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## 5 **Record Log Profile**

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7 **Document Status: Final Standard**  
8 **Document Language: E**  
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103

## Foreword

104 The *Record Log Profile* (DSP1010) was prepared by the Server Management Working Group.

105 DMTF is a not-for-profit association of industry members dedicated to promoting enterprise and systems  
106 management and interoperability.

107

## Introduction

108 This document defines classes to describe the record logs of a managed system. Also included are  
109 descriptions of the associations that can be used to associate the record log classes to DMTF profile  
110 version information. The information in this specification should be sufficient for a provider or consumer of  
111 this data to identify unambiguously the classes, properties, methods, and values that shall be instantiated  
112 and manipulated to represent and manage record logs of managed systems and subsystems modeled  
113 using the DMTF CIM core and extended model definitions.

114 The target audience for this specification is implementers who are writing CIM-based providers or  
115 consumers of management interfaces that represent the component described in this document.

116

# Record Log Profile

## 117 1 Scope

118 The *Record Log Profile* is an autonomous profile that provides the management capabilities to represent  
119 logs of a managed system. The log is modeled as referencing the managed elements that populate the  
120 log, and the profile registration for the schema implementation version information.

## 121 2 Normative References

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

### 125 2.1 Approved References

126 DMTF [DSP0004](#), *CIM Infrastructure Specification 2.3.0*

127 DMTF [DSP0200](#), *CIM Operations over HTTP 1.2.0*

128 DMTF [DSP1000](#), *Management Profile Specification Template 1.0.0*

129 DMTF [DSP1001](#), *Management Profile Specification Usage Guide 1.0.0*

130 DMTF [DSP1033](#), *Profile Registration Profile 1.0.0*

### 131 2.2 Other References

132 ISO/IEC Directives, Part 2, [Rules for the structure and drafting of International Standards](#)

133 OMG, [Unified Modeling Language \(UML\) from the Open Management Group \(OMG\)](#)

## 134 3 Terms and Definitions

135 For the purposes of this document, the following terms and definitions apply. The terms and definitions in  
136 [DSP1033](#) and [DSP1001](#) also apply.

### 137 3.1

#### 138 can

139 used for statements of possibility and capability, whether material, physical, or causal

### 140 3.2

#### 141 cannot

142 used for statements of possibility and capability, whether material, physical or causal

### 143 3.3

#### 144 conditional

145 indicates requirements to be followed strictly in order to conform to the document when the specified  
146 conditions are met

- 147 **3.4**  
148 **mandatory**  
149 indicates requirements to be followed strictly in order to conform to the document and from which no  
150 deviation is permitted
- 151 **3.5**  
152 **may**  
153 indicates a course of action permissible within the limits of the document
- 154 **3.6**  
155 **need not**  
156 indicates a course of action permissible within the limits of the document
- 157 **3.7**  
158 **optional**  
159 indicates a course of action permissible within the limits of the document
- 160 **3.8**  
161 **referencing profile**  
162 indicates a profile that owns the definition of this class and can include a reference to this profile in its  
163 "Referenced Profiles" table
- 164 **3.9**  
165 **shall**  
166 indicates requirements to be followed strictly in order to conform to the document and from which no  
167 deviation is permitted
- 168 **3.10**  
169 **shall not**  
170 indicates requirements to be followed strictly in order to conform to the document and from which no  
171 deviation is permitted
- 172 **3.11**  
173 **should**  
174 indicates that among several possibilities, one is recommended as particularly suitable, without  
175 mentioning or excluding others, or that a certain course of action is preferred but not necessarily required
- 176 **3.12**  
177 **should not**  
178 indicates that a certain possibility or course of action is deprecated but not prohibited
- 179 **3.13**  
180 **unspecified**  
181 indicates that this profile does not define any constraints for the referenced CIM element or operation
- 182 **4 Symbols and Abbreviated Terms**  
183 The following symbols and abbreviations are used in this document.
- 184 **4.1**  
185 **LIFO**  
186 Last In, First Out



187 **5 Synopsis**

188 **Profile Name:** Record Log

189 **Version:** 1.0.1

190 **Organization:** DMTF

191 **CIM schema version:** 2.18.0

192 **Central Class:** CIM\_RecordLog

193 **Scoping Class:** CIM\_RecordLog

194 The *Record Log Profile* is an autonomous profile that provides the management capabilities to represent  
 195 logs of a managed system.

196 Table 1 identifies profiles on which this profile has a dependency.

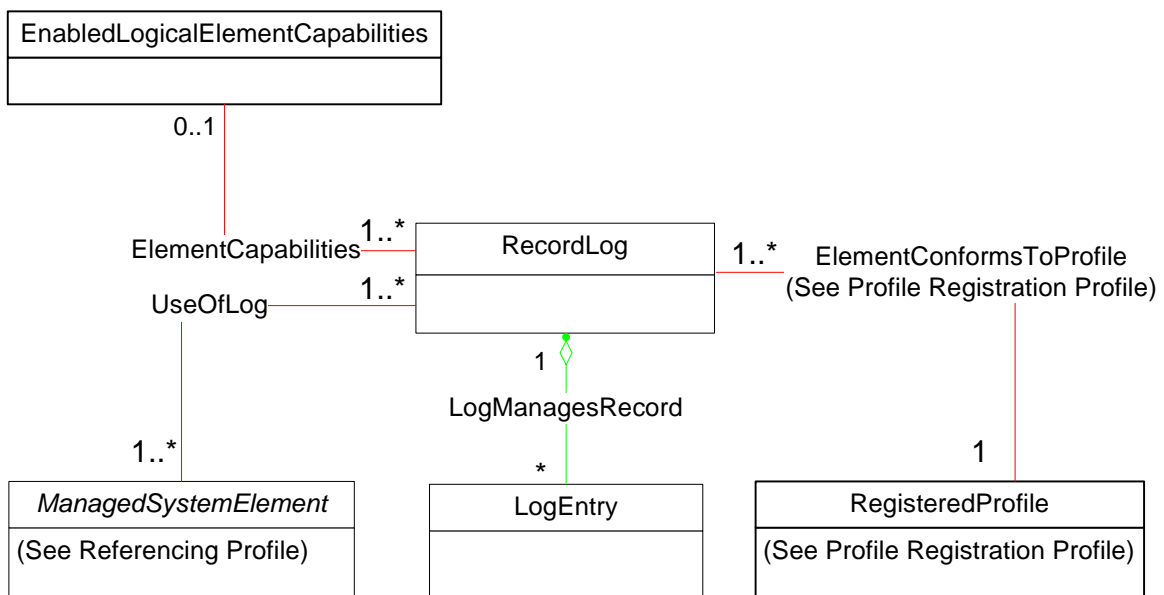
197 **Table 1 – Related Profiles**

Profile Name	Organization	Version	Requirement	Description
<i>Profile Registration</i>	DMTF	1.0.0	Mandatory	None

198 **6 Description**

199 The *Record Log Profile* describes the properties and methods of logs generated by the managed system  
 200 or component. This profile describes the association between the managed system and the generated  
 201 logs as well as how individual log entries are contained within a record log.

202 Figure 1 represents the class schema for the *Record Log Profile*. For simplicity, the prefix CIM\_ has been  
 203 removed from the names of the classes.



204 **Figure 1 – Record Log Profile: Class Diagram**

206 The CIM\_RecordLog class represents the container for the log entries. The individual log entries, which  
207 are represented by the CIM\_LogEntry instances, are aggregated under the CIM\_RecordLog instance  
208 through the CIM\_LogManagesRecord association. The managed system element that is associated with  
209 the log, uses the log, or populates the log is referenced through the CIM\_UseOfLog association.

210 The CIM\_LogEntry class contains properties describing the information about individual records, such as  
211 message text and timestamp. CIM\_RecordLog describes the general properties of the log, such as its  
212 maximal length and state.

## 213 7 Implementation

214 This section details the requirements and guidelines related to the arrangement of instances and their  
215 properties for implementations of this profile. For a list of all required methods, see section 8 ("Methods").  
216 For properties, see section 10 ("CIM Elements").

### 217 7.1 Representing Logs

218 Each log in a managed system shall be represented by a single instance of CIM\_RecordLog. Each entry  
219 in the log shall be represented by a single instance of CIM\_LogEntry. The entries of the log, which are  
220 represented by the instances of CIM\_LogEntry, shall be associated through the instance of  
221 CIM\_LogManagesRecord to the instance of CIM\_RecordLog.

#### 222 7.1.1 CIM\_LogEntry.LogInstanceID

223 The CIM\_LogEntry.LogInstanceID shall have the same value as the InstanceID property of the instance  
224 of CIM\_RecordLog that is associated with the instance CIM\_LogEntry through an instance of  
225 CIM\_LogManagesRecord.

#### 226 7.1.2 CIM\_LogEntry.LogName

227 The CIM\_LogEntry.LogName shall have the same value as the ElementName property of the instance of  
228 CIM\_RecordLog that is associated with the instance CIM\_LogEntry through an instance of  
229 CIM\_LogManagesRecord.

#### 230 7.1.3 CIM\_LogEntry.RecordData

231 The CIM\_LogEntry.RecordData property should be implemented. Note that this property is not required  
232 in order to allow for alternate usage of standard messages in the future.

#### 233 7.1.4 CIM\_LogEntry.RecordFormat

234 The CIM\_LogEntry.RecordFormat property should be implemented. Note that this property is not  
235 required in order to allow for alternate usage of standard messages in the future.

### 236 7.2 CIM\_EnabledLogicalElementCapabilities

237 When the CIM\_EnabledLogicalElementCapabilities class is instantiated, the instance of  
238 CIM\_EnabledLogicalElementCapabilities shall be associated with the CIM\_RecordLog instance through  
239 an instance of CIM\_ElementCapabilities and used for advertising the capabilities of the CIM\_RecordLog  
240 instance.

241 There shall be at most one instance of CIM\_EnabledLogicalElementCapabilities associated with a given  
242 instance of CIM\_RecordLog.

### 243 **7.2.1 CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported**

244 The CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported property is an array that  
245 contains the supported requested states for the instance of CIM\_RecordLog. This property shall be the  
246 super set of the values to be used as the RequestedState parameter in the RequestStateChange()  
247 method (see section 8.2). The value of the  
248 CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported property shall be an empty array or  
249 any combination of the following values: 2 (Enabled), 3 (Disabled), or 11 (Reset).

### 250 **7.2.2 CIM\_EnabledLogicalElementCapabilities.ElementNameEditSupported**

251 The CIM\_EnabledLogicalElementCapabilities.ElementNameEditSupported property shall have a value of  
252 TRUE when the implementation supports client modification of the CIM\_RecordLog.ElementName  
253 property.

### 254 **7.2.3 CIM\_EnabledLogicalElementCapabilities.MaxElementNameLen**

255 The MaxElementNameLen property shall be implemented when the ElementNameEditSupported  
256 property has a value of TRUE.

### 257 **7.2.4 Log State Management (Optional)**

258 Log state management consists of the CIM\_RecordLog.RequestStateChange() method being supported  
259 (see section 8.2) and the value of the CIM\_RecordLog.RequestedState not matching 12 (Not Applicable).

### 260 **7.2.5 Log State Management Support**

261 When no CIM\_EnabledLogicalElementCapabilities instance is associated with the CIM\_RecordLog  
262 instance, log state management shall not be supported.

263 When a CIM\_EnabledLogicalElementCapabilities instance is associated with the CIM\_RecordLog  
264 instance but the value of the CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported  
265 property is an empty array, log state management shall not be supported.

266 When a CIM\_EnabledLogicalElementCapabilities instance is associated with the CIM\_RecordLog  
267 instance and the value of the CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported  
268 property is not an empty array, log state management shall be supported.

## 269 **7.3 CIM\_RecordLog.RequestedState**

270 The CIM\_RecordLog.RequestedState property shall have a value of 12 (Not Applicable), 5 (No Change),  
271 or a value contained in the CIM\_EnabledLogicalElementCapabilities.RequestedStatesSupported property  
272 array of the associated CIM\_EnabledLogicalElementCapabilities instance (see section 7.2.1).

273 When log state management is supported and the RequestStateChange() method is successfully  
274 executed, the RequestedState property shall be set to the value of the RequestedState parameter of the  
275 RequestStateChange() method. After the RequestStateChange() method has successfully executed, the  
276 RequestedState and EnabledState parameters shall have equal values, with the exception of the  
277 transitional requested state 11 (Reset). The value of the RequestedState property may also change as a  
278 result of a non-CIM implementation's request for a change to the log's enabled state.

### 279 **7.3.1 RequestedState—12 (Not Applicable) Value**

280 When log state management is not supported, the value of the CIM\_RecordLog.RequestedState property  
281 shall be 12 (Not Applicable).

### 282 7.3.2 RequestedState—5 (No Change) Value

283 When log state management is supported, the initial value of the CIM\_RecordLog.RequestedState  
284 property shall be 5 (No Change).

## 285 7.4 Representing Log State

286 The log's state shall be represented by two properties: CIM\_RecordLog.EnabledState (see section 7.4.1)  
287 and CIM\_RecordLog.LogState (see section 7.4.2).

### 288 7.4.1 CIM\_RecordLog.EnabledState

289 Table 2 describes the mapping between the values of the CIM\_RecordLog.EnabledState property and the  
290 corresponding description of the state of the log. The CIM\_RecordLog.EnabledState property shall match  
291 the values that are specified in Table 2. When the RequestStateChange() method executes but does not  
292 complete successfully and the log is in an indeterminate state, the CIM\_RecordLog.EnabledState  
293 property shall have a value of 5 (Not Applicable). The value of this property may also change as a result  
294 of a non-CIM implementation's change to the log's enabled state.

295 **Table 2 – EnabledState Value Description**

Value	Description	Extended Description
2	Enabled	Log shall be enabled; new log entries may be added.
3	Disabled	Log shall be disabled; new log entries shall not be added.
5	Not Applicable	Log state is indeterminate, or the log state management is not supported.
6	Enabled but Offline	Log shall be enabled, but new log entries shall not be added. See section 7.4.1.1.

#### 296 7.4.1.1 CIM\_RecordLog.EnabledState—6 (Enabled but Offline) Value

297 When the log is enabled but has reached its maximum capacity of entries and the  
298 CIM\_RecordLog.OverwritePolicy property has a value of 7 (Never Overwrites), the  
299 CIM\_RecordLog.EnabledState property shall have a value of 6 (Enabled but Offline).

300 When the CIM\_RecordLog.OverwritePolicy property has a value of 2 (Wraps When Full), the  
301 CIM\_RecordLog.EnabledState property shall not have a value of 6 (Enabled but Offline).

### 302 7.4.2 CIM\_RecordLog.LogState

303 The CIM\_RecordLog.LogState property is used to describe a more granular state of the log than that of  
304 the CIM\_RecordLog.EnabledState property. Table 3 describes the mapping between the values of the  
305 CIM\_RecordLog.LogState property and the corresponding description of the granular state of the log. The  
306 CIM\_RecordLog.LogState property shall match the values that are specified in Table 3. Additionally,  
307 Table 3 describes the mapping between the LogState property and the EnabledState property. When the  
308 CIM\_RecordLog.LogState property has a value that matches the value in the "LogState Value" column in  
309 Table 3, the CIM\_RecordLog.EnabledState property shall have a value that matches the value in the  
310 "EnabledState Value" column for that row.

311

**Table 3 – LogState Value Description and Mapping to EnabledState Value**

LogState Value	Description	EnabledState Value	Extended Description
0	Unknown	5 (Not Applicable)	See the “Extended Description” column of Table 2 for the corresponding EnabledState value.
2	Normal	2 (Enabled)	See the “Extended Description” column of Table 2 for the corresponding EnabledState value.
3	Erasing	Any value in Table 2	Log shall be in the process of erasing its entries. See section 7.4.2.1.
4	Not Applicable	Any value in Table 2	LogState property is not supported, and EnabledState property shall be used only to represent the log state.

312 **7.4.2.1 CIM\_RecordLog.LogState—3 (Erasing) Value**

313 The instrumentation may be able to represent the transitional states of the log, such as the state when the  
 314 log entries are being cleared. When the log is being cleared through the invocation of the ClearLog()  
 315 method or by a non-CIM implementation, the CIM\_RecordLog.LogState property shall have a value of 3  
 316 (Erasing).

317 **7.5 CIM\_UseOfLog**

318 At least one instance of the CIM\_UseOfLog association shall reference an instance of CIM\_RecordLog  
 319 and an instance of the subclass of CIM\_ManagedSystemElement.

320 **7.6 CIM\_RecordLog.OverwritePolicy Property**

321 The CIM\_RecordLog.OverwritePolicy property indicates the behavior of the log when it has reached the  
 322 maximum capacity of its entries. The CIM\_RecordLog.OverwritePolicy property also affects the  
 323 CIM\_RecordLog.EnabledState property, as described in section 7.4.1.1.

324 The log could be designed such that when the log reaches its maximum capacity, new entries would  
 325 overwrite the oldest entries. An example of this type of log would be circular buffer logs.

326 When the new log entries overwrite the old log entries, the CIM\_RecordLog.OverwritePolicy property has  
 327 a value of 2 (Wraps When Full). When the new log entries never overwrite the old log entries, the  
 328 CIM\_RecordLog.OverwritePolicy property has a value of 7 (Never Overwrites).

329 **8 Methods**

330 This section details the requirements for supporting intrinsic operations and extrinsic methods for the CIM  
 331 elements defined by this profile.

332 **8.1 CIM\_RecordLog.ClearLog()**

333 The CIM\_RecordLog.ClearLog() method is used to request the deletion of all entries in the record log for  
 334 an instance of CIM\_RecordLog. A return code value of zero shall indicate that the clearing of the log  
 335 entries was successfully initiated.

336 CIM\_RecordLog.ClearLog() return code values shall be as specified in Table 4.

337 No parameters or standard messages are defined for the CIM\_RecordLog.ClearLog() method.

338

**Table 4 – CIM\_RecordLog.ClearLog() Method: Return Code Values**

Value	Description
0	Request was successfully executed.
1	Method is not supported in the implementation.
2	Error occurred

## 339 8.2 CIM\_RecordLog.RequestStateChange()

340 Invocation of the CIM\_RecordLog.RequestStateChange() method shall attempt to change the element's  
341 state to the value that is specified in the RequestedState parameter.

342 Return code values for the RequestStateChange() method shall be as specified in Table 5 where the  
343 method-execution behavior matches the return-code description. Parameters for the  
344 RequestStateChange() method are specified in Table 6.

345 When log state management is supported, the RequestStateChange() method shall be implemented and  
346 shall not return a value of 1 (Not Supported) (see section 7.2.5).

347 When the RequestedState parameter is set to 2 (Enabled) but the CIM\_RecordLog.EnabledState  
348 property has a value of 6 (Enabled but Offline), the RequestStateChange() method invocation shall return  
349 2 (Error Occurred).

350 Invoking the CIM\_RecordLog.RequestStateChange() method multiple times could result in earlier  
351 requests being overwritten or lost.

352 No standard messages are defined for this method.

353 **Table 5 – CIM\_RecordLog.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

354

**Table 6 – CIM\_RecordLog.RequestStateChange() Method: Parameters**

Qualifiers	Name	Type	Description/Values
IN, REQ	RequestedState	uint16	State: 2 (Enabled) 3 (Disabled) 11 (Reset)
OUT	Job	CIM_ConcreteJob REF	Returned if job started.
IN, REQ	TimeoutPeriod	Datetime	Client-specified maximum amount of time that the transition to a new state is supposed to take: 0 or NULL—No time requirements <interval>—Maximum time allowed

355 **8.3 Profile Conventions for Operations**

356 Support for operations for each profile class (including associations) is specified in the following  
 357 subclauses. Each subclause includes either the statement “All operations in the default list in section 8.3  
 358 are supported as described by [DSP0200 version 1.2](#)” or a table listing all of the operations that are not  
 359 supported by this profile or where the profile requires behavior other than that described by [DSP0200](#)  
 360 [version 1.2](#).

361 The default list of operations is as follows:

- 362 • GetInstance
- 363 • Associators
- 364 • AssociatorNames
- 365 • References
- 366 • ReferenceNames
- 367 • EnumerateInstances
- 368 • EnumerateInstanceNames

369 A compliant implementation shall support all of the operations in the default list for each class, unless the  
 370 “Requirement” column states something other than *Mandatory*.

371 **8.4 CIM\_ElementCapabilities**

372 Table 7 lists operations that either have special requirements beyond those from [DSP0200 version 1.2](#) or  
 373 shall not be supported.

374 **Table 7 – Operations: CIM\_ElementCapabilities**

Operation	Requirement	Messages
Associators	Unspecified	None
AssociatorNames	Unspecified	None
References	Unspecified	None
ReferenceNames	Unspecified	None

375 **8.5 CIM\_EnabledLogicalElementCapabilities**

376 All operations in the default list in section 8.3 are supported as described by [DSP0200 version 1.2](#).

377 **8.6 CIM\_RecordLog**

378 Table 8 lists operations that either have special requirements beyond those from [DSP0200 version 1.2](#) or  
 379 shall not be supported.

380 **Table 8 – Operations: CIM\_RecordLog**

Operation	Requirement	Messages
ModifyInstance	Optional: See section 8.6.1.	None

### 381 8.6.1 CIM\_RecordLog—ModifyInstance

382 This section details the requirements for the ModifyInstance operation applied to an instance of  
383 CIM\_RecordLog. The ModifyInstance operation may be supported.

384 The ModifyInstance operation shall be supported and CIM\_RecordLog.ElementName shall be modifiable  
385 when the ElementNameEditSupported property of the CIM\_EnabledLogicalElementCapabilities instance  
386 that is associated with the CIM\_RecordLog instance has a value of TRUE. See section 8.6.1.1.

#### 387 8.6.1.1 CIM\_RecordLog.ElementName

388 When the ElementNameEditSupported property of the CIM\_EnabledLogicalElementCapabilities instance  
389 that is associated with the CIM\_RecordLog instance has a value of TRUE, the implementation shall allow  
390 the ModifyInstance operation to change the value of the ElementName property of the CIM\_RecordLog  
391 instance. The ModifyInstance operation shall enforce the length restriction specified in the  
392 MaxElementNameLen property of the CIM\_EnabledLogicalElementCapabilities instance.

393 When the associated CIM\_EnabledLogicalElementCapabilities instance does not exist or the  
394 ElementNameEditSupported property of the associated CIM\_EnabledLogicalElementCapabilities  
395 instance has a value of FALSE, the implementation shall not allow the ModifyInstance operation to  
396 change the value of the ElementName property of the CIM\_RecordLog instance.

### 397 8.7 CIM\_LogEntry

398 Table 9 lists operations that either have special requirements beyond those from [DSP0200 version 1.2](#) or  
399 shall not be supported.

400 **Table 9 – Operations: CIM\_LogEntry**

Operation	Requirement	Messages
DeleteInstance	Optional: See section 8.7.1 for additional requirements.	None

#### 401 8.7.1 CIM\_LogEntry DeleteInstance

402 CIM\_LogEntry DeleteInstance operation shall be optional. The implementation shall also remove any  
403 association instances that reference the instance of CIM\_LogEntry, including the instance of  
404 CIM\_LogManagesRecord.

### 405 8.8 CIM\_UseOfLog

406 Table 10 lists operations that either have special requirements beyond those from [DSP0200 version 1.2](#)  
407 or shall not be supported.

408 **Table 10 – Operations: CIM\_UseOfLog**

Operation	Requirement	Messages
Associators	Unspecified	None
AssociatorNames	Unspecified	None
References	Unspecified	None
ReferenceNames	Unspecified	None



409 **8.9 CIM\_LogManagesRecord**

410 Table 11 lists operations that either have special requirements beyond those from [DSP0200 version 1.2](#)  
 411 or shall not be supported.

412 **Table 11 – Operations: CIM\_LogManagesRecord**

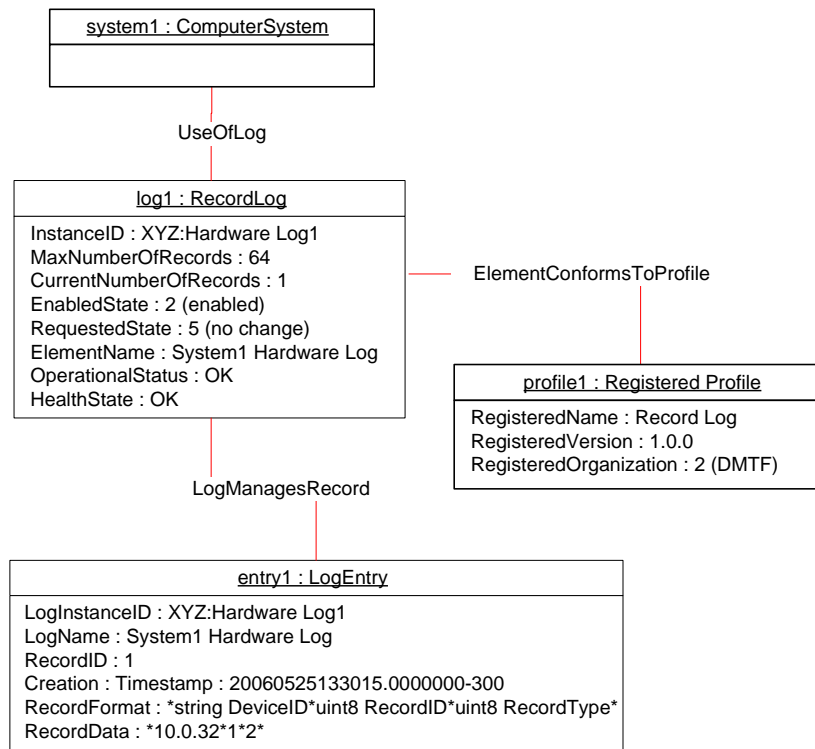
Operation	Requirement	Messages
Associators	Unspecified	None
AssociatorNames	Unspecified	None
References	Unspecified	None
ReferenceNames	Unspecified	None

413 **9 Use Cases**

414 This section contains object diagrams and use cases for the *Record Log Profile*.

415 **9.1 Object Diagrams**

416 Figure 2 represents possible instances of *Record Log Profile* classes. In this case, system1 uses log1 for  
 417 its hardware log. log1 has only one record, but it has a maximum capacity of 64 records. The value of the  
 418 EnabledState property for log1 is 1 (Enabled), which means the log is active. Profile registration  
 419 information is represented with the profile1 instance.

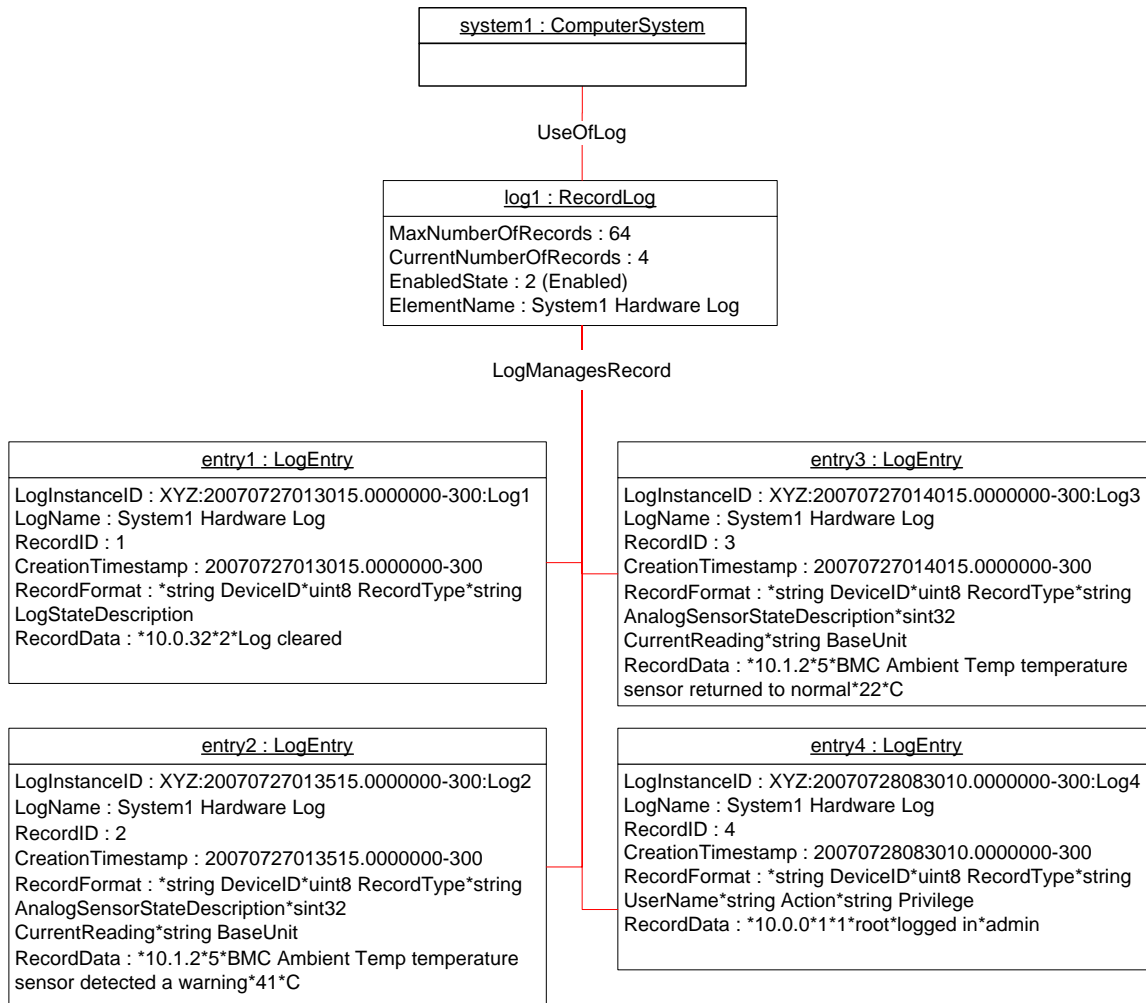


420

421

**Figure 2 – RecordLog Instance**

422 Figure 3 represents a possible instantiation of the *Record Log Profile*. log1, which is the hardware log for  
 423 system1, has four log entries. entry1 is a log entry for clearing the log, entry2 and entry3 are sensor  
 424 logged information, and entry4 contains information about the logged-in users. If the ClearLog( ) method  
 425 is supported on log1, the client might execute the ClearLog( ) method on log1 to erase the entries.  
 426 Depending on the log1 settings, some of the entries may not be erasable through executing the  
 427 ClearLog( ) method. Figure 4 shows the change of instances of CIM\_LogEntry after the successful  
 428 execution of the ClearLog( ) method on log1.

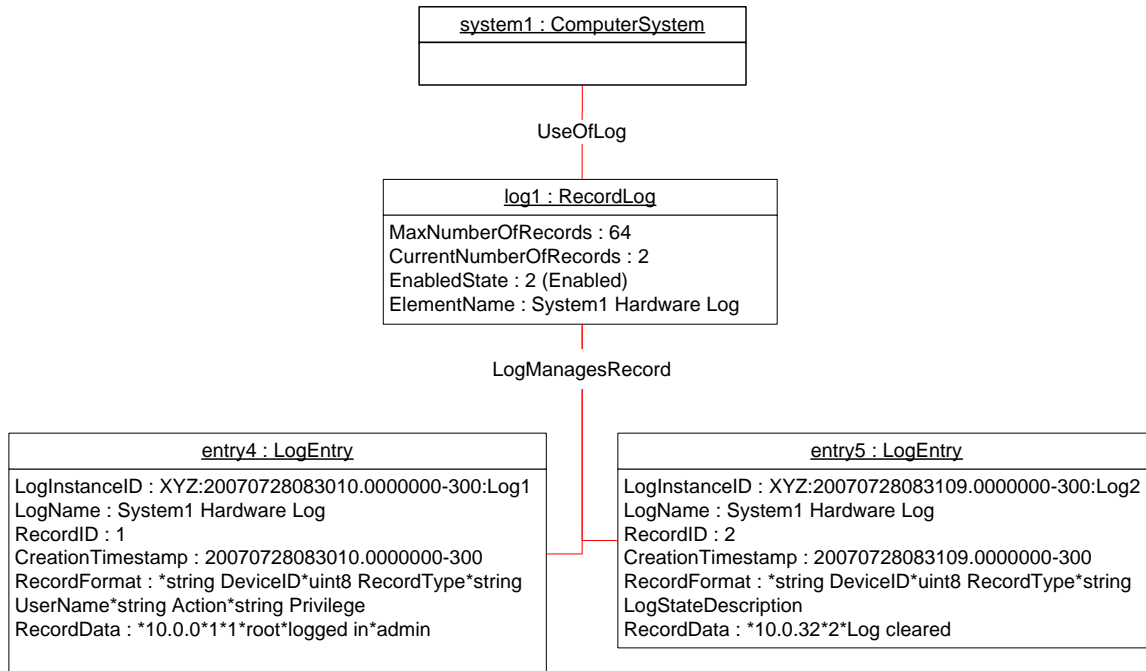


429

430

**Figure 3 – RecordLog Instance Before the Log Is Cleared**

431 Figure 4 shows the representation of log1 after the ClearLog() method successfully executed. entry1,  
 432 entry2, and entry3 from Figure 3 have been erased. Because of log1's policies, entry4 has not been  
 433 erased and still exists in log1. entry5 is a new log entry that has been added to the log after the  
 434 successful clearing of log1. Note that the RecordID properties have been reset for the entries in log1.



435

436

**Figure 4 – RecordLog Instance after the Log Is Cleared**

437 **9.2 Identify the Log by the Name**

438 To select a log by its name, a client can select the CIM\_RecordLog instance in which the ElementName  
 439 property corresponds to the desired name.

440 **9.3 Browse the Records of the Log**

441 To browse log records, a client can iterate through all the instances of CIM\_LogEntry that are associated  
 442 through the CIM\_LogManagesRecord association to the given instance of CIM\_RecordLog and sort them  
 443 based on the RecordID.

444 **9.4 Sort the Log Records Based on the Time Stamp of the Log Entry**

445 A client can sort log records by time stamp as follows:

- 446 1. Iterate through all the instances of CIM\_LogEntry that are associated through the  
 447 CIM\_LogManagesRecord association to the given instance of CIM\_RecordLog that represents  
 448 the log record.
- 449 2. Sort the instances of CIM\_LogEntry based on the CreationTimeStamp property value in LIFO  
 450 order.

## 451 9.5 Delete a Log Entry

452 A client can delete a log entry as follows:

- 453 1. Select the instance of CIM\_LogEntry that represents the desired log entry to be deleted.
- 454 2. Execute DeleteInstance operation on the selected instance of CIM\_LogEntry.

455 Upon successful execution, the instance of CIM\_LogEntry and the instance of CIM\_LogManagesRecord  
456 that associates the log entry to the instance of CIM\_RecordLog are deleted.

## 457 9.6 Clear the Log

458 To clear the log, a client can execute the ClearLog() method for the given instance of CIM\_RecordLog.

## 459 10 CIM Elements

460 Table 12 shows the instances of CIM Elements for this profile. Instances of the CIM Elements shall be  
461 implemented as described in Table 12. Sections 7 (“Implementation”) and 8 (“Methods”) may impose  
462 additional requirements on these elements.

463 **Table 12 – CIM Elements: Record Log Profile**

Element Name	Requirement	Description
<b>Classes</b>		
CIM_ElementCapabilities	Optional	See section 10.1.
CIM_EnabledLogicalElementCapabilities	Optional	See section 10.2.
CIM_LogManagesRecord	Optional	See section 10.3.
CIM_LogEntry	Optional	See section 10.4.
CIM_RecordLog	Mandatory	See section 10.5.
CIM_RegisteredProfile	Mandatory	See section 10.6.
CIM_UseOfLog	Mandatory	See section 10.7.
<b>Indications</b>		
None defined in this profile		

### 464 10.1 CIM\_ElementCapabilities

465 CIM\_ElementCapabilities associates an instance of CIM\_RecordLog with an instance of  
466 CIM\_EnabledLogicalElementCapabilities that describes the capabilities of CIM\_RecordLog.

467

**Table 13 – Class: CIM\_ElementCapabilities**

Elements	Requirement	Notes
ManagedElement	Mandatory	<b>Key:</b> This property shall reference the instance of CIM_RecordLog that represents the log. Cardinality 1..*, indicating one or many references
Capabilities	Mandatory	<b>Key:</b> This property shall reference the instance of CIM_EnabledLogicalElement that represents the capabilities of the log. Cardinality 0..1, indicating zero or one reference

468 **10.2 CIM\_EnabledLogicalElementCapabilities**

469 CIM\_EnabledLogicalElementCapabilities represents the capabilities of the log.

470

**Table 14 – Class: CIM\_EnabledLogicalElementCapabilities**

Elements	Requirement	Notes
InstanceID	Mandatory	<b>Key</b>
RequestedStatesSupported	Mandatory	See section 7.2.1.
ElementNameEditSupported	Mandatory	See Section 7.2.2.
MaxElementNameLen	Conditional	See Section 7.2.3.

471 **10.3 CIM\_LogManagesRecord**

472 CIM\_LogManagesRecord associates the CIM\_RecordLog instance, which represents the log, with an  
473 instance of CIM\_LogEntry, which represents an entry within the log.

474

**Table 15 – Class: CIM\_LogManagesRecord**

Elements	Requirement	Notes
Log	Mandatory	<b>Key:</b> This property shall reference the CIM_RecordLog instance that represents the log. Cardinality 1, indicating one reference
Record	Mandatory	<b>Key:</b> This property shall reference the instance of CIM_LogEntry that represents the entry within the log. Cardinality *, indicating many references

475 **10.4 CIM\_LogEntry**

476 CIM\_LogEntry represents the log entry within the log in the managed system.

477

**Table 16 – Class: CIM\_LogEntry**

Elements	Requirement	Notes
InstanceID	Mandatory	<b>Key</b>
LogInstanceID	Optional	See section 7.1.1.

Elements	Requirement	Notes
LogName	Optional	See section 7.1.2.
RecordID	Mandatory	None
CreationTimestamp	Mandatory	None
RecordData	Optional	See section 7.1.3.
RecordFormat	Optional	See section 7.1.4.
ElementName	Mandatory	The property shall match pattern ".*".

## 478 10.5 CIM\_RecordLog

479 CIM\_RecordLog represents the log in the managed system.

480 **Table 17 – Class: CIM\_RecordLog**

Elements	Requirement	Notes
InstanceID	Mandatory	<b>Key</b>
MaxNumberOfRecords	Mandatory	A value of 0 shall mean "Unknown" or "Not Applicable".
LogState	Mandatory	See section 7.4.2.
OverwritePolicy	Mandatory	See section 7.6.
RequestedState	Mandatory	See section 7.3.
EnabledState	Mandatory	See section 7.4.1.
OperationalStatus	Mandatory	None
HealthState	Mandatory	None
ElementName	Mandatory	The property shall match pattern ".*".

## 481 10.6 CIM\_RegisteredProfile

482 CIM\_RegisteredProfile identifies the *Record Log Profile* in order for a client to determine the conformance  
 483 with the profile. The CIM\_RegisteredProfile class is defined by the *Profile Registration Profile*. With the  
 484 exception of the mandatory values specified for the properties in Table 18, the behavior of the  
 485 RegisteredProfile instance is per the [Profile Registration Profile](#).

486 **Table 18 – Class: CIM\_RegisteredProfile**

Elements	Requirement	Description
RegisteredName	Mandatory	This property shall have a value of "Record Log".
RegisteredVersion	Mandatory	This property shall have a value of "1.0.1".
RegisteredOrganization	Mandatory	This property shall have a value of 2 (DMTF).

487 NOTE: Previous versions of this document included the suffix "Profile" for the RegisteredName value. If  
 488 implementations querying for the RegisteredName value find the suffix "Profile", they should ignore the suffix, with  
 489 any surrounding white spaces, before any comparison is done with the value as specified in this document.

490 **10.7 CIM\_UseOfLog**

491 CIM\_UseOfLog associates CIM\_RecordLog, which represents the log, with a subclass of  
 492 CIM\_ManagedSystemElement, which represents the element that uses or populates the log.

493 **Table 19 – Class: CIM\_UseOfLog**

Elements	Requirement	Notes
Antecedent	Mandatory	<p><b>Key:</b> This property shall reference the CIM_RecordLog instance that represents the log.</p> <p>Cardinality 1..*, indicating one or many references</p>
Dependent	Mandatory	<p><b>Key:</b> This property shall reference the instance of a subclass of CIM_ManagedSystemElement (such as CIM_ComputerSystem) that owns the log.</p> <p>Cardinality 1..*, indicating one or many references</p>

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498**ANNEX A**  
(informative)**Change Log**

<b>Version</b>	<b>Date</b>	<b>Description</b>
1.0.0b	2006/08/16	Preliminary Standard version.
1.0.0c	2007/02/14	Preliminary Standard refresh. Updated the value/valuemaps of CIM_RecordLog.OverwrityPolicy and updated the CIM schema version from 2.11 to 2.14 to reflect the corresponding schema containing the change mentioned.
1.0.0	2007/10/04	Final Standard version
1.0.1	2008/09/23	Errata 1.0.1



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## ANNEX B (informative)

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