# Active Directory®

# Client Profile

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# Foreword

The Active Directory® Client Profile (DCIM1007) was prepared by the Dell CIM Review Board.

# Introduction

This specification identifies the necessary classes, properties, methods, and values to be instantiated and manipulated to represent and manage an Active Directory client modeled using the DMTF Common Information Model (CIM) core and extended model definitions.

This document is intended for implementers who write CIM-based providers or consumers of management interfaces representing the component described herein.

1  # Active Directory® Client Profile

2  # 1  Scope

3  The Active Directory® Client Profile extends the management capabilities of referencing profiles by
4  adding the capability to represent the configuration of Active Directory client service and the groups
5  managed by the service. The Active Directory client service and groups are modeled as referencing the
6  security principals and profile versioning for the schema implementation version information.

7  # 2  Normative References

8  The following referenced documents are indispensable for the application of this document. For dated
9  references, only the edition cited applies. For undated references, the latest edition of the referenced
10  document (including any amendments) applies.

11  ## 2.1  Approved References

12  DMTF DSP1033, *Profile Registration Profile 1.0.0*

13  DMTF DSP0200, *CIM Operations over HTTP 1.2.0*

14  DMTF DSP0004, *CIM Infrastructure Specification 2.3.0*

15  DMTF DSP1000, *Management Profile Specification Template*

16  DMTF DSP1001, *Management Profile Specification Usage Guide*

17  ## 2.2  Other References

18  ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards*,
19  http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype

20  Unified Modeling Language (UML) from the Open Management Group (OMG), http://www.uml.org

21  SM Managed Element Addressing Specification (SM ME Addressing) DSP0215,
22  http://www.dmtf.org/standards/mgmt/smash/

23  # 3  Terms and Definitions

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

25  **3.1**
26  **can**
27  used for statements of possibility and capability, whether material, physical, or causal

28  **3.2**
29  **cannot**
30  used for statements of possibility and capability, whether material, physical, or causal

31  **3.3**
32  **conditional**
33  indicates requirements to be followed strictly in order to conform to the document when the specified
34  conditions are met

35 **3.4**

36 **mandatory**

37 indicates requirements to be followed strictly in order to conform to the document and from which no
38 deviation is permitted

39 **3.5**

40 **may**

41 indicates a course of action permissible within the limits of the document

42 **3.6**

43 **need not**

44 indicates a course of action permissible within the limits of the document

45 **3.7**

46 **optional**

47 indicates a course of action permissible within the limits of the document

48 **3.8**

49 **referencing profile**

50 indicates a profile that owns the definition of this class and can include a reference to this profile in its
51 "Related Profiles" table

52 **3.9**

53 **shall**

54 indicates requirements to be followed strictly in order to conform to the document and from which no
55 deviation is permitted

56 **3.10**

57 **shall not**

58 indicates requirements to be followed strictly in order to conform to the document and from which no
59 deviation is permitted

60 **3.11**

61 **should**

62 indicates that among several possibilities, one is recommended as particularly suitable, without
63 mentioning or excluding others, or that a certain course of action is preferred but not necessarily required

64 **3.12**

65 **should not**

66 indicates that a certain possibility or course of action is deprecated but not prohibited

67 # 4   Symbols and Abbreviated Terms

68 **4.1**

69 **CIM**

70 Common Information Model

71 # 5   Synopsis

72 **Profile Name:** Active Directory Client

73 **Version:** 1.0.0

74   **Organization:** Dell

75   **CIM Schema Version:** 2.15.0

76   **Central Class:** Dell_OEMActiveDirectoryService

77   **Scoping Class:** CIM_ComputerSystem

78   The Active Directory® Client Profile extends the management capability of the referencing profiles by
79   adding the capability to describe the Active Directory client configuration. Dell_OEMActiveDirectory shall
80   be the Central Class. CIM_ComputerSystem shall be the Scoping Class. Instance(s) of
81   Dell_OEMActiveDirectoryService shall be the Central Instance(s). The CIM_ComputerSystem instance
82   with which the Central Instance is associated through the CIM_HostedService association shall be the
83   Scoping Instance.

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

85   **Table 1 – Related Profiles**

| Profile Name | Organization | Version | Relationship |
|---|---|---|---|
| Profile Registration Profile | DMTF | 1.0 | Mandatory |
| Simple Identity Management Profile | DMTF | 1.0 | Conditional. See Section 7.2.2 |

86   # 6   Description

87   The Active Directory® Client Profile describes the Active Directory client configuration service and groups
88   that the service manages. The profile also describes the relationship of the Active Directory groups to the
89   security principal and DMTF/Dell profile version information.

90   Figure 1 represents the class schema for the Active Directory® Client Profile. For simplicity, the prefix
91   CIM_ has been removed from the names of the classes.

92
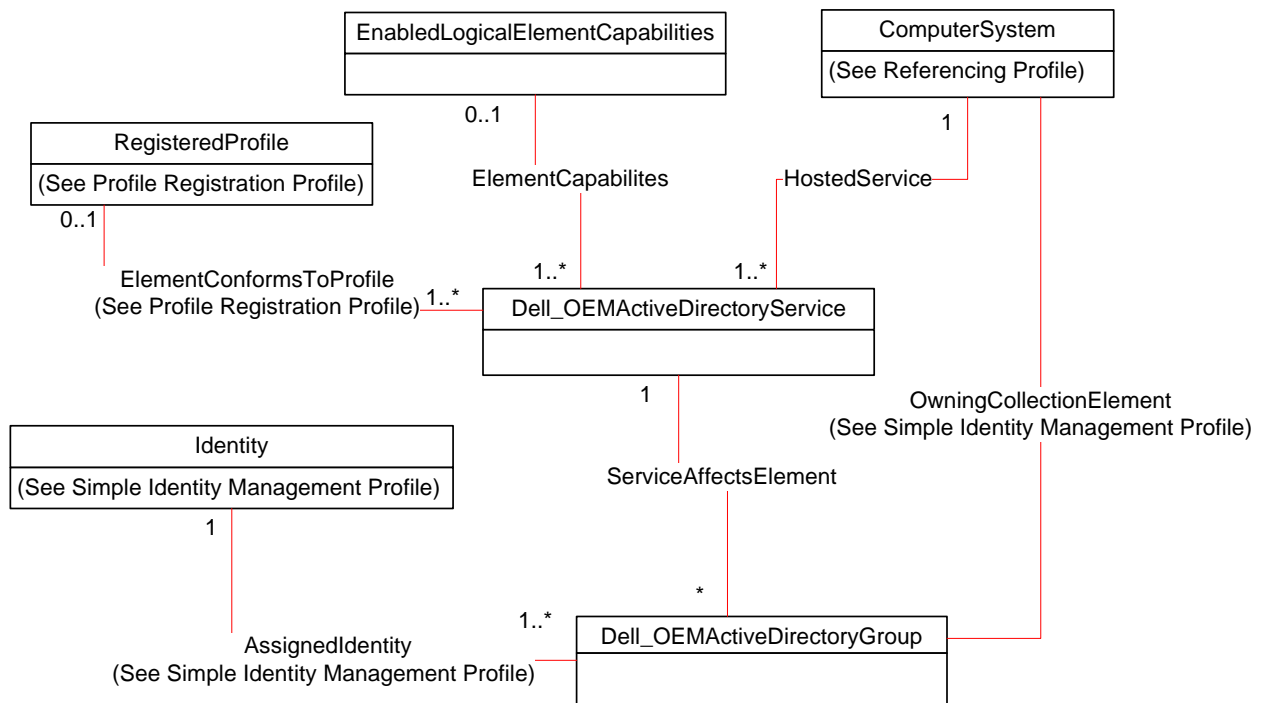


94 **Figure 1 – Active Directory® Client Profile: Class Diagram**

95  The Active Directory client service in a managed system is represented by the
96  Dell_OEMActiveDirectoryService instance class. The capability to disable and enable the Active Directory
97  client is advertised through the CIM_EnabledLogicalElementCapabilities instance. The Active Directory
98  groups are represented by the Dell_OEMActiveDirectoryGroup class.

99  The security principal of the Active Directory group associated with the Dell_OEMActiveDirectoryGroup by
100  CIM_AssignedIdentity is represented by CIM_Identity.

101  Profile information is represented with the CIM_RegisteredProfile instance.

## 6.1  Active Directory Schemas

103  Active Directory authentication can be configured using two different schemas. Depending on which type
104  of schema is used for authentication, the configuration requirements of the classes, properties and
105  methods in the profile may change. The Dell_OEMActiveDirectoryService.SchemaType property
106  represents the current type of schema used by the Active Directory.

### 6.1.1  Extended Schema

108  When the Active Directory extended schema is used, the role and privilege objects reside on the Active
109  Directory. Authorization occurs on the Active Directory and not on the Active Directory client-managed
110  system. The configuration of the Active Directory client involves providing information about the managed
111  system's object name and domain within the Active Directory.

### 6.1.2  Standard Schema

113  When the Active Directory standard schema is used, the role and privilege objects reside on the managed
114  system, Authorization occurs on the managed system and not on the Active Directory server. Active

115 Directory groups are represented by the Dell_OEMActiveDirectoryGroup, and the associated security
116 principal is represented by CIM_Identity.

# 7    Implementation Requirements

118 Requirements and guidelines for propagating and formulating certain properties of the classes are
119 discussed in this section. Methods are listed in section 8 and properties are listed in section 10.

## 7.1    Dell_OEMActiveDirectoryService

121 At least one Dell_OEMActiveDirectoryService instance shall be instantiated.

## 7.2    Extended and Standard Schema Support

123 The following section includes requirements for Active Directory client support extended and standard
124 schemas. The Dell_OEMActiveDirectoryService.SchemaType property shall indicate the current
125 authentication schema used by the Active Directory client.

### 7.2.1    Extended Schema

127 If the extended schema is used for Active Directory authentication, the
128 Dell_OEMActiveDirectoryService.SchemaType property shall be set to 1 (Extended). If this property is set
129 to 1(Extended), the requirements included in this section shall apply.

130 The Dell_OEMActiveDirectoryService.DeviceObjectDomain and
131 Dell_OEMActiveDirectoryService.DeviceObjectName properties shall be mandatory.

### 7.2.2    Standard Schema

133 If the standard schema is used for Active Directory authentication, the
134 Dell_OEMActiveDirectoryService.SchemaType property shall be set to 2 (Standard). If this property is set
135 to 2 (Standard), the requirements detailed in this section shall apply.

136 The Simple Identity Management Profile shall be implemented where the requirements for CIM_Group
137 class shall be applied to the Dell_OEMActiveDirectoryGroup class derived from the CIM_Group class.

138 There shall be at least one Dell_OEMActiveDirectoryGroup instance. The Dell_OEMActiveDirectoryGroup
139 instance(s) shall be associated with the CIM_Identity instance through CIM_AssignedIdenity association.

140 Instance(s) of Dell_OEMActiveDirectoryGroup shall be associated with the Scoping Instance through
141 CIM_OwningCollectionElement.

## 7.3    CIM_EnabledLogicalElementCapabilities

143 When the CIM_EnabledLogicalElementCapabilities class is instantiated, the
144 CIM_EnabledLogicalElementCapabilities instance shall be associated with the
145 Dell_OEMActiveDirectoryService instance through an CIM_ElementCapabilities instance and used for
146 advertising the capabilities of the Dell_OEMActiveDirectoryService instance.

147 There shall be at most one CIM_EnabledLogicalElementCapabilities instance associated with a given
148 Dell_OEMActiveDirectoryService instance.

### 7.3.1    CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported

150 CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported is an array that contains the
151 supported requested states for the Dell_OEMActiveDirectoryService instance. This property shall be the
152 superset of the values of the RequestedState parameter in the RequestStateChange( ) method (see

153    section 8.1). The value of the CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported
154    property shall be either an empty array or contain any combination of the following values: 2 (Enabled), 3
155    (Disabled), 6 (Offline), or 11 (Reset).

### 156    7.3.2    CIM_EnabledLogicalElementCapabilities.ElementNameEditSupported

157    This property shall have a value of TRUE when the implementation supports client modification of the
158    Dell_OEMActiveDirectoryService.ElementName property.

### 159    7.3.3    CIM_EnabledLogicalElementCapabilities.MaxElementNameLen

160    The MaxElementNameLen property shall be implemented when the ElementNameEditSupported
161    property has a value of TRUE.

## 162    7.4    Active Directory Client State Management (Optional)

163    Active Directory client state management consists of the
164    Dell_OEMActiveDirectoryService.RequestStateChange( ) method being supported (see section 8.1) and
165    the value of Dell_OEMActiveDirectoryService.RequestedState not matching 12 (Not Applicable).

### 166    7.4.1    Active Directory Client State Management Support

167    When no CIM_EnabledLogicalElementCapabilities instance is associated with the
168    Dell_OEMActiveDirectoryService instance, Active Directory client state management shall not be
169    supported.

170    When a CIM_EnabledLogicalElementCapabilities instance is associated with the
171    Dell_OEMActiveDirectoryService instance and the value of the
172    CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported property is an empty array, Active
173    Directory client state management shall not be supported.

174    When a CIM_EnabledLogicalElementCapabilities instance is associated with the
175    Dell_OEMActiveDirectoryService instance and the value of the
176    CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported property is not an empty array,
177    Active Directory client state management shall be supported.

## 178    7.5    Dell_OEMActiveDirectoryService.RequestedState

179    The Dell_OEMActiveDirectoryService.RequestedState property shall have a value of 12 (Not Applicable),
180    5 (No Change), or a value contained in the
181    CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported property array of the associated
182    CIM_EnabledLogicalElementCapabilities instance (see section 7.3.1).

183    When Active Directory client state management is supported and the RequestStateChange( ) method is
184    successfully executed, the RequestedState property shall be set to the value of the parameter
185    RequestedState of the RequestStateChange( ) method. After the RequestStateChange( ) method is
186    successfully executed, RequestedState and EnabledState shall have equal values, except for the
187    transitional requested state 11 (Reset). The value of the RequestedState property may change due to a
188    request for change to the Active Directory client enabled state by non-CIM implementation.

### 189    7.5.1    RequestedState – 12 (Not Applicable) value

190    When Active Directory client state management is not supported, the value of the
191    Dell_OEMActiveDirectoryService.RequestedState property shall be 12 (Not Applicable).

192 **7.5.2    RequestedState – 5 (No Change) value**

193 When Active Directory client state management is supported, the initial value of the
194 Dell_OEMActiveDirectoryService.RequestedState property shall be 5 (No Change).

195 **7.6    Dell_OEMActiveDirectoryService.EnabledState**

196 Table 2 relates the values of the Dell_OEMActiveDirectoryService.EnabledState property to the states of
197 the Active Directory client. The Dell_OEMActiveDirectoryService.EnabledState property shall match the
198 values that are specified in Table 2. When the RequestStateChange( ) method executes but does not
199 complete successfully and the Active Directory client is in an indeterminate state, the
200 Dell_OEMActiveDirectoryService.EnabledState property shall have value of 5 (Not Applicable). The value
201 of this property may change due to a change to the Active Directory client's enabled state by non-CIM
202 implementation.

203                              **Table 2 – EnabledState Value Description**

| Value | Description | Extended Description |
|-------|-------------|----------------------|
| 2 | Enabled | Active Directory authentication shall be enabled. |
| 3 | Disabled | Active Directory authentication shall be disabled. |
| 5 | Not Applicable | Active Directory client state is indeterminate, or the Active Directory client state management is not supported. |

204

# 205  **8    Methods**

206 This section includes requirements for support of the intrinsic operations and extrinsic methods of the CIM
207 elements defined by this profile.

208 **8.1    Method: Dell_OEMActiveDirectoryService.RequestStateChange( )**

209 Invoking the Dell_OEMActiveDirectoryService.RequestStateChange( ) method changes the element's
210 state to the value specified in the RequestedState parameter.

211 Return values for RequestStateChange( ) shall be as specified in **Error! Reference source not found.**
212 where the method-execution behavior matches the return-code description. RequestStateChange( )
213 method parameters are specified in **Error! Reference source not found.**.

214     **Table 3 – Dell_OEMActiveDirectoryService.RequestStateChange( ) Method: Return Code Values**

| Value | Description |
|-------|-------------|
| 0 | Request was successfully executed. |
| 1 | Method is not supported in the implementation. |
| 2 | Error occurred |
| 4096 | Job started |

215 **Table 4 – Dell_OEMActiveDirectoryService.RequestStateChange( ) Method: Parameters**

| Qualifiers | Name | Type | Description/Values |
|---|---|---|---|
| IN, REQ | RequestedState | uint16 | Valid state values:<br>2 (Enabled)<br>3 (Disabled) |
| OUT | Job | CIM_ConcreteJob REF | Returned if job started |
| IN, REQ | TimeoutPeriod | Datetime | Client specified maximum amount of time a transition to a new state should take:<br>0 or NULL – No time requirements<br><interval> – Maximum time allowed |

216 When the Active Directory client state management is supported, RequestStateChange( ) method shall be
217 implemented and shall not return a value of 1 (Not Supported). See section 7.4.1.

218 Invoking the Dell_OEMActiveDirectoryService.RequestStateChange( ) method multiple times could result
219 in earlier requests being overwritten or lost.

220 No standard messages are defined for this method.

## 8.2 Profile Conventions for Operations

221

222 Support of operations for each profile class (including associations) is specified in the following
223 subclauses. Each subclause includes either the statement "All operations in the default list in section 8.2
224 are supported as described by DSP0200 version 1.2" or a table listing all of the operations that are not
225 supported by this profile or where the profile requires behavior other than that described by DSP0200.

226 The default list of operations is as follows:

227 • GetInstance

228 • EnumerateInstances

229 • EnumerateInstanceNames

230 • Associators

231 • AssociatorNames

232 • References

233 • ReferenceNames

234 A compliant implementation shall support all of the operations in the default list for each class, unless the
235 "Requirement" column states something other than *Mandatory*.

### 236 **8.3 CIM_ElementCapabilities Operations**

237 Table 5 lists operations that either have special requirements beyond those from DSP0200 or shall not be
238 supported.

239 **Table 5 – CIM_ElementCapabilities Operations**

| Operation | Requirement | Messages |
|---|---|---|
| EnumerateInstances | Unspecified | None |
| EnumerateInstanceNames | Unspecified | None |
| Associators | Unspecified | None |
| AssociatorNames | Unspecified | None |
| References | Unspecified | None |
| ReferenceNames | Unspecified | None |

### 240 **8.4 CIM_EnabledLogicalElementCapabilities Operations**

241 All operations in the default list in section 8.2 are supported as described by DSP0200 version 1.2.

### 242 **8.5 CIM_HostedService Operations**

243 Table 6 lists operations that either have special requirements beyond those from DSP0200 or shall not be
244 supported.

245 **Table 6 – CIM_HostedService Operations**

| Operation | Requirement | Messages |
|---|---|---|
| EnumerateInstances | Unspecified | None |
| EnumerateInstanceNames | Unspecified | None |
| Associators | Unspecified | None |
| AssociatorNames | Unspecified | None |
| References | Unspecified | None |
| ReferenceNames | Unspecified | None |

### 246 **8.6 CIM_ServiceAffectsElement Operations**

247 Table 7 lists operations that either have special requirements beyond those from DSP0200 or shall not be
248 supported.

249 **Table 7 – CIM_ServiceAffectsElement Operations**

| Operation | Requirement | Messages |
|---|---|---|
| EnumerateInstances | Unspecified | None |
| EnumerateInstanceNames | Unspecified | None |
| Associators | Unspecified | None |
| AssociatorNames | Unspecified | None |
| References | Unspecified | None |
| ReferenceNames | Unspecified | None |

## 250    8.7    Dell_OEMActiveDirectoryService Operations

251    Table 8 lists operations that either have special requirements beyond those from DSP0200 or shall not be
252    supported.

253                         **Table 8 – Dell_OEMActiveDirectoryService Operations**

| Operation | Requirement | Messages |
|---|---|---|
| ModifyInstance | Mandatory. See section 8.7.1. | None |

### 254    8.7.1    Dell_OEMActiveDirectoryService—ModifyInstance

255    This section details the requirements for the ModifyInstance operation applied to an instance of
256    Dell_OEMActiveDirectoryService. The ModifyInstance operation may be supported.

257    The ModifyInstance operation shall be supported and Dell_OEMActiveDirectoryService.ElementName
258    shall be modifiable when the ElementNameEditSupported property of the
259    CIM_EnabledLogicalElementCapabilities instance that is associated with the
260    Dell_OEMActiveDirectoryService instance has a value of TRUE. See section 8.7.1.1.

#### 261    8.7.1.1    Dell_OEMActiveDirectoryService.ElementName

262    When the ElementNameEditSupported property of the CIM_EnabledLogicalElementCapabilities instance
263    that is associated with the Dell_OEMActiveDirectoryService instance has a value of TRUE, the
264    implementation shall allow the ModifyInstance operation to change the value of the ElementName
265    property of the Dell_OEMActiveDirectoryService instance. The ModifyInstance operation shall enforce the
266    length restriction specified in the MaxElementNameLen property of the
267    CIM_EnabledLogicalElementCapabilities instance.

268    When the ElementNameEditSupported property of the CIM_EnabledLogicalElementCapabilities instance
269    has a value of FALSE, the implementation shall not allow the ModifyInstance operation to change the
270    value of the ElementName property of the Dell_OEMActiveDirectoryService instance.

## 271    8.8    CIM_OEMActiveDirectoryGroup Operations

272    Table 8 lists operations that either have special requirements beyond those from DSP0200 or shall not be
273    supported.

274                         **Table 9 – Dell_OEMActiveDirectoryService Operations**

| Operation | Requirement | Messages |
|---|---|---|
| ModifyInstance | Mandatory | None |

# 275    9    Use Cases

276    This section contains object diagrams and use cases for the Active Directory Client Profile.

## 277    9.1    Object Diagrams

278    Figure 2 represents a possible instantiation of the Active Directory® Client Profile. In this instantiation, the
279    managed system, chassismgr1, has management of Active Directory client, adservice1.

280    chassismgr1 is the scoping instance for adservice1. Following the CIM_ElementConformsToProfile
281    association to profile1 and the referenced CIM_ReferencedProfile association to a CIM_RegisteredProfile

282 instance with the RegisteredName property set to "Active Directory Client", the client can retrieve profile2.
283 profile2 shows the version of the current Active Directory® Client Profile implementation.

284 The prefix CIM_ has been removed from the names of the classes in the figure.
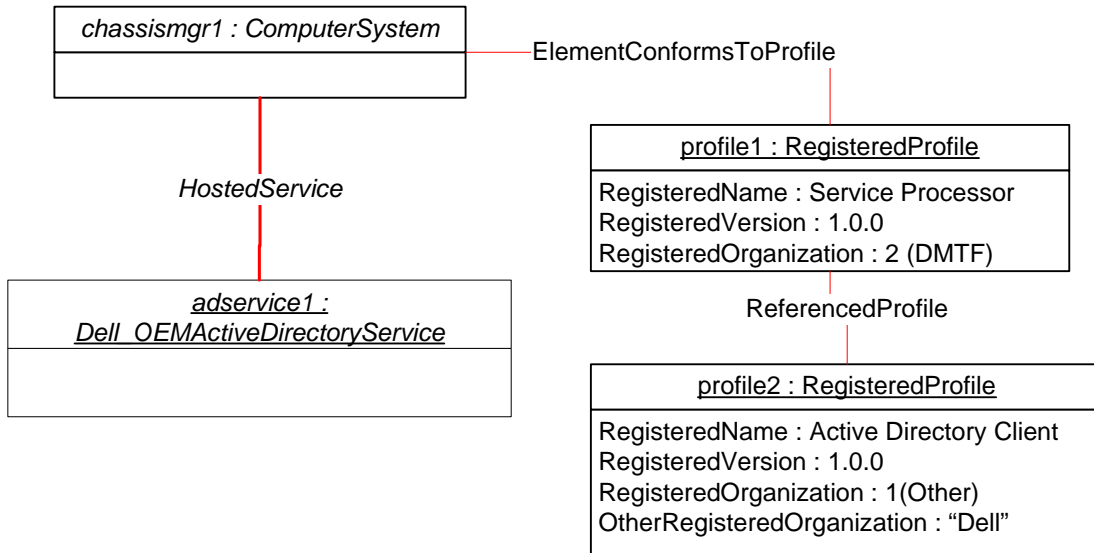


285

286 **Figure 2 – Active Directory® Client Profile: Object Diagram**

287 Figure 3 represents a possible instantiation of the Active Directory® Client Profile representing an Active
288 Directory client configured to use the standard schema represented by the adservice1.SchemaType
289 property value. adgroup1 through adgroup5 represent Active Directory groups that can have local
290 authorization. adgroup1 through adgroup5 are associated to the security principals of ADGroup_id1
291 through ADGroup5 respectively. adgroup1 through adgroup5 priovileges can be represented using the
292 Role Based Authorization Profile by associating ADGroup_id1 through ADGroup_id5 to CIM_Role
293 instances.
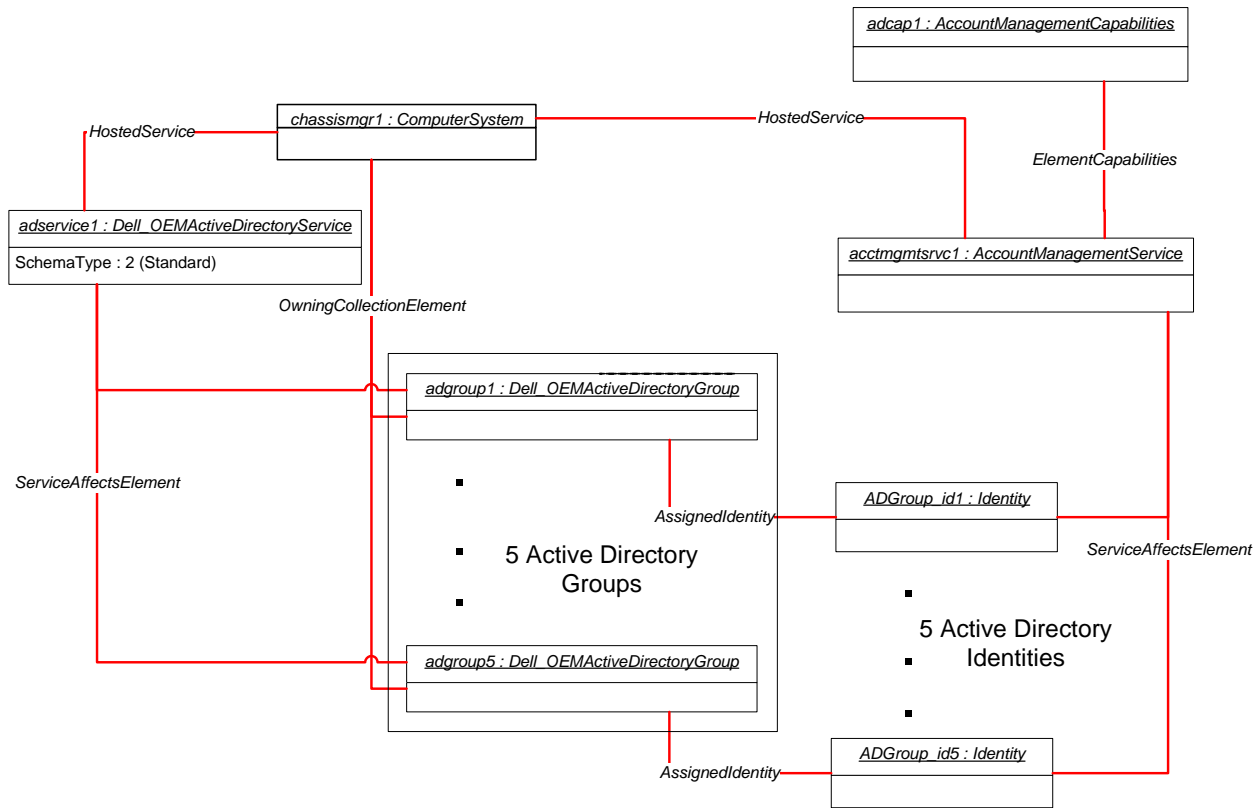
295    **Figure 3 – Active Directory® Client Profile: Standard Schema Object Diagram**

## 9.2    Enable the Active Directory Authentication

297    A client can enable the Active Directory client as follows:

298    1)    For the given Dell_OEMActiveDirectoryService instance, find the associated
299          CIM_EnabledLogicalElementCapabilities instance.

300    2)    If the CIM_EnabledLogicalElementCapabilities.RequestedStatesSupported property is an array
301          that contains the value 2 (Enabled), execute the RequestStateChange( ) method with the value
302          of the RequestedState parameter set to 2 (Enable) to enable the Active Directory authentication
303          of Active Directory client represented by this instance.

## 9.3    Determine Whether the Dell_OEMActiveDirectoryService.ElementName Is Modifiable

306    A client can determine if it can modify the Dell_OEMActiveDirectoryService.ElementName property as
307    follows:

308    1)    Find the CIM_EnabledLogicalElementCapabilities instance associated with the
309          Dell_OEMActiveDirectoryService instance.

310    2)    Query the value of the ElementNameEditSupported property of the instance. If the value is
311          TRUE, the client can modify the Dell_OEMActiveDirectoryService.ElementName property.

## 312  **10  CIM Elements**

313  Table 10 shows the instances of CIM Elements for this profile. Instances of the CIM Elements shall be
314  implemented as described in Table 10. Sections 7 ("Implementation Requirements") and 8 ("Methods")
315  may impose additional requirements on these elements.

316  **Table 10 – CIM Elements: Active Directory® Client Profile**

| Element Name | Requirement | Description |
|---|---|---|
| **Classes** | | |
| CIM_ElementCapabilities | Conditional | See section 10.1. |
| CIM_EnabledLogicalElementCapabilities | Optional | See sections 7.3 and 10.2. |
| CIM_HostedService | Mandatory | See section 10.3. |
| CIM_ServiceAffectsElement | Conditional | See section 10.4 and 7.2.2. |
| Dell_OEMActiveDirectoryGroup | Conditional | See section 10.5 and 7.2.2. |
| Dell_OEMActiveDirectoryService | Mandatory | See sections 10.6. |
| CIM_RegisteredProfile | Mandatory | See section 10.7. |
| **Indications** | | |
| None defined in this profile | | |

### 317  **10.1  CIM_ElementCapabilities**

318  CIM_ElementCapabilities associates a Dell_OEMActiveDirectoryService instance with a
319  CIM_EnabledLogicalElementCapabilities instance.  CIM_EnabledLogicalElementCapabilities describes
320  the capabilities of the Dell_OEMActiveDirectoryService instance. CIM_ElementCapabilities is mandatory
321  when the CIM_EnabledLogicalElementCapabilities instance is instantiated.

322  **Table 11 – CIM_ElementCapabilities**

| Properties | Requirement | Notes |
|---|---|---|
| ManagedElement | Mandatory | **Key**: Shall reference the Dell_OEMActiveDirectoryService instance. Cardinality 1..* indicating one or more references. |
| Capabilities | Mandatory | **Key**: Shall reference the CIM_EnabledLogicalElementCapabilities instance. Cardinality 0..1 indicating zero or one reference. |

### 323  **10.2  CIM_EnabledLogicalElementCapabilities**

324  CIM_EnabledLogicalElementCapabilities represents the capabilities of the Active Directory client.

325  **Table 12 – CIM_EnabledLogicalElementCapabilities**

| Properties | Requirement | Notes |
|---|---|---|
| InstanceID | Mandatory | **Key** |
| RequestedStatesSupported | Mandatory | See section 7.3.1. |
| ElementNameEditSupported | Mandatory | See section 7.3.2. |
| MaxElementNameLen | Conditional | See section 7.3.3. |

### 326 **10.3   CIM_HostedService**

327 CIM_HostedService associates a Dell_OEMActiveDirectoryService instance with the
328 CIM_RedundancySet instance.

329                                             **Table 13 – Class: CIM_HostedService**

| Properties | Notes | Description |
|---|---|---|
| Antecedent | Mandatory | **Key:** Shall reference the Scoping Instance. Cardinality 1 indicating one and only one reference. |
| Dependent | Mandatory | **Key:** Shall reference the Central Instance Cardinality 1..* indicating one or more references. |

### 330 **10.4   CIM_ServiceAffectsElement**

331 Table 14 shows the requirements for a CIM_ServiceAffectsElement instance.

332                                         **Table 14 – Class: CIM_ServiceAffectsElement**

| Elements | Requirement | Notes |
|---|---|---|
| ServiceProvided | Mandatory | **Key** This property shall be a reference to the Central Instance of the profile. Cardinality 1 |
| UserOfService | Mandatory | **Key** This property shall be a reference to Dell_OEMActiveDirectoryGroup. Cardinality * |
| ElementAffects | Mandatory | Matches 5 (Manages). |

### 333 **10.5   Dell_OEMActiveDirectoryGroup**

334 Table 15 shows the requirements for a CIM_Group instance.

335                                     **Table 15 – Class: Dell_OEMActiveDirectoryGroup**

| Elements | Requirement | Notes |
|---|---|---|
| CreationClassName | Mandatory | **Key** |
| Name | Mandatory | **Key** |
| ElementName | Mandatory | shall match "Active Directory Service" |
| DeviceObjectDomain | Mandatory | |

336 **10.6   Dell_OEMActiveDirectoryService**

337   Dell_OEMActiveDirectoryService represents the Active Directory client.

338                          **Table 16 – Class: Dell_OEMActiveDirectoryService**

| Properties and Methods | Requirement | Description |
|---|---|---|
| SystemCreationClassName | Mandatory | **Key** |
| CreationClassName | Mandatory | **Key** |
| SystemName | Mandatory | **Key** |
| Name | Mandatory | **Key** |
| RequestedState | Mandatory | |
| EnabledState | Mandatory | |
| ElementName | Mandatory | pattern ".*". |
| RequestStateChange( ) | Conditional | See section 8.1. |

339 **10.7   CIM_RegisteredProfile**

340   The CIM_RegisteredProfile class is defined by the Profile Registration Profile. The requirements shown in
341   Table 17 are additional to those mandated by the Profile Registration Profile.

342                          **Table 17 – Class: CIM_RegisteredProfile**

| Properties | Requirement | Description |
|---|---|---|
| RegisteredName | Mandatory | This property shall have a value of "Active Directory Client". |
| RegisteredVersion | Mandatory | This property shall have a value of "1.0.0". |
| RegisteredOrganization | Mandatory | This property shall have a value of 1 (Other). |
| OtherRegisteredOrganization | Mandatory | This property shall match "Dell". |

343 **ANNEX A**
344 (informative)

345

346 **Change Log**

| Version | Date | Description |
|---------|------|-------------|
| 1.0.0 | 2/12/2009 | Initial version. |

347

348 # ANNEX B
349 ## (informative)
350
351 # Acknowledgments

352 The authors wish to acknowledge the following people.

353 **Editor:**

354 • Khachatur Papanyan – Dell Inc.

355 **Contributors:**

356 • Khachatur Papanyan – Dell Inc.
357