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# **Text Console Redirection Profile SM CLP**

**Mapping Specification** 

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Perry Vincent – Intel

Foreword 70 71 The Text Console Redirection Profile SM CLP Mapping Specification (DSP0828) was prepared by the Server Management Working Group. 72 **Conventions** 73 74 The pseudo code conventions utilized in this document are the Recipe Conventions as defined in SNIA SMI-S V1.1.0, section 7.6. 75 **Acknowledgements** 76 77 The authors wish to acknowledge the following participants from the DMTF Server Management Working 78 Group: 79 John Leung - Intel 80 Aaron Merkin - IBM 81 Christina Shaw - HP 82 Enoch Suen - Dell Jon Hass - Dell 83 84 Jeff Hilland - HP 85 Khachatur Papanyan - Dell 86 Arvind Kumar - Intel

89	Introduction
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90 91 92 93	This document defines the SM CLP mapping for CIM elements described in the <u>Text Console Redirection Profile</u> . The information in this specification, combined with the <u>SM CLP-to-CIM Common Mapping Specification 1.0 (DSP0216</u> ), is intended to be sufficient to implement SM CLP commands relevant to the classes, properties, and methods described in the <u>Text Console Redirection Profile</u> using CIM operations.
94 95	The target audience for this specification is implementers of the SM CLP support for the <u>Text Console</u> Redirection Profile

conditions are met

# Text Console Redirection Profile SM CLP Mapping Specification

98	1 Scope
99 100	This specification contains the requirements for an implementation of the SM CLP to provide access to, and implement the behaviors of, the <u>Text Console Redirection Profile</u> .
101	2 Normative References
102 103 104	The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.
105	2.1 Approved References
106 107	DMTF DSP0216, SM CLP-to-CIM Common Mapping Specification 1.0, <a href="http://www.dmtf.org/standards/published_documents/DSP0216_1.0.pdf">http://www.dmtf.org/standards/published_documents/DSP0216_1.0.pdf</a>
108 109	DMTF DSP1024, Text Console Redirection Profile 1.0, <a href="http://www.dmtf.org/standards/published_documents/DSP1024_1.0.pdf">http://www.dmtf.org/standards/published_documents/DSP1024_1.0.pdf</a>
110 111	SNIA, Storage Management Initiative Specification (SMI-S) 1.1.0, <a href="http://www.snia.org/tech-activities/standards/curr-standards/smi">http://www.snia.org/tech-activities/standards/curr-standards/smi</a>
112	2.2 Other References
113 114	ISO/IEC Directives, Part 2, Rules for the structure and drafting of International Standards, <a href="http://isotc.iso.org/livelink/livelink.exe?func=ll&amp;objld=4230456&amp;objAction=browse&amp;sort=subtype">http://isotc.iso.org/livelink/livelink.exe?func=ll&amp;objld=4230456&amp;objAction=browse&amp;sort=subtype</a>
115	3 Terms and Definitions
116	For the purposes of this document, the following terms and definitions apply.
117 118 119	<ul><li>3.1</li><li>can</li><li>used for statements of possibility and capability, whether material, physical, or causal</li></ul>
120 121 122	3.2 cannot used for statements of possibility and capability, whether material, physical or causal
123 124 125	3.3  conditional indicates requirements to be followed strictly in order to conform to the document when the specified

- 127 **3.4**
- 128 mandatory
- 129 indicates requirements to be followed strictly in order to conform to the document and from which no
- 130 deviation is permitted
- 131 **3.5**
- 132 **may**
- indicates a course of action permissible within the limits of the document
- 134 **3.6**
- 135 need not
- indicates a course of action permissible within the limits of the document
- 137 **3.7**
- 138 optional
- indicates a course of action permissible within the limits of the document
- 140 **3.8**
- 141 shall
- 142 indicates requirements to be followed strictly in order to conform to the document and from which no
- 143 deviation is permitted
- 144 3.9
- 145 shall not
- 146 indicates requirements to be followed strictly in order to conform to the document and from which no
- 147 deviation is permitted
- 148 **3.10**
- 149 should
- 150 indicates that among several possibilities, one is recommended as particularly suitable, without
- mentioning or excluding others, or that a certain course of action is preferred but not necessarily required
- 152 **3.11**
- 153 **should not**
- 154 indicates that a certain possibility or course of action is deprecated but not prohibited

# 4 Symbols and Abbreviated Terms

- 156 The following symbols and abbreviations are used in this document.
- 157 **4.1**

- 158 **CIM**
- 159 Common Information Model
- 160 **4.2**
- 161 **CLP**
- 162 Command Line Protocol
- 163 **4.3**
- 164 **DMTF**
- 165 Distributed Management Task Force

- 166 **4.4**
- 167 **IETF**
- 168 Internet Engineering Task Force
- 169 **4.5**
- 170 **SM**
- 171 Server Management
- 172 **4.6**
- 173 **SMI**
- 174 Storage Management Initiative
- 175 **4.7**
- 176 **SNIA**
- 177 Storage Networking Industry Association

# 178 **5 Recipes**

- The following is a list of the common recipes used by the mappings in this specification. For a definition of each recipe, see the *SM CLP-to-CIM Common Mapping Specification 1.0* (DSP0216).
- smOpDeleteInstance()
- smShowInstance()
- smShowInstances()
- smSetInstance()
- smShowAssociationInstances()
- 186 This mapping does not define any recipes for local reuse.

# 187 **6 Mappings**

- The following sections detail the mapping of CLP verbs to CIM Operations for each CIM class defined in
- the <u>Text Console Redirection Profile</u>. Requirements specified here related to support for a CLP verb for a
- 190 particular class are solely within the context of this profile.

# 191 **6.1 CIM BindsTo**

- 192 The cd and help verbs shall be supported as described in DSP0216.
- 193 Table 1 lists each SM CLP verb, the required level of support for the verb in conjunction with the target
- 194 class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and
- target. Table 1 is for informational purposes only; in case of a conflict between Table 1 and requirements
- detailed in the following sections, the text detailed in the following sections supersedes the information in
- 197 Table 1.

201

# Table 1 - Command Verb Requirements for CIM\_BindsTo

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.1.2.
Start	Not supported	
Stop	Not supported	

No mappings are defined for the following verbs for the specified target: create, delete, dump, exit, load, reset, set, start, and stop.

# 6.1.1 Ordering of Results

- When results are returned for multiple instances of CIM\_BindsTo, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:
- Results for CIM BindsTo are unordered; therefore, no algorithm is defined.

#### 205 **6.1.2 Show**

- This section describes how to implement the show verb when applied to an instance of CIM\_BindsTo.
- 207 Implementations shall support the use of the show verb with CIM BindsTo.

#### 208 6.1.2.1 Show a Single Instance – CIM\_TextRedirectionSAP Reference

- 209 This command form is used when the show verb applies to a single instance. This command form
- 210 corresponds to a show command issued against instances of CIM\_BindsTo where only one reference is
- 211 specified and the reference is to the instance of CIM\_TextRedirectionSAP.
- 212 The Text Console Redirection Profile imposes a cardinality of 1 on CIM BindsTo.Antecedent, which
- 213 references an instance of CIM\_ProtocolEndpoint. Therefore, for a given instance of a concrete subclass
- of CIM\_TextRedirectionSAP, a single instance of CIM\_BindsTo is found.

# 215 **6.1.2.1.1 Command Form**

216 show <CIM\_BindsTo single objects>

# 217 **6.1.2.1.2 CIM Requirements**

- 218 See CIM BindsTo in the "CIM Elements" section of the Text Console Redirection Profile for the list of
- 219 mandatory properties.

## 220 6.1.2.1.3 Behavior Requirements

# 221 6.1.2.1.3.1 Preconditions

\$\instance\ represents the instance of CIM\_TextRedirectionSAP which is referenced by CIM\_BindsTo.

# 223 6.1.2.1.3.2 Pseudo Code

# 228 6.1.2.2 Show a Single Instance – CIM\_ProtocolEndpoint Reference

- 229 This command form is used when the show verb applies to instances of CIM BindsTo where only one
- 230 reference is specified and the reference is to the instance of a concrete subclass of
- 231 CIM\_ProtocolEndpoint.
- The Text Console Redirection Profile imposes a cardinality of 1 on CIM\_BindsTo.Dependent, which
- 233 references an instance of CIM\_TextRedirectionSAP. Therefore, for a given instance of
- 234 CIM ProtocolEndpoint, a single instance of CIM BindsTo is found.

#### 235 **6.1.2.2.1 Command Form**

236 show <CIM\_BindsTo single object>

#### 237 **6.1.2.2.2 CIM Requirements**

- 238 See CIM\_BindsTo in the "CIM Elements" section of the Text Console Redirection Profile for the list of
- 239 mandatory properties.
- 240 **6.1.2.2.3** Behavior Requirements
- 241 **6.1.2.2.3.1 Preconditions**
- 242 \$instance represents the instance of CIM ProtocolEndpoint which is referenced by CIM BindsTo.

#### 243 6.1.2.2.3.2 Pseudo Code

```
244    &smOpReferences ( $instance.getObjectPath(), "CIM_BindsTo", "Antecedent", NULL, NULL,
245    $reference[] );
246    &smShowInstance ( $reference->[0]), NULL );
247    &smEnd;
```

#### 248 6.1.2.3 Show a Single Instance – Both References

- 249 This command form is for the show verb applied to a single instance. This command form corresponds to
- 250 a show command issued against CIM\_BindsTo where both references are specified and therefore the
- desired instance is unambiguously identified.

#### 252 **6.1.2.3.1 Command Form**

253 show <CIM\_BindsTo single object>

# 254 **6.1.2.3.2 CIM Requirements**

See CIM\_BindsTo in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for the list of

256 mandatory properties.

# 257 6.1.2.3.3 Behavior Requirements

#### 258 **6.1.2.3.3.1 Preconditions**

- 259 \$instanceA represents the instance of CIM\_TextRedirectionSAP which is referenced by CIM\_BindsTo.
- 260 \$instanceB represents the instance of CIM\_ProtocolEndpoint which is referenced by CIM\_BindsTo.

#### 261 **6.1.2.3.3.2** Pseudo Code

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# 6.2 CIM\_ElementCapabilities

266 The cd, help, version, and exit verbs shall be supported as described in DSP0216.

Table 2 lists each SM CLP verb, the required level of support for the verb in conjunction with the target class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and target. Table 2 is for informational purposes only; in case of a conflict between Table 2 and requirements detailed in the following sections, the text detailed in the following sections supersedes the information in Table 2.

#### Table 2 – Command Verb Requirements for CIM\_ElementCapabilities

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.2.2.
Start	Not supported	
Stop	Not supported	

No mapping is defined for the following verbs for the specified target: create, delete, dump, load, reset, set, start, and stop.

# 6.2.1 Ordering of Results

- When results are returned for multiple instances of CIM\_ElementCapabilities, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:
- Results for CIM ElementCapabilities are unordered; therefore, no algorithm is defined.

# 279 **6.2.2 Show**

- This section describes how to implement the show verb when applied to an instance of
- 281 CIM\_ElementCapabilities. Implementations shall support the use of the show verb with
- 282 CIM\_ElementCapabilities.

# 283 6.2.2.1 Show a Single Instance Target – CIM\_TextRedirectionService Reference

- This command form is used to show a single instance of CIM\_ElementCapabilities. This command form
- 285 corresponds to a show command issued against instances of CIM\_ElementCapabilities where only one
- reference is specified and the reference is to the scoping instance of CIM\_TextRedirectionService.
- 287 The Text Console Redirection Profile imposes a cardinality of 0..1 on the
- 288 CIM\_ElementCapabilities.Capabilities property, which references an instance of
- 289 CIM\_EnabledLogicalElementCapabilities. Therefore, for a given instance of CIM\_TextRedirectionService,
- at most a single instance of CIM ElementCapabilities is found.

#### 291 **6.2.2.1.1 Command Form**

#### 292 show <CIM\_ElementCapabilities multiple instances>

#### 293 **6.2.2.1.2 CIM Requirements**

- 294 See CIM ElementCapabilities in the "CIM Elements" section of the Text Console Redirection Profile for
- 295 the list of mandatory properties.

# 296 **6.2.2.1.3 Behavior Requirements**

#### 297 **6.2.2.1.3.1 Preconditions**

- 298 \$instance represents the instance of a CIM\_TextRedirectionService, which is referenced by
- 299 CIM\_ElementCapabilities.
- 300 #all is true if the "-all" option was specified with the command; otherwise, #all is false.

# 301 6.2.2.1.3.2 Pseudo Code

# 306 6.2.2.2 Show Multiple Instances – CIM\_EnabledLogicalElementCapabilities Reference

- 307 This command form is used to show a single instance of CIM\_ElementCapabilities. This command form
- 308 corresponds to a show command issued against a single instance of CIM ElementCapabilities where
- 309 only one reference is specified and the reference is to the instance of
- 310 CIM\_EnabledLogicalElementCapabilities.

# 311 **6.2.2.2.1 Command Form**

# 312 show <CIM\_ElementCapabilities multiple instances>

# 313 **6.2.2.2.2 CIM Requirements**

- 314 See CIM ElementCapabilities in the "CIM Elements" section of the Text Console Redirection Profile for
- 315 the list of mandatory properties.

#### 316 **6.2.2.2.3** Behavior Requirements

#### 317 **6.2.2.3.1 Preconditions**

- 318 \$instance represents the instance of a CIM\_EnabledLogicalElementCapabilties, which is referenced by
- 319 CIM\_ElementCapabilities.

# 320 **6.2.2.2.3.2** Pseudo Code

#### 324 6.2.2.3 Show a Single Instance Target – Both References

325 This command form is for the show verb applied to a single instance. This command form corresponds to

326 a show command issued against CIM\_ElementCapabilities where both references are specified and

327 therefore the desired instance is unambiguously identified.

#### 6.2.2.3.1 Command Form

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show <CIM\_ElementCapabilities single instance>

# 330 **6.2.2.3.2 CIM Requirements**

331 See CIM ElementCapabilities in the "CIM Elements" section of the Text Console Redirection Profile for

the list of mandatory properties.

# 333 6.2.2.3.3 Behavior Requirements

#### 334 **6.2.2.3.3.1** Preconditions

335 \$instanceA represents the instance of a CIM\_TextRedirectionService which is referenced by the

336 CIM ElementCapabilities.

337 \$instanceB represents the instance of a CIM\_EnableLogicalElementCapabilities which is referenced by

338 the CIM ElementCapabilities.

# 339 6.2.2.3.3.2 Pseudo Code

```
340    &smShowAssociationInstance ( "CIM_ElementCapabilities", $instanceA.getObjectPath(),
341    $instanceB.getObjectPath(), NULL );
342    &smEnd;
```

# 6.3 CIM\_EnabledLogicalElementCapabilities

The cd and help verbs shall be supported as described in <u>DSP0216</u>.

Table 3 lists each SM CLP verb, the required level of support for the verb in conjunction with the target

class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and

347 target. Table 3 is for informational purposes only; in case of a conflict between Table 3 and requirements

detailed in the following sections, the text detailed in the following sections supersedes the information in

349 Table 3.

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# Table 3 - Command Verb Requirements for CIM\_EnabledLogicalElementCapabilities

Command Verb	Requirement	Comments
create	Not supported	
delete	Not supported	
dump	Not supported	
load	Not supported	
reset	Not supported	

Command Verb	Requirement	Comments
set	Not supported	
show	Shall	See 6.3.2.
start	Not supported	
stop	Not supported	

- No mappings are defined for the following verbs for the specified target: create, delete, dump, exit,
- 352 load, reset, set, start, and stop.

# 6.3.1 Ordering of Results

- When results are returned for multiple instances of CIM\_EnabledLogicalElementCapabilities,
- implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:
  - Results for CIM\_EnabledLogicalElementCapabilities are unordered; therefore, no algorithm is defined.

# 358 **6.3.2 Show**

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- 359 The show verb is used to display information about instances of
- 360 CIM\_EnabledLogicalElementCapabilities. Implementations shall support the use of the show verb with
- 361 CIM EnabledLogicalElementCapabilities.

# 362 6.3.2.1 Show a Single Instance

- 363 This command form is used to display the information about a single instance of
- 364 CIM\_EnabledLogicalElementCapabilities.

#### 365 **6.3.2.1.1 Command Form**

366 show <CIM\_EnabledLogicalElementCapabilities single object>

# 367 **6.3.2.1.2 CIM Requirements**

- 368 See CIM\_EnabledLogicalElementCapabilities in the "CIM Elements" section of the *Text Console*
- 369 Redirection Profile for the list of mandatory properties.

# 370 6.3.2.1.3 Behavior Requirements

# 371 **6.3.2.1.3.1** Preconditions

- 372 \$instance represents the instance of CIM\_EnabledLogicalElementCapabilities.
- #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- 374 #propertylist[] is an array of mandatory non-key property names.

#### 375 **6.3.2.1.3.2 Pseudo Code**

```
if (false != #all) { #propertylist[] = NULL; }
377  &smShowInstance ( $instance.getObjectPath(), #propertylist[] );
378  &smEnd;
```

# 379 **6.3.2.2 Show Multiple Instances**

- 380 This command form is used to display the information about multiple instances of
- 381 CIM\_EnabledLogicalElementCapabilities. This command form corresponds to UFsT-based selection
- within a scoping system.

#### 383 **6.3.2.2.1 Command Form**

384 show <CIM EnabledLogicalElementCapabilities multiple objects>

#### 385 **6.3.2.2.2 CIM Requirements**

- 386 See CIM\_EnabledLogicalElementCapabilities in the "CIM Elements" section of the *Text Console*
- 387 Redirection Profile for the list of mandatory properties.

# 388 6.3.2.2.3 Behavior Requirements

#### 389 **6.3.2.2.3.1 Preconditions**

- 390 \$containerInstance represents the instance of CIM ConcreteCollection with ElementName property
- 391 that contains "Capabilities" and is associated to the targeted instances of
- 392 CIM\_EnabledLogicalElementCapabilities through the CIM\_MemberOfCollection association.
- 393 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- 394 #propertylist[] is an array of mandatory non-key property names.

#### 395 **6.3.2.2.3.2 Pseudo Code**

```
if (false != #all) { #propertylist[] = NULL; }
397   &smShowInstances ( "CIM_EnabledLogicalElementCapabilities", "CIM_ConcreteCollection",
398    $containerInstance.getObjectPath(), #propertylist[]);
399   &smEnd;
```

# 6.4 CIM HostedService

- The cd and help verbs shall be supported as described in <a href="DSP0216">DSP0216</a>.
- Table 4 lists each SM CLP verb, the required level of support for the verb in conjunction with the target
- dos class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and
- 404 target. Table 4 is for informational purposes only; in case of a conflict between Table 4 and requirements
- detailed in the following sections, the text detailed in the following sections supersedes the information in
- 406 Table 4.

400

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# Table 4 – Command Verb Requirements for CIM\_HostedService

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	

Command Verb	Requirement	Comments
Set	Not supported	
Show	Shall	See 6.4.2.
Start	Not supported	
Stop	Not supported	

- No mappings are defined for the following verbs for the specified target: create, delete, dump, exit,
- 409 load, reset, set, start, and stop.

# 410 **6.4.1 Ordering of Results**

- 411 When results are returned for multiple instances of CIM\_HostedService, implementations shall utilize the
- 412 following algorithm to produce the natural (that is, default) ordering:
- Results for CIM HostedService are unordered; therefore, no algorithm is defined.

# 414 **6.4.2 Show**

- 415 This section describes how to implement the show verb when applied to an instance of
- 416 CIM\_HostedService. Implementations shall support the use of the show verb with CIM\_HostedService.

# 417 6.4.2.1 Show Multiple Instances – CIM\_ComputerSystem Reference

- 418 This command form applies the show verb to multiple instances. This command form corresponds to a
- 419 show command issued against instances of CIM\_HostedService where only one reference is specified
- and the reference is to an instance of CIM\_ComputerSystem.

#### 421 **6.4.2.1.1 Command Form**

422 show <CIM\_HostedService multiple objects>

# 423 **6.4.2.1.2 CIM Requirements**

- 424 See CIM\_HostedService in the "CIM Elements" section of the Text Console Redirection Profile for the list
- 425 of mandatory properties.

# 426 **6.4.2.1.3 Behavior Requirements**

#### 427 6.4.2.1.3.1 Preconditions

- 428 \$instance represents the instance of CIM ComputerSystem, which is referenced by
- 429 CIM HostedService.

#### 430 **6.4.2.1.3.2** Pseudo Code

- 431 &smShowAssociationInstances ( "CIM\_HostedService", \$instance.getObjectPath() );
- 432 &smEnd;

#### 433 6.4.2.2 Show a Single Instance – CIM\_TextRedirectionService Reference

- This command form is used when the show verb applies to instances of CIM HostedService where only
- one reference is specified and the reference is to an instance of CIM\_TextRedirectionService.

- 436 The <u>Text Console Redirection Profile</u> imposes a cardinality of 1 on CIM\_HostedService.Dependent, which
- 437 references an instance of CIM ComputerSystem. Therefore, for a given instance of
- 438 CIM TextRedirectionService, a single instance of CIM HostedService is found.

#### 439 **6.4.2.2.1 Command Form**

- show <CIM\_HostedService single object>
- 441 **6.4.2.2.2 CIM Requirements**
- 442 See CIM\_HostedService in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for the list
- 443 of mandatory properties.
- 444 6.4.2.2.3 Behavior Requirements
- 445 **6.4.2.2.3.1 Preconditions**
- 446 \$instance represents the instance of CIM\_TextRedirectionService, which is referenced by
- 447 CIM HostedService.
- 448 **6.4.2.2.3.2** Pseudo Code

- 451 &smShowInstance ( \$references->[0]), NULL );
- 452 &smEnd;
- 453 6.4.2.3 Show a Single Instance Both References
- This command form is for the show verb applied to a single instance. This command form corresponds to
- 455 a show command issued against CIM\_HostedService where both references are specified and therefore
- 456 the desired instance is unambiguously identified.
- 457 **6.4.2.3.1 Command Form**
- 458 show <CIM\_HostedService single object>
- 459 **6.4.2.3.2 CIM Requirements**
- 460 See CIM\_HostedService in the "CIM Elements" section of the Text Console Redirection Profile for the list
- 461 of mandatory properties.
- 462 6.4.2.3.3 Behavior Requirements
- 463 **6.4.2.3.3.1 Preconditions**
- 464 \$instanceA represents the referenced instance of CIM\_ComputerSystem through CIM\_HostedService
- 465 association.
- 466 \$instanceB represents the other instance of CIM\_TextRedirectionService which is referenced by
- 467 CIM HostedService.
- 468 **6.4.2.3.3.2** Pseudo Code
- 471 &smEnd;

# 472 6.5 CIM\_HostedAccessPoint

- 473 The cd and help verbs shall be supported as described in <u>DSP0216</u>.
- Table 5 lists each SM CLP verb, the required level of support for the verb in conjunction with the target
- class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and
- 476 target. Table 5 is for informational purposes only; in case of a conflict between Table 5 and requirements
- detailed in the following sections, the text detailed in the following sections supersedes the information in
- 478 Table 5.

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# Table 5 – Command Verb Requirements for CIM\_HostedAccessPoint

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.5.2.
Start	Not supported	
Stop	Not supported	

- No mappings are defined for the following verbs for the specified target: create, delete, dump, exit,
- 481 load, reset, set, start, and stop.

# 6.5.1 Ordering of Results

- When results are returned for multiple instances of CIM\_HostedAccessPoint, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:
- Results for CIM\_HostedAccessPoint are unordered; therefore, no algorithm is defined.

## 486 **6.5.2 Show**

- 487 This section describes how to implement the show verb when applied to an instance of
- 488 CIM\_HostedAccessPoint. Implementations shall support the use of the show verb with
- 489 CIM\_HostedAccessPoint.

# 490 6.5.2.1 Show Multiple Instances – CIM\_ComputerSystem Reference

- 491 This command form applies the show verb to multiple instances. This command form corresponds to a
- 492 show command issued against instances of CIM\_HostedAccessPoint where only one reference is
- 493 specified and the reference is to an instance of CIM\_ComputerSystem.

- 494 **6.5.2.1.1 Command Form**
- 495 show <CIM\_HostedAccessPoint multiple objects>
- 496 **6.5.2.1.2 CIM Requirements**
- 497 See CIM HostedAccessPoint in the "CIM Elements" section of the Text Console Redirection Profile for
- 498 the list of mandatory properties.
- 499 6.5.2.1.3 Behavior Requirements
- 500 **6.5.2.1.3.1 Preconditions**
- \$instance represents the instance of CIM\_ComputerSystem, which is referenced by
- 502 CIM\_HostedAccessPoint.
- 503 **6.5.2.1.3.2** Pseudo Code
- &smShowAssociationInstances ( "CIM\_HostedAccessPoint", \$instance.getObjectPath() );
- 505 &smEnd;
- 506 6.5.2.2 Show a Single Instance CIM TextRedirectionSAP Reference
- 507 This command form is used when the show verb applies to instances of CIM\_HostedAccessPoint where
- only one reference is specified and the reference is to an instance of CIM\_TextRedirectionSAP.
- The <u>Text Console Redirection Profile</u> imposes a cardinality of 1 on CIM\_HostedAccessPoint.Dependent,
- 510 which references an instance of CIM\_ComputerSystem. Therefore; for a given instance of
- 511 CIM\_TextRedirectionSAP, a single instance of CIM\_HostedAccessPoint is found.
- 512 **6.5.2.2.1 Command Form**
- 513 show <CIM\_HostedAccessPoint single object>
- 514 **6.5.2.2.2 CIM Requirements**
- 515 See CIM\_HostedAccessPoint in the "CIM Elements" section of the Text Console Redirection Profile for
- 516 the list of mandatory properties.
- 517 6.5.2.2.3 Behavior Requirements
- 518 **6.5.2.2.3.1 Preconditions**
- 519 \$instance represents the instance of CIM TextRedirectionSAP, which is referenced by
- 520 CIM\_HostedAccessPoint.
- 521 **6.5.2.2.3.2 Pseudo Code**
- 522 &smOpReferences ( \$instance.getObjectPath(), "CIM\_HostedAccessPoint", "Antecedent",
- NULL, NULL, \$references[]);
- &smShowInstance ( \$references->[0]), NULL );
- 525 &smEnd;
- 526 **6.5.2.3 Show a Single Instance Both References**
- 527 This command form is for the show verb applied to a single instance. This command form corresponds to
- 528 a show command issued against CIM HostedAccessPoint where both references are specified and
- therefore the desired instance is unambiguously identified.

# 530 **6.5.2.3.1 Command Form**

531 show <CIM\_HostedAccessPoint single object>

#### 532 **6.5.2.3.2 CIM Requirements**

- 533 See CIM\_HostedAccessPoint in the "CIM Elements" section of the Text Console Redirection Profile for
- 534 the list of mandatory properties.

# 535 6.5.2.3.3 Behavior Requirements

#### 536 **6.5.2.3.3.1 Preconditions**

- \$137 \$instanceA represents the referenced instance of CIM\_ComputerSystem which is referenced by
- 538 CIM\_HostedAccessPoint.
- 539 \$instanceB represents the other instance of CIM\_TextRedirectionSAP which is referenced by
- 540 CIM\_HostedAccessPoint.

# 541 **6.5.2.3.3.2 Pseudo Code**

# 545 6.6 CIM SAPAvailableForElement

The cd and help verbs shall be supported as described in DSP0216.

Table 6 lists each SM CLP verb, the required level of support for the verb in conjunction with the target

548 class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and

target. Table 6 is for informational purposes only; in case of a conflict between Table 6 and requirements

detailed in the following sections, the text detailed in the following sections supersedes the information in

551 Table 6.

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# Table 6 – Command Verb Requirements for CIM\_SAPAvailableForElement

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.6.2.
Start	Not supported	
Stop	Not supported	

No mappings are defined for the following verbs for the specified target: create, delete, dump, exit, load, reset, set, start, and stop.

# 555 **6.6.1 Ordering of Results**

- When results are returned for multiple instances of CIM\_SAPAvailableForElement, implementations shall
- utilize the following algorithm to produce the natural (that is, default) ordering:
- Results for CIM SAPAvailableForElement are unordered; therefore, no algorithm is defined.

# 559 **6.6.2 Show**

- This section describes how to implement the show verb when applied to an instance of
- 561 CIM SAPAvailableForElement. Implementations shall support the use of the show verb with
- 562 CIM SAPAvailableForElement.

# 563 6.6.2.1 Show Multiple Instances – CIM\_ComputerSystem Reference

- This command form applies the show verb to multiple instances. This command form corresponds to a
- show command issued against instances of CIM\_SAPAvailableForElement where only one reference is
- specified and the reference is to an instance of CIM\_ComputerSystem.

#### 567 **6.6.2.1.1 Command Form**

- 568 show <CIM\_SAPAvailableForElement multiple objects>
- 569 **6.6.2.1.2 CIM Requirements**
- 570 See CIM SAPAvailableForElement in the "CIM Elements" section of the Text Console Redirection Profile
- for the list of mandatory properties.
- 572 6.6.2.1.3 Behavior Requirements
- 573 **6.6.2.1.3.1 Preconditions**
- 574 \$instance represents the instance of CIM\_ComputerSystem, which is referenced by
- 575 CIM\_SAPAvailableForElement.

#### 576 **6.6.2.1.3.2 Pseudo Code**

- 577 &smShowAssociationInstances ( "CIM\_SAPAvailableForElement",
- \$instance.getObjectPath());
- 579 &smEnd;

#### 580 6.6.2.2 Show a Single Instance – CIM\_TextRedirectionSAP Reference

- This command form is used when the show verb applies to instances of CIM SAPAvailableForElement
- 582 where only one reference is specified and the reference is to an instance of CIM TextRedirectionSAP.
- 583 The Text Console Redirection Profile imposes a cardinality of 1 on
- 584 CIM\_SAPAvailableForElement.Dependent, which references an instance of CIM\_ComputerSystem.
- Therefore, for a given instance of CIM\_TextRedirectionSAP, a single instance of
- 586 CIM\_SAPAvailableForElement is found.

# 587 **6.6.2.2.1 Command Form**

- 588 show <CIM\_SAPAvailableForElement single object>
- 589 **6.6.2.2.2 CIM Requirements**
- 590 See CIM\_SAPAvailableForElement in the "CIM Elements" section of the Text Console Redirection Profile
- for the list of mandatory properties.

# 592 6.6.2.2.3 Behavior Requirements

#### 593 **6.6.2.2.3.1 Preconditions**

- 594 \$instance represents the instance of CIM\_TextRedirectionSAP, which is referenced by
- 595 CIM SAPAvailableForElement.

#### 596 **6.6.2.2.3.2** Pseudo Code

# 601 6.6.2.3 Show a Single Instance – Both References

- This command form is for the show verb applied to a single instance. This command form corresponds to
- a show command issued against CIM\_SAPAvailableForElement where both references are specified and
- therefore the desired instance is unambiguously identified.

#### 605 **6.6.2.3.1 Command Form**

show <CIM\_SAPAvailableForElement single object>

#### 607 **6.6.2.3.2 CIM Requirements**

- 608 See CIM SAPAvailableForElement in the "CIM Elements" section of the Text Console Redirection Profile
- for the list of mandatory properties.
- 610 6.6.2.3.3 Behavior Requirements

#### 611 **6.6.2.3.3.1 Preconditions**

- 612 \$instanceA represents the referenced instance of CIM\_ComputerSystem which is referenced by
- 613 CIM SAPAvailableForElement.
- 614 \$instanceB represents the other instance of CIM TextRedirectionSAP which is referenced by
- 615 CIM SAPAvailableForElement.

#### 616 **6.6.2.3.3.2 Pseudo Code**

# 6.7 CIM\_ServiceAccessBySAP

- The cd and help verbs shall be supported as described in DSP0216.
- Table 7 lists each SM CLP verb, the required level of support for the verb in conjunction with the target
- 623 class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and
- 624 target. Table 7 is for informational purposes only; in case of a conflict between Table 7 and requirements
- detailed in the following sections, the text detailed in the following sections supersedes the information in
- 626 Table 7.

# Table 7 – Command Verb Requirements for CIM\_ServiceAccessBySAP

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.7.2.
Start	Not supported	
Stop	Not supported	

- No mappings are defined for the following verbs for the specified target: create, delete, dump, exit,
- 629 load, reset, set, start, and stop.

# 630 6.7.1 Ordering of Results

- When results are returned for multiple instances of CIM\_ServiceAccessBySAP, implementations shall
- 632 utilize the following algorithm to produce the natural (that is, default) ordering:
- Results for CIM\_ServiceAccessBySAP are unordered; therefore, no algorithm is defined.

#### 634 **6.7.2 Show**

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- This section describes how to implement the show verb when applied to an instance of
- 636 CIM ServiceAccessBySAP. Implementations shall support the use of the show verb with
- 637 CIM\_ServiceAccessBySAP.

# 638 6.7.2.1 Show Multiple Instances – CIM\_TextRedirectionService Reference

- This command form applies the show verb to multiple instances. This command form corresponds to a
- show command issued against instances of CIM\_ServiceAccessBySAP where only one reference is
- specified and the reference is to an instance of CIM TextRedirectionService.

#### 642 **6.7.2.1.1 Command Form**

- 643 show <CIM\_ServiceAccessBySAP multiple objects>
- 644 **6.7.2.1.2 CIM Requirements**
- 645 See CIM\_ServiceAccessBySAP in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.

# 647 6.7.2.1.3 Behavior Requirements

#### 648 **6.7.2.1.3.1 Preconditions**

- 649 \$instance represents the instance of CIM\_TextRedirectionService, which is referenced by
- 650 CIM ServiceAccessBySAP.

# 651 **6.7.2.1.3.2 Pseudo Code**

```
&smShowAssociationInstances ( "CIM_ServiceAccessBySAP", $instance.getObjectPath() );
```

653 &smEnd;

# 654 6.7.2.2 Show a Single Instance – CIM TextRedirectionSAP Reference

- 655 This command form is used when the show verb applies to instances of CIM\_ServiceAccessBySAP
- where only one reference is specified and the reference is to an instance of CIM TextRedirectionSAP.
- The Text Console Redirection Profile imposes a cardinality of 1 on the
- 658 CIM\_ServiceAccessBySAP.Antecedent property, which references an instance of
- 659 CIM\_TextRedirectionService. Therefore, for a given instance of CIM\_TextRedirectionSAP, a single
- 660 instance of CIM ServiceAccessBySAP is found.

#### 661 **6.7.2.2.1 Command Form**

show <CIM\_ServiceAccessBySAP single object>

# 663 **6.7.2.2.2 CIM Requirements**

- 664 See CIM ServiceAccessBySAP in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.
- 666 6.7.2.2.3 Behavior Requirements
- 667 **6.7.2.2.3.1 Preconditions**
- 668 \$instance represents the instance of CIM\_TextRedirectionSAP, which is referenced by
- 669 CIM ServiceAccessBySAP.
- 670 **6.7.2.2.3.2 Pseudo Code**
- 671 &smOpReferences ( \$instance.getObjectPath(), "CIM\_ServiceAccessBySAP", "Dependent",
- NULL, NULL, \$references[]);
- &smShowInstance ( \$references->[0]), NULL );
- 674 &smEnd;

#### 675 **6.7.2.3 Show a Single Instance – Both References**

- This command form is for the show verb applied to a single instance. This command form corresponds to
- a show command issued against CIM ServiceAccessBySAP where both references are specified and
- therefore the desired instance is unambiguously identified.
- 679 **6.7.2.3.1 Command Form**
- show <CIM\_ServiceAccessBySAP single object>
- 681 **6.7.2.3.2 CIM Requirements**
- See CIM\_ServiceAccessBySAP in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- the list of mandatory properties.
- 684 6.7.2.3.3 Behavior Requirements
- 685 **6.7.2.3.3.1 Preconditions**
- \$instanceA represents the referenced instance of CIM\_TextRedirectionService which is referenced by
- 687 CIM\_ServiceAccessBySAP.

\$instanceB represents the other instance of CIM\_TextRedirectionSAP which is referenced by CIM\_ServiceAccessBvSAP.

#### 6.7.2.3.3.2 Pseudo Code

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# 6.8 CIM ServiceAffectsElement

The cd and help verbs shall be supported as described in DSP0216.

Table 8 lists each SM CLP verb, the required level of support for the verb in conjunction with the target class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and target. Table 8 is for informational purposes only; in case of a conflict between Table 8 and requirements detailed in the following sections, the text detailed in the following sections supersedes the information in Table 8.

Table 8 – Command Verb Requirements for CIM\_ServiceAffectsElement

Command Verb	Requirement	Comments
Create	Not supported	
Delete	Not supported	
Dump	Not supported	
Load	Not supported	
Reset	Not supported	
Set	Not supported	
Show	Shall	See 6.8.2.
Start	Not supported	
Stop	Not supported	

No mappings are defined for the following verbs for the specified target: create, delete, dump, exit, load, reset, set, start, and stop.

# 6.8.1 Ordering of Results

When results are returned for multiple instances of CIM\_ServiceAffectsElement, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:

Results for CIM ServiceAffectsElement are unordered; therefore, no algorithm is defined.

#### 708 **6.8.2 Show**

This section describes how to implement the show verb when applied to an instance of CIM\_ServiceAffectsElement. Implementations shall support the use of the show verb with CIM\_ServiceAffectsElement.

# 712 6.8.2.1 Show Multiple Instances – CIM\_ComputerSystem Reference

- 713 This command form is used when the show verb applies to multiple instances. This command form
- 714 corresponds to a show command issued against instances of CIM\_ServiceAffectsElement where only
- one reference is specified and the reference is to an instance of CIM\_ComputerSystem.

#### 716 **6.8.2.1.1 Command Form**

717 show <CIM\_ServiceAffectsElement multiple instances>

#### 718 **6.8.2.1.2 CIM Requirements**

- 719 See CIM ServiceAffectsElement in the "CIM Elements" section of the Text Console Redirection Profile for
- 720 the list of mandatory properties.
- 721 6.8.2.1.3 Behavior Requirements
- 722 **6.8.2.1.3.1 Preconditions**
- 723 \$instance represents the instance of CIM\_ComputerSystem, which is referenced by
- 724 CIM ServiceAffectsElement.

# 725 **6.8.2.1.3.2** Pseudo Code

# 729 6.8.2.2 Show a Single Instance – CIM\_LogicalDevice Reference

- 730 This command form is used when the show verb applies to multiple instances. This command form
- 731 corresponds to a show command issued against instances of CIM\_ServiceAffectsElement where only
- 732 one reference is specified and the reference is to an instance of a concrete subclass of
- 733 CIM LogicalDevice.
- The Text Console Redirection Profile imposes a cardinality of 1 on
- 735 CIM ServiceAffectsElement.Antecedent, which references an instance of
- 736 CIM TextConsoleRedirectionService. Therefore, for a given instance of a concrete subclass of
- 737 CIM LogicalDevice, a single instance of CIM TextConsoleRedirectionService is found.
- 738 **6.8.2.2.1 Command Form**
- 739 show <CIM\_ServiceAffectsElement single instance>
- 740 **6.8.2.2.2 CIM Requirements**
- 741 See CIM\_ServiceAffectsElement in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- 742 the list of mandatory properties.
- 743 6.8.2.2.3 Behavior Requirements
- 744 **6.8.2.2.3.1 Preconditions**
- 745 \$instance represents the instance of a concrete subclass of CIM LogicalDevice, which is referenced
- 746 by CIM ServiceAffectsElement.

# 747 6.8.2.2.3.2 Pseudo Code

- 748 &smShowAssociationInstance ( "CIM\_ServiceAffectsElement", \$instance.getObjectPath() );
- 749 &smEnd;
- 750 6.8.2.3 Show Multiple Instances CIM\_TextRedirectionService Reference
- 751 This command form is used when the show verb applies to multiple instances. This command form
- 752 corresponds to a show command issued against instances of CIM\_ServiceAffectsElement where only
- 753 one reference is specified and the reference is to an instance of CIM TextRedirectionService.
- 754 **6.8.2.3.1 Command Form**
- 755 show <CIM\_ServiceAffectsElement multiple instances>
- **6.8.2.3.2 CIM Requirements**
- 757 See CIM\_ServiceAffectsElement in the "CIM Elements" section of the Text Console Redirection Profile for
- 758 the list of mandatory properties.
- 759 6.8.2.3.3 Behavior Requirements
- 760 **6.8.2.3.3.1 Preconditions**
- 761 \$instance represents the instance of CIM\_TextRedirectionService, which is referenced by
- 762 CIM ServiceAffectsElement.
- 763 **6.8.2.3.3.2** Pseudo Code
- 764 &smShowAssociationInstances ( "CIM\_ServiceAffectsElement",
- \$instance.getObjectPath());
- 766 &smEnd;
- 767 **6.8.2.4 Show a Single Instance Both References**
- 768 This command form is used when the show verb applies to a single instance. This command form
- 769 corresponds to the show verb issued against an instance of CIM\_ServiceAffectsElement where both
- 770 references are specified and therefore the desired instance is unambiguously identified.
- 771 **6.8.2.4.1 Command Form**
- 772 show <CIM\_ServiceAffectsElement single instance>
- 773 **6.8.2.4.2 CIM Requirements**
- 774 See CIM\_ServiceAffectsElement in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.
- 776 6.8.2.4.3 Behavior Requirements
- 777 6.8.2.4.3.1 Preconditions
- 778 \$instanceA represents the instance of CIM\_TextRedirectionService, which is referenced by
- 779 CIM\_ServiceAffectsElement.
- 780 \$instanceB represents the instance of CIM\_ComputerSystem or a concrete subclass of
- 781 CIM\_LogicalDevice which is referenced by CIM\_ServiceAffectsElement.

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#### 6.8.2.4.3.2 Pseudo Code

# 6.9 CIM TextRedirectionSAP

787 The cd and help verbs shall be supported as described in <u>DSP0216</u>.

Table 9 lists each SM CLP verb, the required level of support for the verb in conjunction with the target class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and target. Table 9 is for informational purposes only; in case of a conflict between Table 9 and requirements detailed in the following sections, the text detailed in the following sections supersedes the information in Table 9.

Table 9 – Command Verb Requirements for CIM\_TextRedirectionSAP

Command Verb	Requirement	Comments
create	Not supported	
delete	Not supported	
dump	Not supported	
load	Not supported	
reset	Not supported	
set	May	See 6.9.2.
show	Shall	See 6.9.3.
start	May	See 6.9.4.
stop	May	See 6.9.5.

No mappings are defined for the following verbs for the specified target: create, delete, dump, exit, load, and reset.

#### 6.9.1 Ordering of Results

- 797 When results are returned for multiple instances of CIM\_TextRedirectionSAP, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering:
  - Results for CIM\_TextRedirectionSAP are unordered; therefore, no algorithm is defined.

#### 800 **6.9.2 Set**

The set verb is used to set properties on an instance of CIM\_TextRedirectionSAP. Implementations may support the use of the set verb with CIM\_TextRedirectionSAP.

#### 6.9.2.1 General Usage of Set for a Single Property

- This command form corresponds to the general usage of the set verb to modify a single property of a target instance. The setting of a single property shall be deterministic.
- The requirements for supporting modification of a property using this command form shall be equivalent to the requirement for supporting modification of the property using the ModifyInstance operation as defined in the *Text Console Redirection Profile*.

# 809 **6.9.2.1.1 Command Form**

#### 811 **6.9.2.1.2 CIM Requirements**

- 812 See CIM TextRedirectionSAP in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.

# 814 6.9.2.1.3 Behavior Requirements

```
$15  $instance=<CIM_TextRedirectionSAP single object>
816  #propertyNames[] = <propertname>
817  #propertyValues[] = <propertyvalue>
818  &smSetInstance ( $instance, #propertyNames, #propertyValues );
819  &smEnd;
```

#### 820 **6.9.2.2 General Usage of Set for Multiple Properties**

- This command form corresponds to the general usage of the set verb to modify multiple properties of a
- 822 target instance. The setting of multiple properties may be deterministic.
- 823 The requirements for supporting modification of a property using this command form shall be equivalent
- to the requirement for supporting modification of the property using the ModifyInstance operation as
- defined in the *Text Console Redirection Profile*.

#### 826 **6.9.2.2.1 Command Form**

# 829 **6.9.2.2.2 CIM Requirements**

- 830 See CIM TextRedirectionSAP in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.

#### 832 6.9.2.2.3 Behavior Requirements

# 833 **6.9.2.2.3.1 Preconditions**

\$34 \$instance represents the instance of CIM\_TextRedirectionSAP.

# 835 **6.9.2.2.3.2 Pseudo Code**

```
for #i < n

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```

#### 6.9.3 Show

- The show verb is used to display information about instances of CIM TextRedirectionSAP.
- lmplementations shall support the use of the show verb with CIM TextRedirectionSAP.

- 846 6.9.3.1 Show a Single Instance
- This command form is used to display information about a single instance of CIM\_TextRedirectionSAP.
- 848 **6.9.3.1.1 Command Form**
- 849 show <CIM\_TextRedirectionSAP single object>
- 850 **6.9.3.1.2 CIM Requirements**
- 851 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- the list of mandatory properties.
- 853 6.9.3.1.3 Behavior Requirements
- 854 **6.9.3.1.3.1 Preconditions**
- \$55 \$instance represents the instance of CIM\_TextRedirectionSAP.
- 856 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- #propertylist[] is an array of mandatory non-key property names.
- 858 6.9.3.1.3.2 Pseudo Code

```
if (false != #all) { #propertylist[] = NULL; }
&smShowInstance ( $instance.getObjectPath(), #propertylist[] );
&smEnd;
```

- 862 6.9.3.2 Show Multiple Instances CIM\_HostedAccessPoint
- This command form is used to display information about multiple instances of CIM\_TextRedirectionSAP.
- 864 **6.9.3.2.1 Command Form**
- 865 show <CIM\_TextRedirectionSAP multiple objects>
- 866 **6.9.3.2.2 CIM Requirements**
- 867 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the Text Console Redirection Profile for
- the list of mandatory properties.
- 869 6.9.3.2.3 Behavior Requirements
- 870 **6.9.3.2.3.1 Preconditions**
- \$71 \$containerInstance represents the instance of CIM\_ComputerSystem for which the scoped instance
- 872 of CIM\_TextRedirectionSAP is being displayed. The CIM\_TextRedirectionSAP is associated to
- 873 CIM\_ComputerSystem via a CIM\_HostedAccessPoint association.
- 874 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- 875 #propertylist[] is an array of mandatory non-key property names.
- 876 **6.9.3.2.3.2 Pseudo Code**

```
if (false != #all) { #propertylist[] = NULL; }

&smShowInstances ( "CIM_TextRedirectionSAP", "CIM_HostedAccessPoint",

$containerInstance.getObjectPath(), #propertylist[] );

&smEnd;
```

- 881 6.9.3.3 Show Multiple Instances CIM\_SAPAvailableForElement
- This command form is used to display information about multiple instances of CIM\_TextRedirectionSAP.
- 883 **6.9.3.3.1 Command Form**
- 884 show <CIM\_TextRedirectionSAP multiple objects>
- 885 **6.9.3.3.2 CIM Requirements**
- 886 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- the list of mandatory properties.
- 888 6.9.3.3.3 Behavior Requirements
- 889 **6.9.3.3.3.1 Preconditions**
- 890 \$containerInstance represents the instance of CIM\_ComputerSystem for which the scoped instance
- 891 of CIM\_TextRedirectionSAP is being displayed. The CIM\_TextRedirectionSAP is associated to
- 892 CIM\_ComputerSystem via a CIM\_SAPAvailableForElement association.
- 893 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- #propertylist[] is an array of mandatory non-key property names.
- 895 **6.9.3.3.3.2 Pseudo Code**

```
if (false != #all) { #propertylist[] = NULL; }

&smShowInstances ( "CIM_TextRedirectionSAP", "CIM_SAPAvailableForElement",

$containerInstance.getObjectPath(), #propertylist[] );

&smEnd;
```

- 900 **6.9.4 Start**
- 901 This section describes how to implement the start verb when applied to an instance of
- 902 CIM TextRedirectionSAP. Implementations may support the use of the start verb with
- 903 CIM\_TextRedirectionSAP.
- The start verb is used to enable a Text Console Redirection Session Destination.
- 905 **6.9.4.1 Start a Single Instance**
- This command form is for the start verb applied to a single instance of CIM TextRedirectionSAP, in
- 907 which the CIM\_TextRedirectionSAP does not use a CLP session for the text console redirection session.
- 908 **6.9.4.1.1 Command Form**
- 909 start <CIM\_TextRedirectionSAP single object>
- 910 **6.9.4.1.2 CIM Requirements**
- 911 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- 912 the list of mandatory properties.
- 913 6.9.4.1.3 Behavior Requirements
- 914 \$instance=<CIM\_TextRedirectionSAP single object>
  915 &smStartRSC ( \$instance.getObjectPath() );
  916 &smEnd;

# 917 **6.9.4.2 Start a Single In-line Instance**

- 918 This command form is for the start verb applied to a single instance of CIM\_TextRedirectionSAP, in
- 919 which the CIM\_TextRedirectionSAP uses the CLP session for the text console redirection session.
- 920 Termination of this text console redirection session occurs when the character sequence contained in the
- 921 CIM\_TextRedirectionSAP.SessionTerminationSequence property is entered into the text flow. Upon
- 922 termination, the CLP session is restored.

#### 923 **6.9.4.2.1 Command Form**

924 start <CIM\_TextRedirectionSAP single object>

#### 925 **6.9.4.2.2 CIM Requirements**

- 926 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the Text Console Redirection Profile for
- 927 the list of mandatory properties.

#### 928 6.9.4.2.3 Behavior Requirements

- 929 \$instance=<CIM\_TextRedirectionSAP single object>
- 930 &smStartRSC ( \$instance.getObjectPath() );
- 931 //The text redirection session will use the CLP session until it is terminated.
- 932 &smEnd;

# 933 **6.9.5 Stop**

- 934 This section describes how to implement the stop verb when applied to an instance of
- 935 CIM TextRedirectionSAP. Implementations may support the use of the stop verb with
- 936 CIM TextRedirectionSAP.
- 937 The stop verb is used to place a Text Console Redirection Session Destination into a 6 (Enabled but
- 938 Offline) state.

#### 939 6.9.5.1 Stop a Single Instance

940 This command form is for the stop verb applied to a single instance of CIM\_TextRedirectionSAP.

#### 941 **6.9.5.1.1 Command Form**

942 stop <CIM\_TextRedirectionSAP single object>

#### 943 **6.9.5.1.2 CIM Requirements**

- 944 See CIM\_TextRedirectionSAP in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> for
- 945 the list of mandatory properties.

# 946 **6.9.5.1.3 Behavior Requirements**

- 947 \$instance=<CIM\_TextRedirectionSAP single object>
- \$48 &smRequestStateChange (  $\$ instance.getObjectPath(), "Enabled but Offline" );
- 949 &smEnd;

950

# 6.10 CIM\_TextRedirectionService

- 951 The cd and help verbs shall be supported as described in DSP0216.
- 952 Table 10 lists each SM CLP verb, the required level of support for the verb in conjunction with the target
- 953 class, and, when appropriate, a cross-reference to the section detailing the mapping for the verb and

target. Table 10 is for informational purposes only; in case of a conflict between Table 10 and requirements detailed in the following sections, the text detailed in the following sections supersedes the information in Table 10.

Table 10 – Command Verb Requirements for CIM\_TextRedirectionService

Command Verb	Requirement	Comments
create	Not supported	
delete	Not supported	
dump	Not supported	
load	Not supported	
reset	Not supported	
set	May	See 6.10.2.
show	Shall	See 6.10.3.
start	May	See 6.10.4.
stop	May	See 6.10.5.

958 No mappings are defined for the following verbs for the specified target: create, delete, dump, exit, load, and reset. 959

# 6.10.1 Ordering of Results

- 961 When results are returned for multiple instances of CIM TextRedirectionService, implementations shall utilize the following algorithm to produce the natural (that is, default) ordering: 962
- 963 Results for CIM TextRedirectionService are unordered; therefore, no algorithm is defined.

#### 6.10.2 Set 964

954

955

956

957

960

- 965 The set verb is used to set properties on an instance of CIM\_TextRedirectionService. Implementations 966 may support the use of the set verb with CIM TextRedirectionService.
  - 6.10.2.1 General Usage of Set for a Single Property
- 968 This command form corresponds to the general usage of the set verb to modify a single property of a 969 target instance. The setting of a single property shall be deterministic.
- The requirements for supporting modification of a property using this command form shall be equivalent 970 to the requirement for supporting modification of the property using the ModifyInstance operation as 971 defined in the Text Console Redirection Profile.
- 972
- 973 6.10.2.1.1 Command Form
- 974 set <CIM\_TextRedirectionService single object> cpropertyname>=cpropertyvalue>
- 975 6.10.2.1.2 CIM Requirements
- 976 See CIM TextRedirectionService in the "CIM Elements" section of the Text Console Redirection Profile 977 for the list of mandatory properties.
- 978 6.10.2.1.3 Behavior Requirements
- 979 \$instance=<CIM\_TextRedirectionService single object> 980 #propertyNames[] = cpropertname>

# 984 6.10.2.2 General Usage of Set for Multiple Properties

- This command form corresponds to the general usage of the set verb to modify multiple properties of a target instance. The setting of multiple properties may be deterministic.
- The requirements for supporting modification of a property using this command form shall be equivalent to the requirement for supporting modification of the property using the ModifyInstance operation as
- 989 defined in the Text Console Redirection Profile.

#### 990 **6.10.2.2.1 Command Form**

# 993 **6.10.2.2.2 CIM Requirements**

- 994 See CIM\_TextRedirectionService in the "CIM Elements" section of the <u>Text Console Redirection Profile</u> 995 for the list of mandatory properties.
- 996 6.10.2.2.3 Behavior Requirements
- 997 **6.10.2.2.3.1 Preconditions**
- 998 \$instance represents the instance of CIM\_TextRedirectionService.

#### 999 6.10.2.2.3.2 Pseudo Code

```
for #i < n

for #i < n

{

propertyNames[#i] = <propertname#i>

propertyValues[#i] = <propertyvalue#i>

semSetInstance ( $instance, #propertyNames[], #propertyValues[] );

&smEnd;

**Body

**TopertyNames[], #propertyValues[] );

**SemSetInstance ( $instance, #propertyNames[], #propertyNames[] );

**SemSetInstance ( $instance, #pr
```

- 1007 **6.10.3 Show**
- 1008 The show verb is used to display information about instances of CIM\_TextRedirectionService.
- 1009 Implementations shall support the use of the show verb with CIM\_TextRedirectionService.
- 1010 **6.10.3.1 Show a Single Instance**
- 1011 This command form is used to display information about a single instance of
- 1012 CIM\_TextRedirectionService.
- 1013 **6.10.3.1.1 Command Form**
- 1014 show <CIM TextRedirectionService single object>
- 1015 **6.10.3.1.2 CIM Requirements**
- 1016 See CIM TextRedirectionService in the "CIM Elements" section of the Text Console Redirection Profile
- 1017 for the list of mandatory properties.

- 1018 **6.10.3.1.3 Behavior Requirements**
- 1019 **6.10.3.1.3.1 Preconditions**
- 1020 \$instance represents the instance of CIM\_TextRedirectionService.
- 1021 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- 1022 #propertylist[] is an array of mandatory non-key property names.
- 1023 **6.10.3.1.3.2 Pseudo Code**

```
if (false != #all) { #propertylist[] = NULL; }

1025   &smShowInstance ( $instance.getObjectPath(), #propertylist[] );

1026   &smEnd;
```

- 1027 **6.10.3.2 Show Multiple Instances**
- 1028 This command form is used to display information about multiple instances of
- 1029 CIM TextRedirectionService.
- 1030 **6.10.3.2.1 Command Form**
- 1031 show <CIM\_TextRedirectionService multiple objects>
- 1032 **6.10.3.2.2 CIM Requirements**
- 1033 See CIM\_TextRedirectionService in the "CIM Elements" section of the <u>Text Console Redirection Profile</u>
- for the list of mandatory properties.
- 1035 **6.10.3.2.3 Behavior Requirements**
- 1036 **6.10.3.2.3.1 Preconditions**
- 1037 \$containerInstance represents the instance of CIM\_ComputerSystem for which the scoped instance
- of CIM\_TextRedirectionService is being displayed. The CIM\_TextRedirectionService is associated to
- 1039 CIM\_ComputerSystem via a CIM\_HostedService association.
- 1040 #all is true if the "-all" option was specified with the command; otherwise, #all is false.
- 1041 #propertylist[] is an array of mandatory non-key property names.
- 1042 **6.10.3.2.3.2 Pseudo Code**

- 1047 **6.10.4 Start**
- 1048 This section describes how to implement the start verb when applied to an instance of
- 1049 CIM\_TextRedirectionService. Implementations may support the use of the start verb with
- 1050 CIM TextRedirectionService.
- 1051 The start verb is used to enable a Text Console Redirection Session Source.

1052	6.10.4.1	Start a	<b>Single</b>	Instance
------	----------	---------	---------------	----------

1053 This command form is for the start verb applied to a single instance of CIM\_TextRedirectionService.

# 1054 **6.10.4.1.1 Command Form**

1055 start <CIM\_TextRedirectionService single object>

## 1056 **6.10.4.1.2 CIM Requirements**

1057 See CIM\_TextRedirectionService in the "CIM Elements" section of the <u>Text Console Redirection Profile</u>

1058 for the list of mandatory properties.

# 1059 **6.10.4.1.3 Behavior Requirements**

```
1060 $instance=<CIM_TextRedirectionService single object>
```

- 1061 &smStartRSC ( \$instance.getObjectPath() );
- 1062 &smEnd;

#### 1063 **6.10.5 Stop**

- 1064 This section describes how to implement the stop verb when applied to an instance of
- 1065 CIM\_TextRedirectionService. Implementations may support the use of the stop verb with
- 1066 CIM TextRedirectionService.
- 1067 The stop verb is used to place a Text Console Redirection Session Source in a 6 (Enabled but Offline)
- 1068 state.

#### 1069 **6.10.5.1 Stop a Single Instance**

1070 This command form is for the stop verb applied to a single instance of CIM\_TextRedirectionService.

# 1071 **6.10.5.1.1 Command Form**

1072 stop <CIM\_TextRedirectionService single object>

# 1073 **6.10.5.1.2 CIM Requirements**

- 1074 See CIM TextRedirectionService in the "CIM Elements" section of the Text Console Redirection Profile
- 1075 for the list of mandatory properties.

#### 1076 **6.10.5.1.3 Behavior Requirements:**

```
1077 $instance=<CIM_TextRedirectionService single object>
```

- 1078 &smRequestStateChange ( \$instance.getObjectPath(), "Disabled" );
- 1079 &smEnd;

1081 1082	<b>ANNEX A</b> (informative)
1083	
1084	

# **Change Log**

Version	Date	Author	Description
1.0.0	2009-07-14		DMTF Standard Release

1086