

DMTF Common Information Model (CIM) Specification

Readme

Version 2.11.0

December 2005

This document describes the changes that have been incorporated into the CIM schema for the CIM Version 2.11.0 release.

The *experimental* ZIP file contains entities that were approved for CIM V2.11.0 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.

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1.0 Installation

To install the CIM V2.11.0 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.

- cim2110Experimental-MOFs.zip
- cim2110Final-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.

- cim2110Experimental-xmlAll.zip
- cim2110Final-xmlAll.zip

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

- cim2110Experimental-xmlClasses.zip
- cim2110Final-xmlClasses.zip

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

- cim2110Experimental-Visios.zip
- cim2110Final-Visios.zip

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

- cim2110Experimental-PDFs.zip

- cim2110Final-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 V2.11.

Changes for CIM V2.11.0 Final

There were 46 class updates in CIM V2.11.0 final. The table below contains the list of changes.

Class	Change
Application/CIM_Check.mof	DMTFCR01288 Add some new values to OperatingSystem.OSType and related Application properties
Application/CIM_SoftwareElement.mof	DMTFCR01288 Add some new values to OperatingSystem.OSType and related Application properties
Application/CIM_SoftwareElementVersionCheck.mof	DMTFCR01288 Add some new values to OperatingSystem.OSType and related Application properties
Core/CIM_CollectedCollections.mof	CPUBS corrections to CoreCollection.mof
Core/CIM_CollectionConfiguration.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_CollectionOfMSEs.mof	CPUBS corrections to CoreCollection.mof
Core/CIM_ConcreteCollection.mof	SysDevCR00707.002 CPUBS corrections to CoreCollection.mof
Core/CIM_HostedCollection.mof	CPUBS corrections to CoreCollection.mof
Core/CIM_OrderedMemberOfCollection.mof	SysDevCR00707.002 CPUBS corrections to CoreCollection.mof
Core/CIM_Setting.mof	DMTFCR01378.002 Update of description to support deprecation of CIM_Profile and CIM_Configuration.
Core/CIM_SettingData.mof	SysDevCR00728.000 Update of descriptions based on Tech Edit review.
Core/CIM_SystemSettingContext.mof	SysDevCR00707.002 CPUBS corrections to CoreCollection.mof
Database/CIM_CommonDatabaseCapabilities.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_CommonDatabaseSettingData.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseControlFile.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseAdministrator.mof	DBCR00029 CPubs edits to the database system classes.
Database/CIM_DatabaseFile.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseParameter.mof	DBCR00029 CPubs edits to the database system classes.
Database/CIM_DatabaseResourceStatistics.mof	DMTFCR00026 CPubs edits to the database statistics classes.

Database/CIM_DatabaseSegment.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseSegmentSettingData.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseService.mof	DBCR00029 CPubs edits to the database system classes.
Database/CIM_DatabaseServiceStatistics.mof	DMTFCR00026 CPubs edits to the database statistics classes.
Database/CIM_DatabaseStorage.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseStorageArea.mof	DBCR00027 CPubs edits to the database storage classes.
Database/CIM_DatabaseSystem.mof	DBCR00029 CPubs edits to the database system classes.
Database/CIM_ServiceAvailableToDatabase.mof	DBCR00029 CPubs edits to the database system classes.
Database/CIM_SNMPDatabaseParameter.mof	DBCR00029 CPubs edits to the database system classes.
Event/CIM_IndicationFilter.mof	WIPCR00230 Clarify IndicationFilter rules relatedto embedded query. WIPCR00240 Define DMTF:CQL as the formal nameof CQL.
Network/CIM_iSCSICapabilities.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSIConnection.mof	NetworksCR00020 Correct property types on MaxSegmentLengthProperties. NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSIConnectionSettings.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSILoginStatistics.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSIProtocolEndpoint.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSISession.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSISessionFailures.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_iSCSISessionSettings.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_SCSIProtocolEndpoint.mof	NetworksCR00062.000 Move class from Experimental to Final in v2.11.
Network/CIM_VLANEndpoint.mof	NetworksCR00041 Rename VLANSwitchEndpoint class to be VLANEndpoint class. Changes from SwitchEndpoint to VLANEndpoint - Expand the SwitchEndpointMode to be DesiredEndpointMode and OperationalEndpointMode. - Add OtherEndpointMode property - Rename VLANTrunkOperationalEncapsulation to be OperationalVLANTrunkEncapsulation - Add OtherTrunkEncapsulation property - Move PruneEligibleVLANList, NativeVLAN, and DefaultVLAN properties to VLANEndpointSettingData class. - Update descriptions and add appropriate model correspondence.
Network/CIM_VLANEndpointCapabilities.mof	NetworksCR00045 Rename class from VLANSwitchEndpointCapabilities to VLANEndpointCapabilities Rename property Dot1ConfigurableAcceptableFrameTypes to Dot1qAcceptableVLANFramesTypes and add support for Unknown and Not Applicable.
Network/CIM_VLANSysSystemCapabilities.mof	NetworksCR00043 To the Experimental VLANSysSystemCapabilities class: 1) Rename class to be VLANSysSystemCapabilities 2) Add Properties: MaxMTUsize, and MinMTUsize.
System/CIM_DiagnosticCompletionRecord.mof	CIMCoreCR00784.000

	Remove experimental qualifier.
System/CIM_DiagnosticSettingRecord.mof	CIMCoreCR00784.000 Remove experimental qualifier from LogStorage and OtherLogStorageDescriptions .
System/CIM_DiagnosticTest.mof	CIMCoreCR00784.000 Remove experimental qualifier from LogStorage and OtherLogStorageDescriptions .
System/CIM_LogRecord.mof	CIMCoreCR00775.002 Updat description of MessageTimestamp property to indicate what the value for unknown should be.

Release History

Changes for CIM V2.11.0 Experimental

The table below contains the list of changes for CIM V2.11 experimental.

Class	Change
Application/CIM_BIOSElement.mof	Experimental property: SystemBIOSMajorRelease Experimental property: SystemBIOSMinorRelease Experimental property: EmbeddedControllerFirmwareMajorRelease Experimental property: EmbeddedControllerFirmwareMinorRelease
Core/CIM_AssociatedPowerManagementService.mof	CIMCoreCR00800.002 Add enumerations to PowerState property and add properties RequestedPowerState and // OtherRequestedPowerState. DMTFCR01176.002 Fix ValueMap of PowerState property in CIM_AssociatedPowerManagementService DMTFCR01314 Convert power state names // to standard use more standard terminology SysDevCR00715.001 Update of descriptions based on Tech Edit review.
Core/CIM_Capabilities.mof	CIMCoreCR00788.004 Add method CreateGoalSettings().
Core/CIM_ConcreteJob.mof	Experimental method: GetError
Core/CIM_Configuration.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ConfigurationComponent.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ConfigurationForSystem.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_DependencyContext.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ElementConfiguration.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ElementProfile.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ElementSettingData.mof	SMWGCR00006.015 Add property IsNext.
Core/CIM_ElementSoftwareIdentity.mof	SMWGCR00004.012 Add VendorCompatibilityStrings.
Core/CIM_LocalizationCapabilities.mof	CIMCoreCR777.000 Deprecate class.
Core/CIM_ManagedSystemElement.mof	Experimental property: HealthState
Core/CIM_OwningCollectionElement.mof	SysDevCR00707.002 CPUBS corrections to CoreCollection.mof
Core/CIM_OrderedComponent.mof	SMWGCR00006.015 Add class.
Core/CIM_PowerManagementCapabilities.mof	CIMCoreCR00800.002 Add properties PowerChangeCapabilities and

	OtherPowerChangeCapabilities. DMTFCR01315 Add means of determining what power states are supported by a system or device SysDevCR00715.001 Update of descriptions based on Tech Edit review.
Core/CIM_PowerManagementService.mof	CIMCoreCR00800.002 Add method RequestPowerStateChange(). DMTFCR01314 Convert power state names // to standard use more standard terminology SysDevCR00715.001 Update of descriptions based on Tech Edit review.
Core/CIM_Product.mof	Experimental property: Family
Core/CIM_Profile.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_ProtocolEndpoint.mof	Experimental property: BroadcastResetSupported Experimental method: BroadcastReset
Core/CIM_ProtocolService.mof	SMWGCR00005.014 Created ProtocolService.
Core/CIM_RedundancySet.mof	DMTFCR01291.001 Add VendorIdentifyingInfo to RedundancySet
Core/CIM_SettingAssociatedToCapabilities.mof	Addition of class.
Core/CIM_SettingContext.mof	DMTFCR01378.002 Deprecate class.
Core/CIM_SoftwareIdentity.mof	Experimental property: TargetType DMTFCR01180.006 Addition of SoftwareUpdateService and related classes DMTFCR01352.000 Add 'Service/Support Pack' to SoftwareIdentity classifications
Core/CIM_SoftwareIdentityCollection.mof	DMTFCR01180.006 Addition of SoftwareUpdateService and related classes
Core/CIM_SoftwareIdentityComponent.mof	DMTFCR01330.001 Addition of SoftwareIdentityComponent association
Core/CIM_SoftwareIdentityResource.mof	DMTFCR01554.002 Addition of class.
Core/CIM_SoftwareInstallationService.mof	DMTFCR01180.006 Addition of SoftwareUpdateService and related classes
Core/CIM_SoftwareInstallationServiceCapabilities.mof	DMTFCR01180.006 Addition of SoftwareUpdateService and related classes
	DMTFCR01554.002 Addition of SoftwareIdentityResource
Core/CIM_SystemConfiguration.mof	DMTFCR01554.002 Addition of class.
Core/CIM_SystemSettingContext.mof	DMTFCR01554.002 Addition of class.
Database/CIM_CommonDatabase.mof	DMTFCR01257.001 Model changes for database characteristics DBCR00029 CPubs edits to the database system classes.
Database/CIM_SWRDatabaseAspect.mof	DBCR00028 CPubs edits to the database software resource classes.
Device/CIM_AllocatedFromStoragePool.mof	Experimental property: SpaceLimit Experimental property: SpaceLimitWarningThreshold
Device/CIM_Battery.mof	Experimental property: RechargeCount Experimental property: MaxRechargeCount Experimental property: RemainingCapacity Experimental property: RemainingCapacityMaxError
Device/CIM_BlockStatisticsService.mof	CIMCoreCR00630 Add CIM_BlockStatisticsService.
Device/CIM_BlockStorageStatisticalData.mof	CIMCoreCR00682.004 Added ElementType.
Device/CIM_ControllerConfigurationService.mof	Experimental method: ExposePaths Experimental method: HidePaths Experimental method: ExposeDefaultLUs Experimental method: HideDefaultLUs

Device/CIM_DeviceSharingCapabilities.mof	SMWGCR00015.009 Create DeviceSharingCapabilities.
Device/CIM_Fan.mof	Experimental property: ControlMode Experimental property: DesiredControlMode CIMCoreCR00735.001 Update of descriptions based on Tech Edit review. SMWGCR00026.003 Add ControlModesSupported, ControlMode, and DesiredControlMode.
Device/CIM_LogicalModule.mof	Experimental property: LogicalModuleType Experimental property: OtherLogicalModuleTypeDescription CIMCoreCR00752.000 Update of descriptions based on Tech Edit review. SMWGCR00018.010 Add LogicalModule.
Device/CIM_PassThroughModule.mof	SMWGCR00011.011 Created PassThroughModule.
Device/CIM_Processor.mof	Experimental property: ExternalBusClockSpeed CIMCoreCR00752.000 Update of descriptions based on Tech Edit review. CIMCoreCR00776.004 Addition of property Characteristics. CIMCoreCR00779.001 Add enumerations to property Family. CIMCoreCR00783.002 Add enumerations to property UpgradeMethod. SMWGCR00024.003 Added ExternalBusClockSpeed.
Device/CIM_ProtocolControllerAccessesUnit.mof	Experimental property: DeviceAccess
Device/CIM_ProtocolControllerForUnit.mof	Experimental property: DeviceAccess
Device/CIM_ProtocolControllerMaskingCapabilities.mof	Experimental property: ExposePathsSupported Experimental property: CreateProtocolControllerSupported Experimental property: MaximumMapCount Experimental property: SPCAllowsNoLUs Experimental property: SPCAllowsNoTargets Experimental property: SPCAllowsNoInitiators Experimental property: SPCSupportsDefaultViews
Device/CIM_RealizesProcessor.mof	CIMCoreCR00776.004 Addition of class.
Device/CIM_SCSIProtocolController.mof	Experimental property: NameFormat Experimental property: OtherNameFormat
Device/CIM_SharedDeviceManagementService.mof	SMWGCR00015.009 Create SharedDeviceManagementService.
Device/CIM_SharingDependency.mof	SMWGCR00015.009 Create SharingDependency.
Device/CIM_StorageCapabilities.mof	Experimental method: GetSupportedStripeLengths Experimental method: GetSupportedStripeLengthRange Experimental method: GetSupportedStripeDepths Experimental method: GetSupportedStripeDepthRange
Device/CIM_StorageConfigurationCapabilities.mof	CIMCoreCR00687.007 Added properties IncrementalDeltas, PersistentReplica, IntendedUsage, UseReplicationBuffer, InitialSynchronization, and ReplicationPriority. DMTFCR01314.000 Add "InExtents" to Values of StorageConfigurationCapabilities.SupportedStorageElementFeatures for support of CreateOrModifyStoragePool method. DMTFCR01425.003 Add enumerations to SupportedAsynchronousActions and SupportedSynchronousActions; add ModelCorrespondence to SupportedStorageElementTypes; and correct // enumeration for SupportedStorageElementFeatures. DMTFCR01427.001 Add "SCSI Scan" to Values of SupportedAsynchronousActions and // SupportedSynchronousActions.
Device/CIM_StorageConfigurationService.mof	Experimental method: AttachOrModifyReplica Experimental method: CreateOrModifyReplicationPipe Experimental method: CreateReplicationBuffer Experimental method: ScsiScan CIMCore00686 New methods to manage remote replication.

	SysDev00685 Changes for Background Copy feature
Device/CIM_StorageLibrary.mof	SysDevCR00678 Deprecate CIM_StorageMediaLibrary in Device model
Device/CIM_StorageLibraryCapabilities.mof	sysdevCR00679_003 Add CIM_StorageLibraryCapabilities.
Device/CIM_StoragePool.mof	Experimental property: LowSpaceWarningThreshold Experimental method: GetAvailableExtents
Device/CIM_StorageReplicationCapabilities.mof	CIMCoreCR00687.007 Added StorageReplicationCapabilities.
Device/CIM_StorageSetting.mof	Experimental property: IncrementalDeltas Experimental property: PersistentReplica Experimental property: IntendedUsage Experimental property: UseReplicationBuffer Experimental property: InitialSynchronization Experimental property: ReplicationPriority Experimental property: SpaceLimit Experimental property: SpaceLimitWarningThreshold Experimental property: LowSpaceWarningThreshold CIMCoreCR00687.007 Update description and valuemap for SupportedAsynchronousActions and SupportedSynchronousActions. CIMCoreCR00688.005 Added property SpaceLimit, SpaceLimitWarningThreshold, and // LowSpaceWarningThreshold.
Device/CIM_StorageSettingsAssociatedToCapabilities.mof	CIMCoreCR00695.006 Change subclass to CIM_SettingAssociatedToCapabilities.
Device/CIM_StorageSettingsGeneratedFromCapabilities.mof	CIMCoreCR00695.006 Change subclass to CIM_SettingAssociatedToC
Device/CIM_StorageSynchronized.mof	Experimental property: CopyPriority SysDev00685 Changes for Background Copy feature
Device/CIM_ZoneCapabilities.mof	CIMCoreCR00669.002 Add SupportedConnectivityMemberTypes to // ZoneCapabilities
Device/CIM_ZoneService.mof	Experimental property: DefaultZoningState
Event/CIM_AlertIndication.mof	Experimental property: OwningEntity Experimental property: MessageID Experimental property: Message DMTFCR01584 PerceivedSeverity Promotion to CIM_Indication
Network/CIM_CLPCapabilities.mof	SMWGCR00005.014 Created CLPCapabilities. SMWGCR00066.003 Added properties CLPVersions and SMMEAddressVersions.
Network/CIM_CLPProtocolEndpoint.mof	SMWGCR00025.003 Create CLPProtocolEndpoint. SMWGCR00067.005 Added properties CurrentDefaultTarget, KeepTime, WaitBehavior, OutputFormat, OutputVerbosity, OutputLanguage, OutputPosition, OutputOrder, and OutputCount.
Network/CIM_CLPSettingData.mof	SMWGCR00025.003 Create CLPSettingData. SMWGCR00067.005 Added properties CurrentDefaultTarget, KeepTime, WaitBehavior, OutputFormat, OutputVerbosity, OutputLanguage, OutputPosition, OutputOrder, and OutputCount.
Network/CIM_NetworkVLAN.mof	NetworksCR00047 To the experimental class NetworkVLAN: // 1) Add TypeOfMedia, and OtherTypeDescription. 2) Change name of MaxTransmissionSize property to TransmissionSize. //
System/CIM_AvailableDiagnosticService.mof	Experimental property: IsExclusiveForME
System/CIM_DiagnosticServiceCapabilities.mof	CIMCoreCR745.002 Deprecated qualifier Job Creation in property SupportedExecutionControls.
System/CIM_DiagnosticSetting.mof	CIMCoreCR00746.001 Update description for LogStorage. CIMCoreCR00772.000 Update valuemap for LogOptions.

	CIMCoreCR777.000 Deprecated property Locales.
System/CIM_RecordForLog.mof	CIMCoreCR777.000 Deprecated property Locale.