DMTF Common Information Model (CIM) Specification

Readme

Version 2.13.0

September 2006

This document describes the changes that have been incorporated into the CIM schema for the CIM Version 2.13.0 release.

The *experimental* ZIP file contains entities that were approved for CIM V2.13.0 that did not have sufficient implementation experience to be taken Final. The *final* ZIP file contains entities that have at least two independent implementations. Entities that are designated as final cannot be changed in a backward incompatible way between point releases.

any party implementing the standard from any and all claims of infringement by a patent owner for such implementations.

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1.0 Installation

To install the CIM V2.13.0 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 both the experimental and final MOFs.

   - cim2130Experimental-MOFs.zip
   - cim2130Final-MOFs.zip

   This file contains all the MOF files that are part of the CIM schema. The experimental ZIP file contains the latest experimental schema. This schema may change in a backward incompatible way based on implementation experience. The final ZIP file contains just the portions of the schema that is in a final state.

   - cim2130Experimental-xmlAll.zip
   - cim2130Final-xmlAll.zip

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

   - cim2130Experimental-xmlClasses.zip
   - cim2130Final-xmlClasses.zip

   This file contains a rendering of the CIM schema in XML into individual files, one file per entity.

   - cim2130Experimental-Visios.zip
   - cim2130Final-Visios.zip

   This file contains the UML representations of the CIM schema in Visio format.

   - cim2130Experimental-PDFs.zip

- cim2130Final-PDFs.zip

  This file contains the UML representations of the CIM schema in PDF format

2. Unzip the downloaded files. Please be aware that the MOFs will be expanded into the directory that you specify. Subdirectories are created for each separate model area.

2.0 Schema Changes

This section describes the changes that were made for CIM V2.13.0.

Changes for CIM V2.13.0 Final

There were 3 class updates in CIM V2.13.0 final. The table below contains the list of changes.

Class	Change
Device/CIM_StoragePool.mof	CIMCoreCR000703 Correct the description of StoragePool

Core/CIM_Spared.mof
Core/CIM_IsSpare.mof
Core/CIM_RedundancySet.mof
 	
Core/CIM_ActsAsSpare.mof
Core/CIM_ExtentRedundancyComponent.mof
Core/CIM_ExtraCapacityGroup.mof
Core/CIM_RedundancyComponent.mof
Core/CIM_RedundancyGroup.mof
Core/CIM_SpareGroup.mof
Core/CIM_StorageRedundancyGroup.mof
	CIMCoreCR00717
	Remove the Experimental Qualifier from:
	  CIM_Spared
	  CIM_IsSpare
	  CIM_RedundancySet
	Depricate the following:
	  CIM_ActsAsSpare
	  CIM_ExtentRedundancyComponent
	  CIM_ExtraCapacityGroup
	  CIM_RedundancyComponent
	  CIM_RedundancyGroup
	  CIM_SpareGroup
	  CIM_StorageRedundancyGroup
	Add "DegradedRedundancy" to the RedundancySet.RedundancyStatus property

System/CIM_ComputerSystemPackage.mof	CIMCoreCR00774 Changed UnitaryComputerSystem references in ComputerSystemPackage to reference ComputerSystem
Core/CIM_ManagedSystemElement.mof Device/CIM_StorageConfigurationService.mof Device/CIM_StorageCapabilities.mof Device/CIM_StorageSetting.mof Core/CIM_ConcreteJob.mof	CIMCoreCR00796 Remove the Experimental Qualifier from: ManagedSystemElement.HealthState StorageConfigurationService.CreateOrModifyElementFromElements StorageCapabilities.ExtentStripeLengthDefault StorageCapabilities.ParityLayoutDefault StorageCapabilities.UserDataStripeDepthDefault StorageSettings.ExtentStripeLength StorageSettings.ExtentStripeLengthMin StorageSettings.ExtentStripeLengthMax StorageSettings.ParityLayout StorageSettings.UserDataStripeDepth StorageSettings.UserDataStripeDepthMin StorageSettings.UserDataStripeDepthMax StorageSettingsAssociatedToCapabilities ConcreteJob.TimeBeforeRemoval
	CIMCoreCR00804 Remove the Experimental Qualifier from:

Core/CIM_EnabledLogicalElementCapabilities.mof Device/CIM_LogicalPortCapabilities.mof Device/CIM_LogicalPortSettings.mof Device/CIM_FCPortCapabilities.mof Device/CIM_FCPortSettings.mof Device/CIM_FCSwitchCapabilities.mof Device/CIM_FCSwitchSettings.mof	CIM_EnabledLogicalElementCapabilities, CIM_LogicalPortCapabilities, CIM_LogicalPortSettings, CIM_FCPortCapabilities, CIM_FCPortSettings, CIM_FCSwitchCapabilities CIM_FCSwitchSettings.
Core/CIM_StatisticsCollection.mof Core/CIM_StorageRedundancySet.mof Device/CIM_BlockStatisticsManifestCollection.mof Device/CIM_BlockStatisticsManifest.mof Device/CIM_BlockStatisticsService.mof Device/CIM_AssociatedBlockStatisticsManifestCollection.mof Core/CIM_StorageRedundancySet.mof Device/CIM_BlockStorageStatisticalData.mof Device/CIM_SCSIInitiatorTargetLogicalUnitPath.mof Device/CIM_StatisticsCapabilities.mof Device/CIM_StatisticsService.mof Device/CIM_StorageReplicationCapabilities.mof Device/CIM_StorageSettingsGeneratedFromCapabilities.mof Core/CIM_SettingAssociatedToCapabilities.mof Device/CIM_ProtocolControllerForUnit.mof Device/CIM_SCSIProtocolController.mof Device/CIM_ProtocolControllerMaskingCapabilities.mof Device/CIM_ControllerConfigurationService.mof Device/CIM_StoragePool.mof	CIMCoreCR00820 Remove the Experimental Qualifier from: Classes: CIM_StatisticsCollection CIM_BlockStatisticsCapabilities CIM_BlockStatisticsManifestCollection CIM_BlockStatisticsManifest CIM_BlockStatisticsService CIM_AssociatedBlockStatisticsManifestCollection CIM_StorageRedundancySet CIM_BlockStorageStatisticalData CIM_SCSIInitiatorTargetLogicalUnitPath CIM_StatisticsCapabilities CIM_StatisticsService CIM_StorageReplicationCapabilities CIM_StorageSettingsGeneratedFromCapabilities CIM_SettingAssociatedToCapabilities Properites: CIM_ProtocolControllerForUnit.DeviceAccess CIM_SCSIProtocolController.NameFormat CIM_SCSIProtocolController.OtherNameFormat CIM_ProtocolControllerMaskingCapabilities.CreateProtocolControllerSupported CIM_ProtocolControllerMaskingCapabilities.ExposePathsSupported CIM_ProtocolControllerMaskingCapabilities.MaximumMapCount CIM_ProtocolControllerMaskingCapabilities.SPCAllowsNoInitiators CIM_ProtocolControllerMaskingCapabilities.SPCAllowsNoLUs CIM_ProtocolControllerMaskingCapabilities.SPCAllowsNoTargets CIM_ProtocolControllerMaskingCapabilities.SPCSupportsDefaultViews Methods: CIM_ControllerConfigurationService.ExposePaths() CIM_ControllerConfigurationService.HidePaths() CIM_StoragePool.GetAvailableExtents()
Core/CIM_ManagedSystemElement.mof	DMTFCR01743 Add HealthState Property back in for Final Release.

Changes for CIM V2.13.0 Experimental

The table below contains the list of changes for CIM V2.13.0 experimental.

Class	Change
all	ARCHCR00066 add UmlPackagePath qualifiers to CIM Schema
Device/CIM_StorageConfigurationCapabilities.mof	CIMCoreCR00824 Enhance StorageConfigurationCapability to express the nuances of changing storage elements
Device/ CIM_SCSIProtocolEndpoint.mof	CIMCoreCR00831 Fix to match ATAProtocolEndpoint CR to fix class description to match ATAProtocolEndpoint.
Device/CIM_Battery.mof	CIMCoreCR00838 Add Learning and Overcharged enums to BatteryStatus.
Core/ CIM_TimeService.mof	CIMCoreCR00839 Update CIM_TimeDescription to refer to CIM_ServiceAffectsElement instead of CIM_ServiceAvailableToElement.
System/ CIM_JobQueue.mof	CIMCoreCR841 Fix description of CIM_JobQueue.MaxJobsOnQueue
Device/CIM_ProcessorCore.mof;	CIMCoreCR849

Device/CIM_HardwareThread.mof	Add KEY properties to the CIM_ProcessorCore and CIM_HardwareThread classes.
User/CIM_StorageHardwareID.mof	CIMCoreCR850 Add Switch WWN to StorageHardwareID.IDType
Network/Network.mof	NetworksCR00089 Add method CreateNetworkPipe to Network
System/CIM_BootSourceSetting.mof System/CIM_BootService.mof System/CIM_BootConfigSetting.mof	SMWGCR00086 Add parameters to method definition in CIM_BootService and CIM_BootConfigSetting classes.
Core/CIM_ElementSoftwareIdentity.mof Core/CIM_SoftwareIdentity.mof	SWMGCR00089 Add/Change enumeration values to the ElementSoftwareStatus property array of the CIM_ElementSoftwareIdentity class. Change the description of SoftwareIdentity class.
Core/CIM_AssociatedPowerManagementService.mof	SMWGCR000090 Modify the description of PowerOnTime property of CIM_AssociatedPowerManagementService class.
Physical/CIM_ConfigurationCapacity.mof	SMWGCR000093 Add VendorCompatibilityStrings to the CIM_ConfigurationCapacity class.
Network/CIM_DNSProtocolEndpoint.mof, Network/CIM_DNSSettingData.mof Network/CIM_DNSGeneralSettingData.mof	SMWGCR000094 Enhancements to DNS Client model
System/CIM_Log.MOF	SMWGCR000095 Add LogState property to CIM_Log
Core/CIM_SoftwareIdentity.mof	SMWGCR000096 Add 2 new properties CIM_SoftwareIdentity: IdentityInfoValue[], IdentityInfoType [] to allow additional organization specific correlating information for a software identity instance.
Network/CIM_CLPCapabilities.mof	SMWGCR000097 Change Parent class of CIM_CLPCapabilities to CIM_ProtocolServiceCapabilities
Metrics/CIM_DiscreteMetricDefinition.mof Metrics/CIM_DiscreteMetricDefinitionDependency.mof Metrics/CIM_DiscreteMetricValue.mof Metrics/CIM_DiscreteMetricValueDependency.mof	WGAPPCR00043 Add Discrete Metrics to CIM metrics model
Core/CIM_ActsAsSpare.mof Core/CIM_ExtentRedundancyComponent.mof Core/CIM_ExtraCapacityGroup.mof Core/CIM_RedundancyComponent.mof Core/CIM_RedundancyGroup.mof Core/CIM_SpareGroup.mof Core/CIM_StorageRedundancyGroup.mof	CIMCORECR00717 Depricate the following: CIM_ActsAsSpare CIM_ExtentRedundancyComponent CIM_ExtraCapacityGroup CIM_RedundancyComponent CIM_RedundancyGroup CIM_SpareGroup CIM_StorageRedundancyGroup
Device/CIM_NetworkPortSettings.mof Device/CIM_NetworkPortCapabilities.mof Device/CIM_FCPortCapabilities Device/CIM_FCPortSettings.mof	CIMCoreCR00805 Add capabilities and settings for NetworkPort and change FCPortCapabilities and FCPortSettings to subclass from these new classes instead of LogicalPortCapabilities and LogicalPortSettings, respectively.
Device/CIM_Processor.mof	CIMCoreCR00809 Add new values to CIM_Processor
System/CIM_DiagnosticSetting.mof System/CIM_DiagnosticSettingData.mof System/CIM_DiagnosticServiceCapabilities.mof System/CIM_DiagnosticSettingRecord.mof Core/CIM_ConcreteJob.mof	CIMCoreCR00812 Add settings and capabilities to configure interactive and destructive tests
Device/CIM_Processor.mof Device/CIM_ProcessorCapabilities.mof Device/CIM_ProcessorCores.mof Device/CIM_HardwareThreads.mof	CIMCoreCR00825 Add NumberOfEnabledCores Property to CIM_Processor class Add the following classes: CIM_ProcessorCapabilities class CIM_ProcessorCores class CIM_HardwareThreads class
Device/CIM_StoragePool.mof Device/CIM_AssociatedComponentExtent.mof Device/CIM_AssociatedRemainingExtent.mof	CIMCoreCR00828 Make Extent discovery more efficient
Device/CIM_StorageExtent.mof Device/CIM_StorageVolume.mof Device/CIM_LogicalDisk.mof Device/CIM_StoragePool.mof	CIMCoreCR00834 Clarify the intended usage of "StorageVolumes" or "StoragePools" and add restrictions to their usage.

Device/CIM_StorageSetting.mof Device/CIM_StorageConfigurationCapabilities.mof Device/CIM_StorageConfigurationService.mof	
Event/CIM_IndicationSubscription.mof	WIPCR00281 Add LastIndication properties to IndicationSubscription. This CR proposes new properties to CIM_IndicationSubscription so that clients can determine if the last indication that they have received for a given subscription is
Interop/CIM_ObjectManagerCommunicationMechanism.mof	WIPCR00294 Version 001 Add WSDM (group agreed to add it even though no public spec) Change name of Generic Ops spec to the DSP# Version 000 Add CLP, WS-Management to CIM_ObjectManagerCommunicationMechanism
Qualifiers.mof	WIPCR00302 Document the deprecation of the qualifiers that were deprecated for the CIM Infrastructure Specification 2.3. Added one that was missing as well. Created a new MOF for optional qualifiers.
Core/CIM_EnableLogicalElementCapabilities.mof	CIMCoreCR00821 Add the ElementNameMask property to CIM_EnabledLogicalElementCapabilities
Core/CIM_SCSIMultipathSettings.mof	CIMCoreCR00872 Change initial value for CurrentLoadBalanceType to be an integer value instead of a string (thus matching the datatype).