LocalRoleBasedManagementCapabilities class and associate it with the
 577 DCIM_LocalRoleBasedAuthorizationService class.

578 **7.10.1 Resource URIs for WinRM®**

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

581 The key property shall be the InstanceID.

582 The instance Resource URI for DCIM_LocalRoleBasedManagementCapabilities instance shall be:
 583 "http://schemas.dell.com/wbem/wscim/1/cim-
 584 schema/2/DCIM_LocalRoleBasedManagementCapabilities?__cimnamespace=root/dcim+InstanceID=DCI
 585 M:LocalRoleBasedManagementCapabilities"

586 **7.10.2 Operations**

587 The following table lists the operations implemented on DCIM_LocalRoleBasedManagementCapabilities.

588 **Table 21 – DCIM_LocalRoleBasedManagementCapabilities - Operations**

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

589 **7.10.3 Class Properties**

590 The following table lists the implemented properties for DCIM_LocalRoleBasedManagementCapabilities.

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

594 **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.

595 7.11 DCIM_IPMIRoleBasedManagementCapabilities – IPMI Role Management 596 Capabilities

597 This section describes the implementation for the DCIM_IPMIRoleBasedManagementCapabilities class.

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

599 The DCIM_IPMIRBAElementCapabilities class shall reference the
600 DCIM_IPMIRoleBasedManagementCapabilities class and associate it with the
601 DCIM_IPMIRoleBasedAuthorizationService class.

602 7.11.1 Resource URIs for WinRM®

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

605 The key property shall be the InstanceID.

606 The instance Resource URI for DCIM_IPMIRoleBasedManagementCapabilities instance shall be:
607 “http://schemas.dell.com/wbem/wscim/1/cim-
608 schema/2/DCIM_IPMIRoleBasedManagementCapabilities?__cimnamespace=root/dcim+InstanceID=DCI
609 M:IPMIRoleBasedManagementCapabilities”

610 7.11.2 Operations

611 The following table lists the operations implemented on DCIM_IPMIRoleBasedManagementCapabilities.

612 **Table 23 – DCIM_IPMIRoleBasedManagementCapabilities - Operations**

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

613 7.11.3 Class Properties

614 The following table lists the implemented properties for DCIM_IPMIRoleBasedManagementCapabilities.

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

618 **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

619 **7.12 DCIM_CLPRoleBasedManagementCapabilities - CLIP Role Management**
 620 **Capabilities**

621 This section describes the implementation for the DCIM_CLPRoleBasedManagementCapabilities class.

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

623 The DCIM_CLPRBAElementCapabilities class shall reference the DCIM_CLPRBAElementCapabilities
 624 class and associate it with the DCIM_CLPRoleBasedAuthorizationService class.

625 **7.12.1 Resource URIs for WinRM®**

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

628 The key property shall be the InstanceID.

629 The instance Resource URI for DCIM_CLPRoleBasedManagementCapabilities instance shall be:
 630 "http://schemas.dell.com/wbem/wscim/1/cim-
 631 schema/2/DCIM_CLPRoleBasedManagementCapabilities?__cimnamespace=root/dcim+InstanceID=DCI
 632 M:CLPRoleBasedManagementCapabilities"

633 **7.12.2 Operations**

634 The following table lists the operations implemented on DCIM_CLPRoleBasedManagementCapabilities.

635 **Table 25 – DCIM_CLPRoleBasedManagementCapabilities - Operations**

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

636 **7.12.3 Class Properties**

637 The following table lists the implemented properties for DCIM_CLPRoleBasedManagementCapabilities.

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

641 **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".

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644 **7.13 DCIM_RegisteredProfile - DMTF Role Based Authorization Profile Profile**
 645 **Registration**

646 This section describes the implementation for the DCIM_RegisteredProfile class.

647 This class shall be instantiated in the Interop Namespace.

648 The DCIM_ElementConformsToProfile association(s) shall reference the DCIM_RegisteredProfile
 649 instance.

650 **7.13.1 Resource URIs**

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

653 The key property shall be the InstanceID property.

654 The instance Resource URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-
 655 schema/2/DCIM_RegisteredProfile?__cimnamespace=root/interop+InstanceID=DCIM:RoleBasedAuthoriz
 656 ationRegisteredProfile:1"

657 **7.13.2 Operations**

658 The following table lists the operations implemented on for DCIM_RegisteredProfile.

659 **Table 27 – DCIM_RegisteredProfile - Operations**

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

660 **7.13.3 Class Properties**

661 The following table lists the implemented properties for DCIM_RegisteredProfile instance. The
 662 "Requirements" column shall denote whether the property is implemented (for requirement definitions,
 663 see section 3). The "Additional Requirements" column shall denote either possible values for the property,
 664 or requirements on the value formulation.

665 **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"].

666
 667

668 **7.14 DCIM_LCRegisteredProfile**

669 This section describes the implementation for the DCIM_LCRegisteredProfile class.

670 This class shall be instantiated in the Interop Namespace.

671 The DCIM_ElementConformsToProfile association(s) shall reference the DCIM_LCRegisteredProfile
672 instance.

673 **7.14.1 Resource URIs for WinRM®**

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

676 The key property shall be the InstanceID property.

677 The instance Resource URI shall be: "http://schemas.dell.com/wbem/wscim/1/cim-
678 schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID=DCIM:RoleBasedAuth
679 orizationRegisteredProfile:1.0.0"

680 **7.14.2 Operations**

681 The following table lists the operations implemented on for DCIM_LCRegisteredProfile.

682 **Table 29 – DCIM_LCRegisteredProfile - Operations**

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

683 **7.14.3 Class Properties**

684 The following table lists the implemented properties for DCIM_LCRegisteredProfile instance. The
685 "Requirements" column shall denote whether the property is implemented (for requirement definitions,
686 see section 3). The "Additional Requirements" column shall denote either possible values for the property,
687 or requirements on the value formulation.

688 **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"> • "LICENSED" • "NOT_LICENSED" <p>If no license is required for the profile, the property shall have value NULL.</p>

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691 **8 Methods**

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

694 **8.1 DCIM_IPMIRoleBasedAuthorizationService.AssignRoles()**

- 695 The invocation of “Assign Roles” shall follow the following steps:
 696 1. Enumerate DCIM_LANIdentity or DCIM_SerialIdentity
 697 2. Enumerate DCIM_IPMIRole for LAN Identities or DCIM_IPMISOLRole for Serial Identities
 698 3. Call AssignRoles with references to an instance of each class.

699 **Table 31 – DCIM_IPMIRoleBasedAuthorizationService.AssignRoles() Method: Return Code Values**

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

700 **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

701 **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

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704 **8.2 DCIM_CLPRoleBasedAuthorizationService.AssignRoles()**

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

- 706 1. Enumerate DCIM_CLPIdentity
- 707 2. Enumerate DCIM_CLPRole
- 708 3. Call AssignRoles with references to an instance of each class.

709 **Table 34 – DCIM_CLPRoleBasedAuthorizationService.AssignRoles() Method: Return Code Values**

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

710 **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

711 **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

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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

Class and Method	Operation	User Privilege Required	License Required
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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