DMTF Common Information Model (CIM) Specification

Readme

Version 2.9 – Final Release

January 2005

This document describes the changes that have been incorporated into the CIM schema for the CIM Version 2.9 Final release.

Classes or associations that have been modified for CIM V2.9 can be identified by searching the version qualifier for V2.9.0.

For information about patents held by third-parties which have notified the DMTF that, in their opinion, such patent may relate to or impact implementations of DMTF standards, visit http://www.dmtf.org/about/policies/disclosures.php.

1.0 Installation

To install the CIM V2.9.0 schema:

1. Download the ZIP files from the DMTF CIM standards page (http://www.dmtf.org/standards/cim/). The ZIP files can be found under the "CIM Schema and Specifications" section. The release contains the following ZIPs:

   - CIM_V2.9.0Final-MOFs.zip

     This file contains all the MOF files that are part of the CIM schema.

   - CIM_V2.9.0Final-Visios.zip

     This file contains UML representations of the CIM core and common models in Visio format.

   - CIM_V2.9.0Final-PDFs.zip

     This file contains UML representations of the CIM core and common models in PDF format.

   - CIM_V2.9.0Final-XML.zip

     This file contains a rendering of the CIM schema in XML.

2. Unzip the downloaded files. Please be aware that the MOFs will be expanded into a CIMV290 directory.

2.0 Schema Changes

The DMTF has made a number of process changes during the V2.9 development process. One of the primary goals for these changes is to provide a high quality CIM schema. CIM V2.9 is the first release to be developed using an integrated source control system for version tracking and compilation checking. The DMTF is also using an improved MOF pretty printer to make the MOF more readable, and additional rules have been added to the MOF lint tool to better ensure that inconsistencies across the schema areas

are identified during the development process. These tools are available to DMTF members from the Member Tools area of the DMTF website.

CIM V2.9 also includes new HTML renderings of the MOF, organized by both classname and by schema. The document format is intended to improve the usability of the schemas.

The release of the CIM 2.9 Final Schema has been primarily focused on the needs of the Common Diagnostic Model version 2.0. See http://www.intel.com/design/servers/cdm/index.htm for more information.

Some additional changes are also being made. These are:

- Addition/Modification to various enumerations (processor, OS types, new system buses).
- Some minor fixes to the Networks model.
- Some changes to the Applications Metrics model to reflect implementation experience.

3.0 Included Change Requests

The following changes have been approved for inclusion in the CIM V2.9.0 release. Changes are organized by model area. DMTF members can find additional details on these changes from the "Adopted Change Requests" section of the Document Review page.

Change Request	Description
DMTFCR01180	Addition of SoftwareUpdateService and related classes to the Core Model (partial implementation)
DMTFCR01190	Rewrite LogOptions and deprecate TestWarningLevel in the System Diagnostics Model
DMTFCR01259	Add PCI-E enumeration to CIM_SystemBusCard and SMBIOS Type 9 in the Physical model.
DMTFCR01263	Add DDR2 enumeration to CIM and SMBIOS related to physical model.
DMTFCR01266	Change request to approve or suggest changes to the alliance partner work register template.
DMTFCR01281	Deprecate CIM_DiagnosticTest.ClearResults
DMTFCR01287	Remove DiagnosticRecord.ExecutionID, override the description for RecordID, and add a new required property: ManagedElementName to the System model
DMTFCR01288	Add some new values to OperatingSystem.OSType to System model
DMTFCR01292	Add "Media Required" to CIM_DiagnosticTest.Characteristics of System Model
DMTFCR01298	Add new Processor Upgrade enum in DMTF|Processor group
DMTFCR01319	Changes to Job Control to enhance interoperability in Core and Systems models (partial implementation)
DMTFCR01321	Superclass MessageLog
DMTFCR01322	Add "Device Errors" to LogOptions and RecordType to System model

	(SysDev578)
DMTFCR01323	Add DiagnosticRecordLog to SupportedLogStorage and cleanup
DMTFCR01369	Add "Additional Hardware Required" to DiagnosticTest.Characteristics to System model
DMTFCR01443	Fixes for V2.9 Diags Preliminary for System model
DMTFCR01453	Corrections to DiagnosticServiceCapabilities in System model
DMTFCR01454	Various Corrections to the Diagnostic SubModel in System model
DMTFCR01455	Corrections to DiagnosticRecord and DiagnosticSetting - Corresponding to DiagnosticServiceCapabilities in System model
DMTFCR01465	Added missing value map to TypeOfAccess ValueMap { "0", "1", "2"},
DMTFCR01473	Addition in Processor Enumeration table to include AMD Sempron
DMTFCR01484	ValueMap correction for property ProtocolIFType in various ProtocolEndpoint sub-classes in Network model. File: ProtocolEndpoints.mof
DMTFCR01485	ValueMap correction for ProtocolIFType in Network_8023LAG.mof.
DMTFCR01509	Changes to Diagnostics MOF to bring into compliance with RFC2119 in System model
DMTFCR01531	Correct Operating System Values qualifiers for NonStop OS in application and system mofs.
DMTFCR01532	Fix the LogRecord Key Conflict – add Record Class
DMTFCR01542	Fix error in application of CR00572 in System model
DMTFCR01543	Make OtherCharacteristicDescription an array in System model.
DMTFCR01549	Diagnostics to final in core and system model.
DMTFCR01551	Remove "Unknown/Default"s and "None"s from various enums in system model.
DMTFCR01552	Correct typo in JobSettingData.RecoveryAction
DMTFCR01556	Delete SupportedVerbosityLevels in System model
DMTFCR01579	Correct some descriptions in the diagnostics model.
DMTFCR01580	Metrics model. Change key property to match other use of instanceID
DMTFCR01581	Remove "Experimental" qualifier from BaseMetricDefinition and BaseMetricValue properties in CIM_Metrics Model
DMTFCR01282	Change the description of Job.PercentComplete and JobProcessingStatistics.PercentComplete
DMTFCR01320	Make DiagnosticSetting.OtherLoopControlDescriptions an array and some other fixes.
DMTFCR01591	Add a timestamp to DiagnosticRecord

A large number of other approved Change Requests required to support SNIA's SMI-S have been held over to a new 2.9.1 release since no Implementation experience has been reported. Again, DMTF members can find additional details on these changes from the "Adopted Change Requests" section of the Document Review page.