



## CHAPTER 6

# Managed Object Format Files for Cisco DCNM SMI-S Server

---

This appendix provides the text from the Managed Object Format (MOF) files for the Cisco DCNM SMI-S Server extensions. These MOF files are an extension to the standard MOF files and provide management for VSANs, PortChannels, FCIP, and iSCSI.

For information about the standard MOF files, refer to the DMTF website at the following URL: <http://www.dmtf.org>.

## CISCO\_ActiveConnection.mof

```
CISCO_ActiveConnection
[Association,
    Description (
        "This association defines a connection that is currently "
        "communicating, or is configured to communicate, between two "
        "ServiceAccessPoints i.e. two CISCO_ProtocolEndPoints." ),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ActiveConnectionProviderImpl")]
class CISCO_ActiveConnection : CIM_ActiveConnection
{
    [Override ( "Antecedent" ),
    Description (
        "A ServiceAccessPoint that is configured to communicate "
        "or is actively communicating with the Dependent SAP. In "
        "a unidirectional connection, this SAP is the one that is "
        "transmitting." )]
    CISCO_ProtocolEndPoint REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "A second ServiceAccessPoint that is configured to "
        "communicate or is actively communicating with the "
        "Antecedent SAP. In a unidirectional connection, this SAP "
        "is the one that is receiving the communication." )]
    CISCO_ProtocolEndPoint REF Dependent;
};
```

## CISCO\_AdminDomain.mof

```
CISCO_AdminDomain
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_AdminDomainProviderImpl")]
class CISCO_AdminDomain : CIM_AdminDomain
{};
```

## CISCO\_AdminDomainConformsToFabricProfile.mof

```
[Association, Version ( "3.1.0" ), Description (
    "The SMISConformsToProfile association defines the "
    "RegisteredProfiles that are conformant with a specific "
    "version of SIM-S. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_AdminDomainConformsToFabricProfile
ProviderImpl")
]
class CISCO_AdminDomainConformsToFabricProfile : CIM_ElementConformsToProfile {

    [Key, Override ( "ConformantStandard" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The RegisteredProfile to which the ManagedElement conforms.")]
    CISCO_FabricProfile REF ConformantStandard;

    [Key, Override ( "ManagedElement" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The ManagedElement that conforms to the RegisteredProfile.")]
    CISCO_AdminDomain REF ManagedElement;
};
```

## CISCO\_AlertIndication.mof

```
CISCO_AlertIndication
class CISCO_AlertIndication: CIM_AlertIndication {

    [Override("IndicationIdentifier"), Description (
        "Unique numeric identifier for indication.")]
    string IndicationIdentifier;

    [Override("IndicationTime"), Description (
        "The time and date of creation of the Indication. "
        "The property may be set to NULL if the entity creating the "
        "Indication is not capable of determining this information. "
        "Note that IndicationTime may be the same for two Indications "
        "that are generated in rapid succession.")]
    datetime IndicationTime;

    [Override("AlertType"), Description (
        "Primary classification of the Indication. "
        "The following values are defined: \n"
        "1 - Other. The Indication's OtherAlertType property conveys "
        "its classification. Use of \"Other\" in an enumeration is a "
        "standard CIM convention. It means that the current Indication "
        "does not fit into the categories described by this enumeration. \n"
        "2 - Communications Alert. An Indication of this type is "
        "principally associated with the procedures and/or processes "
        "required to convey information from one point to another. \n"
        "3 - Quality of Service Alert. An Indication of this type is "
        "principally associated with a degradation or errors in the "
        "performance or function of an entity. \n"
        "4 - Processing Error. An Indication of this type is "
        "principally associated with a software or processing fault. "
    )]
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "This is the AlertType generated for failures during "
        "enumerateInstanceNames or enumerateInstances. \n"
    "5 - Device Alert. An Indication of this type is principally "
        "associated with an equipment or hardware fault. \n"
    "6 - Environmental Alert. An Indication of this type is "
        "principally associated with a condition relating to an "
        "enclosure in which the hardware resides, or other "
        "environmental considerations. \n"
    "7 - Model Change. The Indication addresses changes in the "
        "Information Model. For example, it may embed a Lifecycle "
        "Indication to convey the specific model change being "
        "alerted. \n"
    "8 - Security Alert. An Indication of this type is associated "
        "with security violations, detection of viruses, user account changes "
        "and similar issues. \n"
        "The 'Description' field will describe the type of indication."),
ValueMap {"1", "2", "3", "4", "5", "6", "7", "8"},
Values {"Other", "Communications Alert", "Quality of Service Alert",
        "Processing Error", "Device Alert", "Environmental Alert",
        "Model Change", "Security Alert"}]
uint16 AlertType;

[Override("OtherAlertType"), Description (
    "A string describing the Alert type - used when "
    "the AlertType property is set to 1, \"Other\". Other Alert types "
    "include notifications that are intended as state change "
    "notifications for fabric/switch/port/device/connection, etc."),
ModelCorrespondence {"CISCO_AlertIndication.AlertType"},
ValueMap {"Switch Alert", "Port Alert", "Fabric Alert", "Device Alert",
        "Zone Alert", "Platform Alert", "Firmware Alert", "Connection Alert",
        "HA Alert", "Agent Alert", "Virtual Fabric Alert"}]
string OtherAlertType;

[Description (
    "A string describing the Alert subtype. "),
MappingStrings {"API.CISCO | Event | EventType"},
ModelCorrespondence {"CISCO_AlertIndication.OtherAlertType"},
ValueMap {"New Login", "Failed Login", "Logout", "Config Changed",
        "Track Change On", "Track Change Off", "Up", "Down",
        "Fabric Changed", "Connected Area Online", "Connected Area Offline",
        "Connected Area State Unknown", "Connected Port Online",
        "Connected Port Offline", "Connected Port State Unknown",
        "Database Merge Completed", "Database Change Completed",
        "Config Enabled", "Config Disabled", "Config Saved",
        "Config Committed", "Session Aborted", "Session Status Changed",
        "Registered", "Deregistered", "State Changed", "Firmware Download Started",
        "Firmware Download Completed", "Connection Merged", "Connection Deactivated",
        "Connection Reactivated", "Failover Completed",
        "Persistence Failure", "Initialization Failure",
        "RPC Handles Initialization Failure", "Event Registration Failure",
        "SMIAgent Config Update Failure", "Account Locked Out", "Account Added",
        "Account Deleted", "Account Role Changed", "Account Membership Changed",
        "Password Expiring", "Password Expired"}]
string AlertSubType;

[Description (
    "The identifying information for the admin "
    "domain (Fabric) for which this indication is generated. "
    "The property is the path of the Fabric instance encoded "
    "as a string. The entity within this domain for which the "
    "indication is generated is the called the AlertingManagedElement.")]
string AlertingAdminDomain;

[Description (

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

    "The identifying information of the entity ")]
string AlertingManagedElements[];

[Override("PerceivedSeverity"), Description (
    "The severity of the event. "
    "The values are: "
    "1 - Other, by CIM convention, is used to indicate that the "
    "Severity's value can be found in the OtherSeverity property. \n"
    "3 - Degraded/Warning should be used when its appropriate to let "
    "the user decide if action is needed. \n"
    "4 - Minor should be used to indicate action is needed, but the "
    "situation is not serious at this time. \n"
    "5 - Major should be used to indicate action is needed NOW. \n"
    "6 - Critical should be used to indicate action is needed NOW "
    "and the scope is broad (perhaps an imminent outage to a "
    "critical resource will result). \n"
    "7 - Fatal/NonRecoverable should be used to indicate an error "
    "occurred, but it's too late to take remedial action. \n"
    "2 and 0 - Information and Unknown (respectively) follow common "
    "usage. Literally, the AlertIndication is purely informational "
    "or its severity is simply unknown."),
Values {"Unknown", "Other", "Information", "Degraded/Warning",
    "Minor", "Major", "Critical", "Fatal/NonRecoverable"},
ValueMap{"0", "1", "2", "3", "4", "5", "6", "7"}]
uint16 PerceivedSeverity = 0;

[Override("ProbableCause"), Description (
    "An enumerated value that describes the probable cause "
    "of the situation which resulted in the AlertIndication."),
Values {"Unknown", "Other"},
ValueMap{"0", "1"}]
uint16 ProbableCause = 0;

[Description (
    "The debug level of this event."),
Values {"Level_0", "Level_1", "Level_2", "Level_3", "Level_4",
    "Level_5", "Level_6", "Level_7", "Level_8", "Level_9"},
ValueMap{"0", "1", "2", "3", "4", "5", "6", "7", "8", "9"}]
uint16 DebugLevel = 0;

[Override("Description"), Description (
    "Textual (ASCII) description of indication.")]
string Description;

};

```

## CISCO\_Component.mof

```

CISCO_Component
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_Component : CIM_Component
{};

```

## CISCO\_ComputerSystem.mof

```

CISCO_ComputerSystem
[Abstract,

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        Description ("This is an abstract class." )]
class CISCO_ComputerSystem : CIM_ComputerSystem
{};

```

## CISCO\_ComputerSystemPackage.mof

```

CISCO_ComputerSystemPackage
[Association,
    Description("ComputerSystem may be realized realized in "
        "one or more PhysicalPackages. The ComputerSystemPackage "
        "association explicitly defines this relationship."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ComputerSystemPackageProviderImpl"
)]
class CISCO_ComputerSystemPackage : CIM_ComputerSystemPackage
{
    [Override ( "Antecedent" ),
        Description (
            "The PhysicalPackage(s) that realize a Unitary ComputerSystem." )]
    CISCO_PhysicalPackage REF Antecedent;

    [Override ( "Dependent" ),
        Description ( "The UnitaryComputerSystem." )]
    CISCO_PhysicalComputerSystem REF Dependent;
};

```

## CISCO\_ComputerSystemRemoteService.mof

```

CISCO_ComputerSystemRemoteService
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ComputerSystemRemoteServiceProvide
rImpl")]
class CISCO_ComputerSystemRemoteService : CISCO_HostedAccessPoint
{
    [Override ( "Antecedent" ),
        Min ( 1 ),
        Max ( 1 ),
        Description ( "The hosting System." )]
    CISCO_PhysicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
        Weak, Description (
            "The SAPs that are hosted on this System." )]
    CISCO_RemoteServiceAccessPoint REF Dependent;
};

```

## CISCO\_ConnectivityCollection.mof

```

CISCO_ConnectivityCollection
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ConnectivityCollectionProviderImp
l")]
class CISCO_ConnectivityCollection : CIM_ConnectivityCollection
{};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ConnectivityCollectionInVsan.mof

```

CISCO_ConnectivityCollectionInVsan
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ConnectivityCollectionInVsanProviderImpl")]
class CISCO_ConnectivityCollectionInVsan : CISCO_HostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
    CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The collection defined in the context of a system." )]
    CISCO_ConnectivityCollection REF Dependent;
};

```

## CISCO\_ConnectivityMemberOfCollection.mof

```

CISCO_ConnectivityMemberOfCollection
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ConnectivityMemberOfCollectionProviderImpl")]
class CISCO_ConnectivityMemberOfCollection : CIM_MemberOfCollection
{
    [Override ( "Collection" ), Min ( 1 ), Description (
        "Collection representing Connectivity." )]
    CISCO_ConnectivityCollection REF Collection;

    [Override ( "Member" ), Min ( 1 ), Description (
        "The protocol endpoints that are members of the connectivity collection." )]
    CISCO_ProtocolEndPoint REF Member;
};

```

## CISCO\_ContainedDomain.mof

```

CISCO_ContainedDomain
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ContainedDomainProviderImpl")]
class CISCO_ContainedDomain : CIM_ContainedDomain
{
    [Aggregate, Override ( "GroupComponent" ),
    Description (
        "An AdminDomain that aggregates other AdminDomains." )]
    CISCO_AdminDomain REF GroupComponent;

    [Override ( "PartComponent" ),
    Description (
        "An AdminDomain aggregated by another AdminDomain." )]
    CISCO_Vsan REF PartComponent;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_CopyRunning.mof

```
CISCO_CopyRunning
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_CopyRunningProviderImpl")]
class CISCO_CopyRunning: CIM_Service
{
    uint32 Execute();
};
```

## CISCO\_DeviceAlias.mof

```
CISCO_DeviceAlias
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_DeviceAliasProviderImpl")]
class CISCO_DeviceAlias : CIM_NamedAddressCollection
{
    string name;
    string pwnn;
};
```

## CISCO\_DeviceSAPImplementation.mof

```
CISCO_DeviceSAPImplementation
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_DeviceSAPImplementation : CIM_DeviceSAPImplementation
{};
```

## CISCO\_ElementCapabilities.mof

```
CISCO_ElementCapabilities
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_ElementCapabilities : CIM_ElementCapabilities
{};
```

## CISCO\_ElementSettingData.mof

```
CISCO_ElementSettingData
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_ElementSettingData : CIM_ElementSettingData
{};
```

## CISCO\_ElementSoftwareIdentity.mof

```
[Association, Version("3.1.0"),
    Provider("jsr48:com.wbem.solutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
class CISCO_ElementSoftwareIdentity : WBEMSolutions_ElementSoftwareIdentity {

    [Override ( "Antecedent" ), Description (
        "A LogicalElement's Software Asset.")]
    CISCO_ServerSoftware REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The ManagedElement that requires or uses the software.")]
    CISCO_RegisteredProfile REF Dependent;

};
```

## CISCO\_ElementStatisticalData.mof

```
CISCO_ElementStatisticalData
[Abstract,
    Association,
    Description ("This is an abstract association.")]
class CISCO_ElementStatisticalData : CIM_ElementStatisticalData
{};
```

## CISCO\_EndPort.mof

```
CISCO_EndPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EndPortProviderImpl")]
class CISCO_EndPort : CIM_FCPort {

    [Override ( "PortType"), Description (
        "The specific mode currently enabled for the Port. The "
        "values: \N\" = Node Port, \NL\" = Node Port supporting FC "
        "arbitrated loop, \E\" = Expansion Port connecting fabric "
        "elements (for example, FC switches), \F\" = Fabric "
        "(element) Port, \FL\" = Fabric (element) Port supporting "
        "FC arbitrated loop, \B\" = Bridge and \G\" = Generic "
        "Port. PortTypes are defined in the ANSI X3 standards. "
        "When set to 1 (\Other\"), the related property "
        "OtherPortType contains a string description of the port's "
        "type."),
        ValueMap { "0", "1", "10", "11", "12", "13", "14", "15", "16",
            "17", "18", "16004", "16010", "16011", "16012", "16000..65535"},
        Values { "Unknown", "Other", "N", "NL", "F/NL", "Nx", "E", "F",
            "FL", "B", "G", "PortChannel", "FCIP", "ISCSI-F", "ISCSI-N", "Vendor Reserved"}
    ]

    uint16 PortType;

    [Description (
        "IP Address of the actual node.")]
    string NodeIpAddress;

    [Experimental, Description (
        "The availability of the port for client to "
        "determine whether the port can be made operational. The "
        "values: \n"
        "\Available\" indicates that the port can be made operational, \n"
        "\Not Installed\" indicates some aspect of the port has not been "
        "installed preventing it from being operational but is discoverable through "
        "instrumentation, \n"
        "\No Transceiver\" indicates that the transceiver is "
        "not installed to allow the port to become operational, "
    )]
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        "\"Incompatible Transceiver\" indicates the installed transceiver is not correct
and is preventing "
        "the port from being operational, \n"
        "\"Not Licensed\" indicates that the port "
        "cannot be made operational due to a license not existing for the port."),
        ValueMap { "0", "1", "2", "3", "4", "5", "6" },
        Values { "Unknown", "Available", "Not Installed", "No Transceiver",
        "Incompatible Transceiver", "Not Licensed", "DMTF Reserved" }}
        uint16 PortAvailability = 2;
};

```

## CISCO\_EndPortControlledByPortController.mof

```

CISCO_EndPortControlledByPortController
[Association,
    Description ("This association represents the relationship between a "
        "device and ports."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EndPortControlledByPortControllerP
roviderImpl")]
class CISCO_EndPortControlledByPortController: CIM_ControlledBy {
    [Override ("Antecedent"), Description (
        "The device that controls the port.")]
        CISCO_PortController REF Antecedent;

    [Override ("Dependent"), Description (
        "The port being controlled.")]
        CISCO_EndPort REF Dependent;

    [Override("DeviceNumber"), MaxLen(255), Description (
        "Address of associated port in context of the antecedent "
        "device. This may be a comma-separated list in case there "
        "are multiple addresses."),
        MappingStrings {"FC-GS-4 | FDMI | OS Device Name"}]
        string DeviceNumber;
};

```

## CISCO\_EndPortSAPImplementation.mof

```

CISCO_EndPortSAPImplementation
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EndPortSAPImplementationProviderIm
pl")]
class CISCO_EndPortSAPImplementation : CISCO_DeviceSAPImplementation
{
    [Override ( "Antecedent" ),
        Description ( "The LogicalDevice." )]
        CISCO_EndPort REF Antecedent;

    [Override ( "Dependent" ),
        Description (
            "The ServiceAccessPoint implemented using the LogicalDevice."
        )]
        CISCO_ProtocolEndPoint REF Dependent;
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

## CISCO\_EndPortsInHostComputerSystem.mof

```
CISCO_EndPortsInHostComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EndPortsInHostComputerSystemProviderImpl")]
class CISCO_EndPortsInHostComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_HostComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
    Weak, Description (
        "The LogicalDevice that is a component of a System." )]
    CISCO_EndPort REF PartComponent;
};
```

## CISCO\_EndPortsInStorageComputerSystem.mof

```
CISCO_EndPortsInStorageComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EndPortsInStorageComputerSystemProviderImpl")]
class CISCO_EndPortsInStorageComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_StorageComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
    Weak, Description (
        "The LogicalDevice that is a component of a System." )]
    CISCO_EndPort REF PartComponent;
};
```

## CISCO\_EnvironmentalAlert.mof

```
CISCO_EnvironmentalAlert
[Abstract,
    Indication]
class CISCO_EnvironmentalAlert: CISCO_AlertIndication
{
    string EnvAlertDescription;
    uint32 PhysicalIndex;
    uint32 OperationalStatus;
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_EthernetPort.mof

```
CISCO_EthernetPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EthernetPortProviderImpl")]
class CISCO_EthernetPort : CIM_EthernetPort
{
};
```

## CISCO\_EthernetPortProtocolEndpoint.mof

```
CISCO_EthernetPortProtocolEndpoint
[Association,
    Description ("CISCO_EthernetPortProtocolEndpoint associates a "
        "CISCO_EthernetPort with CISCO_LANEndpoint . "),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EthernetPortProtocolEndpointProviderImpl")]
class CISCO_EthernetPortProtocolEndpoint : CIM_DeviceSAPImplementation {
    [Override ( "Antecedent" ), Description (
        "The EthernetPort that represents the Device behind the "
        "ProtocolEndpoint.")]
    CISCO_EthernetPort REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The LANEndpoint implemented on the LogicalPort.")]
    CISCO_LANEndpoint REF Dependent;
};
```

## CISCO\_EthernetPortsInPhysicalComputerSystem.mof

```
CISCO_EthernetPortsInPhysicalComputerSystem
[Association,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EthernetPortsInPhysicalComputerSystemProviderImpl")]
class CISCO_EthernetPortsInPhysicalComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_PhysicalComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
    Weak, Description (
        "The LogicalDevice that is a component of a System." )]
    CISCO_EthernetPort REF PartComponent;
};
```

## CISCO\_EthernetPortStatisticalData.mof

```
CISCO_EthernetPortStatisticalData
[Association,
    Description (
        "CISCO_IPEndPointStatistics is an association that associates "
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "CISCO_IPProtocolEndPoint to its StatisticalData "),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EthernetPortStatisticalDataProvide
rImpl")]
class CISCO_EthernetPortStatisticalData : CISCO_ElementStatisticalData {
    [Override ("ManagedElement"), Description (
        "Reference to CISCO_EthernetPort instance.")]
    CISCO_EthernetPort REF ManagedElement;
    [Override("Stats"), Key, Description (
        "The statistic information.")]
    CISCO_EthernetPortStatistics REF Stats;
};

```

## CISCO\_EthernetPortStatistics.mof

```

CISCO_EthernetPortStatistics
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_EthernetPortStatisticsProviderImp
l")]
class CISCO_EthernetPortStatistics : CIM_EthernetPortStatistics {
    [Override("InstanceID"), Key, Description (
        "Within the scope of the instantiating Namespace, InstanceID "
        "opaquely and uniquely identifies an instance of this class. ")]
    string InstanceID;
    [Required, Override ( "ElementName" ), Description (
        "The user friendly name for this instance of "
        "StatisticalData. In addition, the user friendly name can be "
        "used as a index property for a search of query. (Note: Name "
        "does not have to be unique within a namespace.)")]
    string ElementName ="Undefined";
    [Override ( "PacketsTransmitted" ), Description (
        "The total number of packets transmitted. This is "
        "calculated as the sum of the packets transmitted "
        "through each EPort associated to the GigEPort. "), Counter,
    MappingStrings { "MIF.DMTF|Network Adapter 802 Port|001.6" }]
    uint64 PacketsTransmitted;
    [Override ( "PacketsReceived" ), Description (
        "The total number of packets received. This is "
        "calculated as the sum of the packets received "
        "by each EPort associated to the GigEPort. "), Counter,
    MappingStrings { "MIF.DMTF|Network Adapter 802 Port|001.8" }]
    uint64 PacketsReceived;
    [Override ( "SymbolErrors" ), Description (
        "The number of times there was an invalid data symbol when a "
        "valid carrier was present. The count is incremented at most "
        "once per carrier event, even if multiple symbol errors "
        "occur during the carrier event."), Counter,
    MappingStrings { "MIB.IETF|EtherLike-MIB.dot3StatsSymbolErrors" }]
    uint32 SymbolErrors;
    [Override ( "AlignmentErrors" ), Description (
        "A count of frames received on a particular interface that "
        "are not an integral number of octets in length and do not "
        "pass the FCS check. The count represented by an instance of "
        "this object is incremented when the alignment error status "
        "is returned by the MAC layer to the LLC (or other MAC "

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

"user). Received frames for which multiple error conditions "
"obtain are, according to the conventions of IEEE 802.3 "
"Layer Management, counted exclusively according to the "
"error status presented to the LLC."), Counter,
MappingStrings {"MIB.IETF|EtherLike-MIB.dot3StatsAlignmentErrors" }}
uint32 AlignmentErrors;

[Override ( "CarrierSenseErrors" ),
Description (
"The number of times that the carrier sense condition was "
"lost or never asserted when attempting to transmit a frame "
"on a particular interface. The count represented by an "
"instance of this object is incremented at most once per "
"transmission attempt, even if the carrier sense condition "
"fluctuates during a transmission attempt."), Counter,
MappingStrings {"MIB.IETF|EtherLike-MIB.dot3StatsCarrierSenseErrors" }}
uint32 CarrierSenseErrors;

[Override ( "FrameTooLongs" ),
Description (
"A count of frames received on a particular interface that "
"exceed the maximum permitted frame size. The count "
"represented by an instance of this object is incremented "
"when the FrameTooLong status is returned by the MAC layer "
"to the LLC (or other MAC user). Received frames for which "
"multiple error conditions obtain are, according to the "
"conventions of IEEE 802.3 Layer Management, counted "
"exclusively according to the error status presented to the "
"LLC."), Counter,
MappingStrings { "MIB.IETF|EtherLike-MIB.dot3StatsFrameTooLongs" }}
uint32 FrameTooLongs;

[Override ( "BytesTransmitted" ), Description (
"The total number of bytes transmitted, including framing "
"characters."), Units ( "Bytes" ), Counter,
MappingStrings { "MIB.IETF|MIB-II.ifOutOctets",
"MIF.DMTF|Network Adapter 802 Port|001.7" }}
uint64 BytesTransmitted;

[Override ( "BytesReceived" ), Description (
"The total number of bytes received, including framing "
"characters."), Units ( "Bytes" ), Counter,
MappingStrings { "MIB.IETF|MIB-II.ifInOctets",
"MIF.DMTF|Network Adapter 802 Port|001.9" }}
uint64 BytesReceived;

[Description (
"The total number of unicast frames transmitted. " )]
uint64 UnicastFramesTransmitted;

[Description (
"The total number of unicast frames received. " )]
uint64 UnicastFramesReceived;

[Description (
"The total number of multicast frames transmitted. " )]
uint64 MulticastFramesTransmitted;

[Description (
"The total number of multicast frames received. " )]
uint64 MulticastFramesReceived;

[Description (
"The total number of broadcast frames transmitted. " )]

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

uint64 BroadcastFramesTransmitted;

    [Description (
        "The total number of broadcast frames received. " )]
uint64 BroadcastFramesReceived;

    [Description (
        "The total number of pause frames transmitted. " )]
uint64 PauseFramesTransmitted;

    [Description (
        "The total number of pause frames received. " )]
uint64 PauseFramesReceived;

    [Description (
        "A count of frames received with less than allowed minimum "
        "frame length (64 bytes) and have CRC errors(Runt)."]
uint32 FrameTooShorts;

    [Description (
        "A count of frames aborted because of excessive or "
        "late collisions. " )]
uint32 Collisions;

    [Description (
        "A count of frames discarded because they are abruptly cut short "
        "and miss valid CRC. " )]
uint32 FrameAborts;

    [Description (
        "A count of frames which are dropped because of lack of "
        "receive buffer. " )]
uint32 Overruns;

    [Description (
        "A count of frames which are dropped because of "
        "FIFO overflow. " )]
uint32 FIFOOverflow;

    [Description (
        "Number of compressed bytes through the GigEPort. This is "
        "calculated as the sum of the compressed bytes transmitted "
        "through each EPort associated to this GigEPort. ")
uint64 CompressedBytes;

    [Description (
        "Number of uncompressed bytes through the GigEPort. This is "
        "calculated as the sum of the uncompressed bytes transmitted "
        "through each EPort associated to this GigEPort. ")
uint64 UncompressedBytes;

    [Description (
        "Number of IOAccelerated bytes.")
uint64 IOAccelerated;
};

```

## CISCO\_FabricProfile.mof

```

[Version ( "3.1.0" ), Description (
    "A RegisteredProfile describes a set of CIM Schema classes with "
    "required properties and/or methods, necessary to manage a "
    "real-world entity or to support a usage scenario, in an "

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

"interoperable fashion. RegisteredProfiles can be defined by "
"the DMTF or other standards organizations. Note that this "
"class should not be confused with CIM_Profile, which collects "
"SettingData instances, to be applied as a 'configuration "
"profile' for an element. \n"
"A RegisteredProfile is a named 'standard' for CIM-based "
"management of a particular System, subsystem, Service or other "
"entity, for a specified set of uses. It is a complete, "
"standalone definition, as opposed to the subclass "
"RegisteredSubProfile, which requires a scoping profile for "
"context. \n"
"The uses for a RegisteredProfile or SubProfile MUST be "
"specified in the document that defines the profile. Examples "
"of Profiles are to manage various aspects of an Operating "
"System, Storage Array, or Database. The name of the profile is "
"defined and scoped by its authoring organization.",
Provider("jsr48:com.wbem solutions.wbem.cimom."
"GenericReadOnlyProvider")
]
class CISCO_FabricProfile : CISCO_RegisteredProfile {
};

```

## CISCO\_FabricService.mof

```

CISCO_FabricService
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FabricServiceProviderImpl")]
class CISCO_FabricService : CIM_Service {

    uint32 ZoneSetDistribute (
        [Required, IN, Description (
            "A reference to the ZoneSet to be activated.")]
        CISCO_VSAN ref VSAN);
};

```

## CISCO\_FabricServiceInAdminDomain.mof

```

CISCO_FabricServiceInAdminDomain
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FabricServiceInAdminDomainProviderImpl")]
class CISCO_FabricServiceInAdminDomain : CISCO_HostedService
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_AdminDomain REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description ( "The Service hosted on the System." )]
    CISCO_FabricService REF Dependent;
};

```

## CISCO\_FabricServiceInVsan.mof

```

CISCO_FabricServiceInVsan

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Association,
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FabricServiceInVsanProviderImpl")]
class CISCO_FabricServiceInVsan : CISCO_HostedService
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description ( "The Service hosted on the System." )]
    CISCO_FabricService REF Dependent;
};
```

## CISCO\_FanAlert.mof

```
CISCO_FanAlert
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FanAlertProviderImpl")]
class CISCO_FanAlert: CISCO_EnvironmentalAlert
{};
```

## CISCO\_FCIPElementSettingData.mof

```
CISCO_FCIPElementSettingData
[Association,
    Description ("This corresponds to the association between
CISCO_FCIPProtocolEndpoint "
    "and CISCO_FCIPSettings. "),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPElementSettingDataProviderImpl
")]
class CISCO_FCIPElementSettingData : CISCO_ElementSettingData
{
    [Override ("ManagedElement"), Description (
    "Reference to CISCO_FCIPProtocolEndpoint instance.")]
    CISCO_FCIPProtocolEndpoint REF ManagedElement;

    [Override ("SettingData"), Description (
    "Reference to CISCO_FCIPSettings instance.")]
    CISCO_FCIPSettings REF SettingData;
};
```

## CISCO\_FCIPPEBasedOn.mof

```
CISCO_FCIPPEBasedOn
[Association, Aggregation,
    Description ("CISCO_FCIPPEBasedOn is an association used to establish "
    "membership relationships between a fcipprofile and the fcip protocol
endpoints"
    "within that switch. "),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPPEBasedOnProviderImpl")]
class CISCO_FCIPPEBasedOn: CISCO_Component {
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Override("GroupComponent"), Description (
    "The switch that has contained Ethernet ports.")]
CISCO_FCIPProfile REF GroupComponent;

[Override("PartComponent"), Description (
    "The FCIP ProtocolEndPoint in this switch.")]
CISCO_FCIPProtocolEndPoint REF PartComponent;
};
```

## CISCO\_FCIPProfile.mof

```
CISCO_FCIPProfile
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPProfileProviderImpl")]
class CISCO_FCIPProfile : CIM_Profile
{
    [Description ("The type of Internet address by which the entity is reachable. " )]
    uint32 FcipEntityAddressType;

    [Description (
        "The Internet address for this entity. "
    )]
    string FcipEntityAddress;

    [Description (
        "A TCP port other than the FCIP Well-Known port on which the "
        " FCIP entity listens for new TCP connection requests. It "
        " contains the value zero (0) if the FCIP Entity only listens on "
        " the Well-Known port. "
    )]
    uint32 FcipEntityTcpConnPort;

    [Description (
        "An indication of whether the TCP Selective Acknowledgement "
        " Option is enabled to allow the receiver end to acknowledge "
        " multiple lost packets in a singel ACK, enabling faster "
        " recovery."
        "enabled(1) - acknowledge option is enabled."
        " disabled(2) - acknowledge option is disabled. "
    )]
    boolean FcipEntitySACKOption;

    [Description (
        "An indication of whether the FCIP Entity supports the "
        "protection against sequence number wrap. "
        "If true(1), the FCIP Entity supports protection against "
        "sequence number wrap. If false(2), the FCIP Entity does not "
        "support protection against sequence number wrap. "
    )]
    boolean FcipEntitySeqNumWrap;

    [Description (
        "An indication of whether the FCIP Entity supports PHB IP QoS. "
    )]
    boolean FcipEntityPHBSupport;
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_FCIPProtocolEndpoint.mof

```

CISCO_FCIPProtocolEndpoint
[Description ("A communication point from which data may be "
             "sent or received. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPProtocolEndpointProviderImpl")
]
class CISCO_FCIPProtocolEndpoint : CIM_ProtocolEndpoint {

    [Override("SystemCreationClassName"), Key,
     Propagated("CIM_System.CreationClassName"),
     Description ("The scoping System's CreationClassName."),
     MaxLen ( 256 )]
    string SystemCreationClassName;

    [Override("SystemName"), Key, Propagated("CIM_System.Name"),
     Description ("The scoping System's Name."),
     MaxLen ( 256 )]
    string SystemName;

    [Override("CreationClassName"), Key, Description (
     "CreationClassName indicates the name of the class or the "
     "subclass used in the creation of an instance. When used "
     "with the other key properties of this class, this property "
     "allows all instances of this class and its subclasses to be "
     "uniquely identified."),
     MaxLen ( 256 )]
    string CreationClassName;

    [Override("Name"), Key, Description (
     "A string that identifies this ProtocolEndpoint with either "
     "a port or an interface on a device. To ensure uniqueness, "
     "the Name property should be prepended or appended with "
     "information from the Type or OtherTypeDescription "
     "properties. The method selected is described in the "
     "NameFormat property of this class."),
     MaxLen ( 256 )]
    string Name;

    [Override("NameFormat"), Description (
     "NameFormat contains the naming heuristic that is chosen to "
     "ensure that the value of the Name property is unique. For "
     "example, one might choose to prepend the name of the port "
     "or interface with the Type of ProtocolEndpoint that this "
     "instance is (e.g., IPv4) followed by an underscore."),
     MaxLen ( 256 )]
    string NameFormat;

    [Description (
     "Identifies the FCIP Tunnel on the GigE port."
     "The value ranges from 0 to 7." )]
    uint16 TunnelID;

    [Description (
     "IP address of the remote end of the "
     "FCIP connection.")]
    string RemoteIPAddress;

    [Description (
     "IP address for the given port.")]
    string LocalIPAddress ;

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

[Description (
    "WWN of remote switch.")]
string RemoteWWN;

[Description (
    "WWN of the local FC switch.")]
string LocalWWN;

[Description (
    "Committed traffic rate on this FCIP channel.")]
uint32 CommittedRate;

[Description (
    "Flag to indicate if compression will be used.")]
boolean Compression;

[Description (
    "Flag to indicate if SACK will be used.")]
boolean SelectiveACK;

[Description (
    "Flag to indicate if path MTU discovery will be used.")]
boolean PathMTU = false;

[Description (
    "This indicates the Retransmit time in milliseconds.")]
uint32 RetransmitTime;

[Description (
    "This indicates the maximum number of retransmissions that "
    "will be attempted.")]
uint16 MaxRetransmissions;

[Description (
    "The Keep alive time in TCP.")]
uint32 KeepAliveTimeout;

    [Override("ProtocolIFType"), Description (
        "ProtocolIFType's enumeration is limited to IP-related and "
        "reserved values for this subclass of ProtocolEndpoint."),
        ValueMap { "1", "56", "222.4095", "4096", "4097", "4098",
            "4116..32767", "32768.." },
        Values { "Other", "Fibre Channel", "IANA Reserved", "IPv4", "IPv6",
"IPv4/v6",
            "DMTF Reserved", "Vendor Reserved" }]
    uint16 ProtocolIFType = 56;

};

```

## CISCO\_FCIPSettings.mof

```

CISCO_FCIPSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPSettingsProviderImpl")]
class CISCO_FCIPSettings : CIM_SettingData
{

    [Override("InstanceID"), Key, Description (
        "A string that identifies this ProtocolEndpoint with either "
        "a port or an interface on a device. To ensure uniqueness, "
        "the Name property should be prepended or appended with "
        "information from the Type or OtherTypeDescription "
        "properties. The method selected is described in the "

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "NameFormat property of this class."),
        MaxLen ( 256 )]
string InstanceID;

[Description (
    "Identifies the FCIP Tunnel on the GigE port."
    "The value ranges from 0 to 7." )]
uint16 TunnelID;

[Description (
    "If the value is set to 'false' this link endpoint actively"
    " tries to connect to the peer. If it is set to 'true' the link"
    "endpoint waits for the peer to connect to it. ")]
boolean PassiveMode;

[Description (
    "The maximum number of TCP connections allowed on this"
    "link. ")]
uint32 NumTcpConnections;

    boolean CheckTimestamp;

        [Description(
            "The accepted time difference between the local time"
            "and the timestamp value received in the FCIP header."
            "By default this value will be EDTOV/2. EDTOV is the"
            "Error_Detect_Timeout Value used for Fibre channel Ports"
            "as the timeout value for detecting an error condition.")]
uint32 TimeStampTolerance;

        [Description(
            "The remote TCP port to which the local FCIP entity will"
            "connect if and when it initiates a TCP connection setup"
            "for this link. ")]
uint32 TcpRemPort;

//Wrong Description need to set it right
[Description(
    "The remote TCP port to which the local FCIP entity will"
    "connect if and when it initiates a TCP connection setup"
    "for this link. ")]
boolean LocalPortEnable;

[Description(
    "If the value is set to 'true', the TCP active opener"
    "initiates FCIP special frames and the TCP passive"
    "opener responds to the FCIP special frames."
    "If it is set to 'false', the FCIP special frames are"
    "neither generated nor responded to. ")]
boolean SpecialFrameEnable;

[Description(
    "If the value is set to 'true', a message is"
    "sent in response to a (Fibre Channel) ELS Echo"
    "frame received from the peer. Some B Port"
    "implementations use ELS Echo request/response frames"
    "as Link Keep Alive."
    "If it is set to 'false', this response is not"
    "generated."
    "This object is valid only if the"
    "cfmFcipLinkExtLocalBPortEnable is 'true'. ")]
boolean BPortKAEnable;

[Description(

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

    "The value to be set for the TOS field in IP header"
    "for the TCP control connection."
    "The cfmFcipLinkExtCntrlQOSField,cfmFcipLinkExtDataQOSField"
    "must be set in the same SNMP set request. SET operation would"
    "fail if this object is set individually. ")]
uint32 CntrlQOSField;

[Description(
    "The value to be set for the TOS field in IP header"
    "for the TCP Data connection."
    "The cfmFcipLinkExtCntrlQOSField,cfmFcipLinkExtDataQOSField"
    "must be set in the same SNMP set request. SET operation would"
    "fail if this object is set individually. ")]
uint32 DataQOSField;

[Description(
    "The ifIndex of the interface on which this FCIP link was"
    "initiated. ")]
uint32 EthIfIndex;

[Description(
    "The Write accelerator allows for enhancing SCSI write"
    "performance."
    "If 'true', the FCIP Write accelerator is enabled on this link"
    "If 'false' it is disabled.")]
boolean WriteAccelerator;

[Description(
    "The configuration for the IP compression."
    "'none' - ip compression is disabled."

    " 'highCompressionRatio' - indicates better compression"
    " performance at the cost of lower"
    " throughput."

    " 'highThroughput' - indicates better throughput at"
    " the cost of lower compression"
    " performance."

    "'auto' - indicates that an appropriate"
    " mode will be picked based on"
    " the bandwidth and data."

    " 'mode1' - fast compression mode for high"
    " bandwidth WAN links with bandwidth"
    "greater than 30 Mbps."

    " 'mode2' - high compression mode for"
    " moderately low bandwidth WAN links,"
    " i.e. bandwidth between 15 and 30 Mbps."

    " 'mode3' - high compression mode for"
    " low bandwidth WAN links,"
    " i.e. bandwidth less than 15 Mbps."

    )]
uint32 IPComp;

[Description(
    "The Tape accelerator allows for enhancing Tape write"
    "performance."
    "If 'true', the FCIP Tape accelerator is enabled on this link"
    "If 'false' it is disabled.")]

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

boolean TapeAccelerator;

[Description(
    "The flow control buffer size.")]
uint32 FlowCtrlBufSize;

[Description(
    "Indicates whether the IP Security has been turned on or"
    " off on this link.")]
boolean IPsec;

[Description(
    "The physical ifIndex of the interface on which this FCIP link"
    "is currently bound. ")]
uint32 PhyIfIndex;

[Description(
    "When Write Acceleration is operationally off for the FCIP"
    " link, the value of this object will be set to 'false'."
    "When Write Acceleration is operationally on for the FCIP"
    "link, the value of this object will be set to 'true'. ")]
boolean WriteAccOper;

[Description(
    "When Tape Acceleration is operationally off for the FCIP"
    " link, the value of this object will be set to 'false'."
    "When Tape Acceleration is operationally on for the FCIP"
    "link, the value of this object will be set to 'true'. ")]
boolean TapeAccOper;

[Description(
    "This object represents the state of the Tape Read"
    "Acceleration for an FCIP link. Tape Read Acceleration"
    "is automatically operational when Tape Acceleration is"
    "operational (cfmFcipLinkExtTapeAccOper) and both sides"
    "of the FCIP link support Tape Read Acceleration."
    " When Tape Read Acceleration is operationally off for"
    "the FCIP link, the value of this object is 'false'."
    "When Tape Read Acceleration is operationally on for"
    "the FCIP link, the value of this object is 'true'. ")]
boolean TapeAccReadOper;

// [Description(
//     "When Tape Acceleration is operationally off for the FCIP
//     link, the value of this object will be set to 'false'.
//     When Tape Acceleration is operationally on for the FCIP
//     link, the value of this object will be set to 'true'. "
// )]

uint32 KeepAliveTimeout;
uint32 SpecialFrameTimeout;
uint16 ConnectionUsageFlags;
};

```

## CISCO\_FCIPTCPEndpoint.mof

```

CISCO_FCIPTCPEndpoint
[Association,
    Description ("This corresponds to the association between
CISCO_FCIPProtocolEndpoint "
    "and CISCO_TCPProtocolEndPoint."),

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCIPTCPEndpointProviderImpl")
class CISCO_FCIPTCPEndpoint : CIM_BindsTo {
    [Override ( "Antecedent" ), Description (
        "The underlying TCPEndpoint, which is depended upon.")]
    CISCO_TCPProtocolEndPoint REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The FCIP ProtocolEndpoint dependent on the TCP Endpoint.")]
    CISCO_FCIPProtocolEndpoint REF Dependent;
};

```

## CISCO\_FCLogicalSwitchCapabilities.mof

```

CISCO_FCLogicalSwitchCapabilities
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCLogicalSwitchCapabilitiesProviderImpl")]
class CISCO_FCLogicalSwitchCapabilities : CIM_FCSwitchCapabilities
{};

```

## CISCO\_FCLogicalSwitchSettings.mof

```

CISCO_FCLogicalSwitchSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCLogicalSwitchSettingsProviderImpl")]
class CISCO_FCLogicalSwitchSettings : CIM_FCSwitchSettings
{};

```

## CISCO\_FCNodeMemberOfCollection.mof

```

CISCO_FCNodeMemberOfCollection
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCNodeMemberOfCollectionProviderImpl")]
class CISCO_FCNodeMemberOfCollection : CIM_MemberOfCollection
{
    [Override ( "Collection" ), Min ( 1 ), Description (
        "Collection representing Connectivity.")]
    CISCO_LogicalPortGroup REF Collection;

    [Override ( "Member" ), Min ( 1 ), Description (
        "The protocol endpoints that are members of the connectivity collection.")]
    CISCO_EndPort REF Member;
};

```

## CISCO\_FCPort.mof

```

CISCO_FCPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortProviderImpl")]
class CISCO_FCPort : CIM_FCPort {

    [Override ( "PortType"), Description (
        "The specific mode currently enabled for the Port. The "
        "values: \"N\" = Node Port, \"NL\" = Node Port supporting FC ")
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

    "arbitrated loop, \"E\" = Expansion Port connecting fabric "
    "elements (for example, FC switches), \"F\" = Fabric "
    "(element) Port, \"FL\" = Fabric (element) Port supporting "
    "FC arbitrated loop, \"B\" = Bridge and \"G\" = Generic "
    "Port. PortTypes are defined in the ANSI X3 standards. "
    "When set to 1 (\"Other\"), the related property "
    "OtherPortType contains a string description of the port's "
    "type."),
    ValueMap { "0", "1", "10", "11", "12", "13", "14", "15", "16",
              "17", "18", "19", "16004", "16010", "16011", "16012", "16000..65535"},
    Values { "Unknown", "Other", "N", "NL", "F/NL", "Nx", "E", "F",
            "FL", "B", "G", "NP", "PortChannel", "FCIP", "ISCSI-F", "ISCSI-N", "Vendor
Reserved"} ]
    uint16 PortType;

    [Description (
        "IP Address of the actual node.")]
    string NodeIpAddress;

    [Experimental, Description (
        "The availability of the port for client to "
        "determine whether the port can be made operational. The "
        "values: \n"
        "\"Available\" indicates that the port can be made operational, \n"
        "\"Not Installed\" indicates some aspect of the port has not been "
        "installed preventing it from being operational but is discoverable through "
        "instrumentation, \n"
        "\"No Transceiver\" indicates that the transceiver is "
        "not installed to allow the port to become operational, "
        "\"Incompatible Transceiver\" indicates the installed transceiver is not correct
and is preventing "
        "the port from being operational, \n"
        "\"Not Licensed\" indicates that the port "
        "cannot be made operational due to a license not existing for the port."),
    ValueMap { "0", "1", "2", "3", "4", "5", "6" },
    Values { "Unknown", "Available", "Not Installed", "No Transceiver",
            "Incompatible Transceiver", "Not Licensed", "DMTF Reserved" }]
    uint16 PortAvailability = 2;
};

```

## CISCO\_FCPortCapabilities.mof

```

CISCO_FCPortCapabilities
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortCapabilitiesProviderImpl")]
class CISCO_FCPortCapabilities : CIM_FCPortCapabilities
{};

```

## CISCO\_FCPortElementCapabilities.mof

```

CISCO_FCPortElementCapabilities
[Association,
    Description("ElementCapabilities represents the association between "
        "ManagedElements and their Capabilities."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortElementCapabilitiesProviderI
mpl")]
class CISCO_FCPortElementCapabilities : CISCO_ElementCapabilities
{
    [Override ( "ManagedElement" ), Key, Min ( 1 ),

```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

    Max ( 1 ),
    Description ( "The managed element." )]
CISCO_FCPort REF ManagedElement;

    [Override ( "Capabilities" ), Key, Description (
        "The Capabilities object associated with the element." )]
CISCO_FCPortCapabilities REF Capabilities;
};

```

## CISCO\_FCPortProtocolEndPoint.mof

```

CISCO_FCPortProtocolEndPoint
[Association,
    Description ( "CISCO_FcPortProtocolEndpoint associates a "
        "CISCO_FcPort with CISCO_LANEndpoint . "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortProtocolEndPointProviderImpl
")]
class CISCO_FCPortProtocolEndPoint : CIM_DeviceSAPImplementation {

    [Override ( "Antecedent" ), Description (
        "The FcPort that represents the Device behind the "
        "ProtocolEndpoint." )]
CISCO_FCPort REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The FCIPProtocolEndpoint implemented on the LogicalPort." )]
CISCO_FCIPProtocolEndpoint REF Dependent;
};

```

## CISCO\_FCPortSAPImplementation.mof

```

CISCO_FCPortSAPImplementation
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortSAPImplementationProviderImpl
")]
class CISCO_FCPortSAPImplementation : CISCO_DeviceSAPImplementation
{
    [Override ( "Antecedent" ),
    Description ( "The LogicalDevice." )]
Cisco_LogicalFcPort REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The ServiceAccessPoint implemented using the LogicalDevice."
    )]
CISCO_ProtocolEndPoint REF Dependent;
};

```

## CISCO\_FCPortSettingData.mof

```

CISCO_FCPortSettingData
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortSettingDataProviderImpl")]

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
class CISCO_FCPortSettingData : CISCO_ElementSettingData
{
    [Override ( "ManagedElement" ), Key,
    Description ( "The managed element." )]
    CISCO_FCPort REF ManagedElement;

    [Override ( "SettingData" ), Key, Description (
        "The SettingData object associated with the element." )]
    CISCO_FCPortSettings REF SettingData;
};
```

## CISCO\_FCPortSettings.mof

```
CISCO_FCPortSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortSettingsProviderImpl")]
class CISCO_FCPortSettings : CIM_FCPortSettings
{};
```

## CISCO\_FCPortsInLogicalComputerSystem.mof

```
CISCO_FCPortsInLogicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortsInLogicalComputerSystemProviderImpl")]
class CISCO_FCPortsInLogicalComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_LogicalComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
    Weak, Description (
        "The LogicalDevice that is a component of a System." )]
    CISCO_LogicalFCPort REF PartComponent;
};
```

## CISCO\_FCPortsInPhysicalComputerSystem.mof

```
CISCO_FCPortsInPhysicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortsInPhysicalComputerSystemProviderImpl")]
class CISCO_FCPortsInPhysicalComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_PhysicalComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        Weak, Description (
            "The LogicalDevice that is a component of a System." )]
    CISCO_FCPort REF PartComponent;

};

```

## CISCO\_FCPortsInPortChannel.mof

```

CISCO_FCPortsInPortChannel
[Association,
    Description ("This corresponds to the association between CISCO_PortChannel"
        "and CISCO_FCPort. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortsInPortChannelProviderImpl")
]
class CISCO_FCPortsInPortChannel : CIM_MemberOfCollection
{
    [Override ( "Collection" ), Min ( 1 ), Description (
        "PortChannel." )]
    CISCO_PortChannel REF Collection;

    [Override ( "Member" ), Min ( 1 ), Max ( 8 ), Description (
        "The ports that are members of the port channel." )]
    CISCO_FCPort REF Member;
};

```

## CISCO\_FCPortStatisticalData.mof

```

CISCO_FCPortStatisticalData
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortStatisticalDataProviderImpl"
)]
class CISCO_FCPortStatisticalData : CISCO_ElementStatisticalData
{
    [Override ( "ManagedElement" ), Key, Min ( 1 ),
    Max ( 1 ),
    Description (
        "The ManagedElement for which statistical or metric data "
        "is defined." )]
    CISCO_FCPort REF ManagedElement;

    [Override ( "Stats" ), Key, Description (
        "The statistic information/object." )]
    CISCO_FCPortStatistics REF Stats;
};

```

## CISCO\_FCPortStatistics.mof

```

CISCO_FCPortStatistics
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCPortStatisticsProviderImpl")]
class CISCO_FCPortStatistics : CIM_FCPortStatistics
{};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_FCSwitchCapabilities.mof

```
CISCO_FCSwitchCapabilities
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCSwitchCapabilitiesProviderImpl"
)]
class CISCO_FCSwitchCapabilities : CIM_FCSwitchCapabilities
{};
```

## CISCO\_FCSwitchSettings.mof

```
CISCO_FCSwitchSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_FCSwitchSettingsProviderImpl")]
class CISCO_FCSwitchSettings : CIM_FCSwitchSettings
{};
```

## CISCO\_HBAProduct.mof

```
CISCO_HBAProduct
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_HBAProductProviderImpl"),
  Description ("This class represents product information of FDMI enabled physical
HBA card attached "
              "to a switch.")]

class CISCO_HBAProduct: CIM_Product {

  [Override("Name"),Key, Description (
    "Commonly used Product name."),
    MaxLen ( 256 )]
  string Name;

  [Override("IdentifyingNumber"),Key, Description (
    "A manufacturer-allocated number used to identify the HBA. "
    "This value SHOULD match a serial number engraved or "
    "printed in the HBA."),
    MaxLen ( 64 ),
    MappingStrings { "FC-GS-4 | FDMI | IdentifyingNumber " }]
  string IdentifyingNumber;

  [Override("Vendor"),Key, Description (
    "The name of the Product's supplier, or entity selling the "
    "Product (the manufacturer, reseller, OEM, etc.). "
    "Corresponds to the Vendor property in the Product object in "
    "the DMTF Solution Exchange Standard."),
    MaxLen ( 256 ),
    MappingStrings { "FC-GS-4 | FDMI | Manufacturer" }]
  string Vendor;

  [Override("Version"),Key, Description (
    "A string indicating the version of the HBA card."),
    MaxLen ( 64 ),
    MappingStrings { "FC-GS-4 | FDMI | Version" }]
  string Version;

  [Override("ElementName"), Description(
    "The detailed description of the model of the HBA. The "
    "value might provide a more detailed identification of the "
    "HBA than the Model property does "),
    MappingStrings {"FC-GS-4 | FDMI | Model Description"}]
  string ElementName;
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
};
```

## CISCO\_HBASoftwareIdentity.mof

```
CISCO_HBASoftwareIdentity
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_HBASoftwareIdentityProviderImpl")
]
class CISCO_HBASoftwareIdentity : CIM_SoftwareIdentity
{
};
```

## CISCO\_HBASoftwareInstalledOnPlatform.mof

```
CISCO_HBASoftwareInstalledOnPlatform
[Association,
    Description ("The SoftwareInstalledOnPlatform relationship allows the "
        "identification of the platform on which HBA driver "
        "is installed and this association can return multiple instances."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_HBASoftwareInstalledOnPlatformProviderImpl")]
class CISCO_HBASoftwareInstalledOnPlatform: CIM_InstalledSoftwareIdentity {
    [Key, Override("System"), Max (1), Description (
        "Reference to the platform hosting a particular "
        "SoftwareIdentity.")]
    CISCO_Platform REF System;

    [Key, Override("InstalledSoftware"), Description (
        "Reference to the driver that is installed on the "
        "platform.")]
    CISCO_HBASoftwareIdentity REF InstalledSoftware;
};
```

## CISCO\_HostComputerSystem.mof

```
CISCO_HostComputerSystem
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_HostComputerSystemProviderImpl")]
class CISCO_HostComputerSystem : CISCO_ComputerSystem
{
    String IpAddress;
};
```

## CISCO\_HostComputerSystemsInAdminDomain.mof

```
CISCO_HostComputerSystemsInAdminDomain
[Association,
    Description (
        "CISCO_HostComputerSystemsInAdminDomain is a association between CISCO_AdminDomain
and "
        "CISCO_HostComputerSystem."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_HostComputerSystemsInAdminDomainProviderImpl")]
class CISCO_HostComputerSystemsInAdminDomain : CISCO_Component
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
{
    [Override ("GroupComponent"), Key, Aggregate, Description (
        "The parent element in the association." )]
    CISCO_AdminDomain REF GroupComponent;

    [Override("PartComponent"), Key, Description (
        "The child element in the association." )]
    CISCO_HostComputerSystem REF PartComponent;
};
```

## CISCO\_HostedAccessPoint.mof

```
CISCO_HostedAccessPoint
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_HostedAccessPoint : CIM_HostedAccessPoint
{};
```

## CISCO\_HostedCollection.mof

```
CISCO_HostedCollection
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_HostedCollection : CIM_HostedCollection
{};
```

## CISCO\_HostedDependency.mof

```
CISCO_HostedDependency
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_HostedDependency : CIM_HostedDependency
{};
```

## CISCO\_HostedService.mof

```
CISCO_HostedService
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_HostedService : CIM_HostedService
{};
```

## CISCO\_InstalledSoftwareIdentity.mof

```
CISCO_InstalledSoftwareIdentity
[Abstract,
    Association,
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        Description ("This is an abstract association." )]
class CISCO_InstalledSoftwareIdentity : CIM_InstalledSoftwareIdentity
{};

```

## CISCO\_IPElementSettingData.mof

```

CISCO_IPElementSettingData
[Association,
    Description ("This corresponds to the association between CISCO_IPProtocolEndpoint
"
                "and CISCO_IPSettings. "),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPElementSettingDataProviderImpl")
]
class CISCO_IPElementSettingData : CIM_ElementSettingData
{
    [Override ("ManagedElement"), Description (
        "Reference to CISCO_IPProtocolEndpoint instance.")]
    CISCO_IPProtocolEndpoint REF ManagedElement;

    [Override ("SettingData"), Description (
        "Reference to CISCO_FCIPSettings instance.")]
    CISCO_IPSettings REF SettingData;
};

```

## CISCO\_IPEndPointStatisticalData.mof

```

CISCO_IPEndPointStatisticalData
[Association,
    Description ("CISCO_IPEndPointStatistics is an association that associates "
                "CISCO_IPProtocolEndPoint to its StatisticalData "),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPEndPointStatisticalDataProviderI
mpl")]
class CISCO_IPEndPointStatisticalData : CIM_ElementStatisticalData {
    [Override ("ManagedElement"), Description (
        "Reference to CISCO_IPProtocolEndpoint instance.")]
    CISCO_IPProtocolEndPoint REF ManagedElement;

    [Override("Stats"), Key, Description (
        "The statistic information.")]
    CISCO_IPEndPointStatistics REF Stats;
};

```

## CISCO\_IPEndPointStatistics.mof

```

CISCO_IPEndPointStatistics
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPEndPointStatisticsProviderImpl"
)]
class CISCO_IPEndPointStatistics : CIM_IPEndpointStatistics {
    [Description (
        "The number of times FC synchronization lost on this FCIP Link. "
    )]
    uint64 FcipLossofFcSynchs;
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

[Description (
    "The number of times FCIP Special Frame not received on this FCIP Link. "
)]
    uint64 FcipSfNotRcv;

[Description (
    "The number of times FCIP Special Frame Response not received on this FCIP Link. "
)]
    uint64 FcipSfRespNotRcv;

[Description (
    "The number of times FCIP Special Frame Bytes mismatch"
    " happened on this FCIP Link. "
)]
    uint64 FcipSfRespMismatch;
[Description (
    "The number of times FCIP Special Frame Invalid connections"
    " once happened on this FCIP Link. "
)]
uint64 FcipSfInvalidNonce;

[Description (
    "The number of times FCIP Special Frame Response not received on this FCIP Link. "
)]
uint64 FcipDuplicateSfRcv;

[Description (
    "The number of times FCIP Special Frames with invalid "
    " destination FC Fabric Entity WWN received on this FCIP Link. "
)]
uint64 FcipSfInvalidWWN;

[Description (
    "The number of times B_Access Link Keep Alive Time out"
    " happened on this FCIP Link. "
)]
uint64 FcipBB2LkaTimeOut;

[Description (
    "The number of times Sntp Time Stamp expired on this FCIP Link. "
)]
uint64 FcipSntpTimeStampExp;
};

```

## CISCO\_IPEthernetEndpoint.mof

```

CISCO_IPEthernetEndpoint
[Association,
    Description ("This corresponds to the association between
CISCO_IPProtocolEndpoint "
    "and CISCO_LANEndPoint." ),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPEthernetEndpointProviderImpl")]
class CISCO_IPEthernetEndpoint : CIM_BindsTo {

    [Override ( "Antecedent" ), Description (
        "The underlying IP Endpoint, which is depended upon.")]
    CISCO_IPProtocolEndpoint REF Antecedent;

```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Override ( "Dependent" ), Description (
    "The LAN Endpoint dependent on the IP Endpoint.")]
CISCO_LANEndPoint REF Dependent;
];
```

## CISCO\_IPProtocolEndpoint.mof

```
CISCO_IPProtocolEndpoint
[Description ("A protocol endpoint that is dedicated to running IP."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPProtocolEndpointProviderImpl")]
class CISCO_IPProtocolEndpoint: CIM_IPProtocolEndPoint {

    [Override("SystemCreationClassName"), Key, Propagated("CIM_System.CreationClassName"),
        Description ("The scoping System's CreationClassName."),
        MaxLen ( 256 )]
    string SystemCreationClassName;

    [Override("SystemName"), Key, Propagated("CIM_System.Name"),
        Description ("The scoping System's Name."),
        MaxLen ( 256 )]
    string SystemName;

    [Override("CreationClassName"), Key, Description (
        "CreationClassName indicates the name of the class or the "
        "subclass used in the creation of an instance. When used "
        "with the other key properties of this class, this property "
        "allows all instances of this class and its subclasses to be "
        "uniquely identified."),
        MaxLen ( 256 )]
    string CreationClassName;

    [Override("Name"), Key, Description (
        "A string that identifies this ProtocolEndpoint with either "
        "a port or an interface on a device. To ensure uniqueness, "
        "the Name property should be prepended or appended with "
        "information from the Type or OtherTypeDescription "
        "properties. The method selected is described in the "
        "NameFormat property of this class."),
        MaxLen ( 256 )]
    string Name;

    [Override("NameFormat"), Description (
        "NameFormat contains the naming heuristic that is chosen to "
        "ensure that the value of the Name property is unique. For "
        "example, one might choose to prepend the name of the port "
        "or interface with the Type of ProtocolEndpoint that this "
        "instance is (e.g., IPv4) followed by an underscore."),
        MaxLen ( 256 )]
    string NameFormat;

    [Override("IPv4Address"), Description (
        "The IPv4 address that this ProtocolEndpoint represents.")]
    string IPv4Address;

    [Override("SubnetMask"), Description (
        "The mask for the IPv4 address of this ProtocolEndpoint, if "
        "one is defined.")]
    string SubnetMask;

    [Override("ProtocolIFType"), Description (
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "ProtocolIFType's enumeration is limited to IP-related and "
        "reserved values for this subclass of ProtocolEndpoint."),
        ValueMap { "1", "222.4095", "4096", "4097", "4098",
            "4116.32767", "32768.." },
        Values { "Other", "IANA Reserved", "IPv4", "IPv6", "IPv4/v6",
            "DMTF Reserved", "Vendor Reserved" }}
        uint16 ProtocolIFType = 4096;

// [Experimental, Description (
//     "AddressOrigin identifies the method by which the IP "
//     "Address, Subnet Mask, and Gateway were assigned to the "
//     "IPProtocolEndpoint."),
//     ValueMap { "0", "1", "2", "3", "4", "5", "6.32767", "32768.." },
//     Values { "Unknown", "Other", "Not Applicable", "Static", "DHCP",
//         "BOOTP", "DMTF Reserved", "Vendor Reserved" }}
//     uint16 AddressOrigin = 3;

};

```

## CISCO\_IPSettings.mof

```

CISCO_IPSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_IPSettingsProviderImpl")]
class CISCO_IPSettings : CIM_IPSettings
{};

```

## CISCO\_LANEndpoint.mof

```

CISCO_LANEndpoint
[Description ("A communication endpoint which, when its associated interface "
    "device is connected to a LAN, may send and receive data "
    "frames. LANEndpoints include Ethernet, Token Ring and FDDI "
    "interfaces."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LANEndpointProviderImpl")]
class CISCO_LANEndpoint : CIM_ProtocolEndpoint {

    [Override("SystemCreationClassName"), Key,
        Propagated("CIM_System.CreationClassName"),
        Description ("The scoping System's CreationClassName."),
        MaxLen ( 256 )]
    string SystemCreationClassName;

    [Override("SystemName"), Key, Propagated("CIM_System.Name"),
        Description ("The scoping System's Name."),
        MaxLen ( 256 )]
    string SystemName;

    [Override("CreationClassName"), Key, Description (
        "CreationClassName indicates the name of the class or the "
        "subclass used in the creation of an instance. When used "
        "with the other key properties of this class, this property "
        "allows all instances of this class and its subclasses to be "
        "uniquely identified."),
        MaxLen ( 256 )]
    string CreationClassName;

    [Override("Name"), Key, Description (
        "A string that identifies this ProtocolEndpoint with either "
        "a port or an interface on a device. To ensure uniqueness, "

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        "the Name property should be prepended or appended with "
        "information from the Type or OtherTypeDescription "
        "properties. The method selected is described in the "
        "NameFormat property of this class."),
        MaxLen ( 256 )]
string Name;

[Override ( "NameFormat" ), Description (
    "NameFormat contains the naming heuristic that is chosen to "
    "ensure that the value of the Name property is unique. For "
    "example, one might choose to prepend the name of the port "
    "or interface with the Type of ProtocolEndpoint that this "
    "instance is (e.g., IPv4) followed by an underscore."),
    MaxLen ( 256 )]
string NameFormat;

[Override("ProtocolIFType"), Description (
    "ProtocolIFType's enumeration is limited to Layer 2-related and "
    "reserved values for this subclass of ProtocolEndpoint."),
    ValueMap { "1", "6", "9", "15", "222..4095", "4116..32767", "32768.." },
    Values { "Other", "Ethernet CSMA/CD", "ISO 802.5 Token Ring",
            "FDDI", "IANA Reserved", "DMTF Reserved", "Vendor Reserved" }]
uint16 ProtocolIFType = 6;
};

```

## CISCO\_LinkDown.mof

```

CISCO_LinkDown
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LinkDownProviderImpl")]
class CISCO_LinkDown : CISCO_LinkStateChange
{};

```

## CISCO\_LinkStateChange.mof

```

CISCO_LinkStateChange
[Abstract,
    Indication,
    Description ("This is an abstract indication class." )]
class CISCO_LinkStateChange : CISCO_AlertIndication
{
    [Description (
        "The desired state of the interface. The testing (3) state"
        "indicates that no operational packets can be passed. When a"
        "managed system initializes, all interfaces start with"
        "ifAdminStatus in the down(2) state. As a result of either"
        "explicit management action or per configuration information"
        "retained by the managed system, ifAdminStatus is then"
        "changed to either the up(1) or testing(3) states (or remains"
        "in the down(2) state)."),
        ValueMap {"0", "1", "2"},
        Values { "up", "down", "testing"}]
    uint32 ifAdminStatus;

    [Description (
        "The current operational state of the interface. "),
        ValueMap {"1", "2", "3", "4", "5", "6", "7"},
        Values { "up", "down", "testing", "unknown", "dormant",
                "notPresent", "lowerLayerDown"}]
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
uint32 ifOperStatus;
uint32 ifIndex;
};
```

## CISCO\_LinkUp.mof

```
CISCO_LinkUp
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LinkUpProviderImpl")]
class CISCO_LinkUp : CISCO_LinkStateChange
{
};
```

## CISCO\_LogicalComputerSystem.mof

```
CISCO_LogicalComputerSystem
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalComputerSystemProviderImpl")]
class CISCO_LogicalComputerSystem : CISCO_ComputerSystem
{
};
```

## CISCO\_LogicalComputerSystemsInAdminDomain.mof

```
CISCO_LogicalComputerSystemsInAdminDomain
[Association,
    Description (
        "CISCO_LogicalComputerSystemsInAdminDomain is a association between
CISCO_AdminDomain and "
        "CISCO_LogicalComputerSystem."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalComputerSystemsInAdminDomainProviderImpl")]
class CISCO_LogicalComputerSystemsInAdminDomain : CISCO_Component
{
    [Override ("GroupComponent"), Key, Aggregate, Description (
        "The parent element in the association." )]
    CISCO_AdminDomain REF GroupComponent;

    [Override("PartComponent"), Key, Description (
        "The child element in the association." )]
    CISCO_LogicalComputerSystem REF PartComponent;
};
```

## CISCO\_LogicalFCPort.mof

```
CISCO_LogicalFCPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalFCPortProviderImpl")]
class CISCO_LogicalFCPort : CIM_FCPort {
    [Override ( "PortType"), Description (
        "The specific mode currently enabled for the Port. The "
        "values: \N\" = Node Port, \NL\" = Node Port supporting FC "
        "arbitrated loop, \E\" = Expansion Port connecting fabric "
        "elements (for example, FC switches), \F\" = Fabric "
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "(element) Port, \"FL\" = Fabric (element) Port supporting "
        "FC arbitrated loop, \"B\" = Bridge and \"G\" = Generic "
        "Port. PortTypes are defined in the ANSI X3 standards. "
        "When set to 1 (\"Other\"), the related property "
        "OtherPortType contains a string description of the port's "
        "type.\"",
        ValueMap { "0", "1", "10", "11", "12", "13", "14", "15", "16",
                  "17", "18", "16004", "16010", "16011", "16012", "16000..65535"},
        Values { "Unknown", "Other", "N", "NL", "F/NL", "Nx", "E", "F",
                "FL", "B", "G", "PortChannel", "FCIP", "ISCSI-F", "ISCSI-N", "Vendor Reserved"}
    ]
    uint16 PortType;

    [Description (
        "IP Address of the actual node.")]
    string NodeIpAddress;

    [Experimental, Description (
        "The availability of the port for client to "
        "determine whether the port can be made operational. The "
        "values: \n"
        "\"Available\" indicates that the port can be made operational, \n"
        "\"Not Installed\" indicates some aspect of the port has not been "
        "installed preventing it from being operational but is discoverable through "
        "instrumentation, \n"
        "\"No Transceiver\" indicates that the transceiver is "
        "not installed to allow the port to become operational, "
        "\"Incompatible Transceiver\" indicates the installed transceiver is not correct
    and is preventing "
        "the port from being operational, \n"
        "\"Not Licensed\" indicates that the port "
        "cannot be made operational due to a license not existing for the port."),
        ValueMap { "0", "1", "2", "3", "4", "5", "6" },
        Values { "Unknown", "Available", "Not Installed", "No Transceiver",
                "Incompatible Transceiver", "Not Licensed", "DMTF Reserved" }]
    uint16 PortAvailability = 2;
};

```

## CISCO\_LogicalFCPortForFCPort.mof

```

CISCO_LogicalFCPortForFCPort
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalFCPortForFCPortProviderImpl
")]
class CISCO_LogicalFCPortForFCPort : CISCO_HostedDependency
{
    [Override ( "Antecedent" ),
    Max ( 1 ),
    Description ( "The scoping ManagedElement." )]
    CISCO_FCPort REF Antecedent;

    [Override ( "Dependent" ),
    Description ( "The hosted ManagedElement." )]
    CISCO_LogicalFCPort REF Dependent;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_LogicalForPhysicalComputerSystem.mof

```
CISCO_LogicalForPhysicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalForPhysicalComputerSystemPr
oviderImpl")]
class CISCO_LogicalForPhysicalComputerSystem : CISCO_HostedDependency
{
    [Override ( "Antecedent" ),
    Max ( 1 ),
    Description ( "The scoping ManagedElement." )]
    CISCO_PhysicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Description ( "The hosted ManagedElement." )]
    CISCO_LogicalComputerSystem REF Dependent;
};
```

## CISCO\_LogicalModule.mof

```
CISCO_LogicalModule
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalModuleProviderImpl")]
class CISCO_LogicalModule : CIM_LogicalModule
{};
```

## CISCO\_LogicalModulesInPhysicalComputerSystem.mof

```
CISCO_LogicalModulesInComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalModulesInPhysicalComputerSy
stemProviderImpl")]
class CISCO_LogicalModulesInPhysicalComputerSystem : CISCO_SystemDevice
{
    [Aggregate, Override ( "GroupComponent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The parent system in the Association." )]
    CISCO_PhysicalComputerSystem REF GroupComponent;

    [Override ( "PartComponent" ),
    Weak, Description (
    "The LogicalDevice that is a component of a System." )]
    CISCO_LogicalModule REF PartComponent;
};
```

## CISCO\_LogicalPortGroup.mof

```
CISCO_LogicalPortGroup
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalPortGroupProviderImpl")]
class CISCO_LogicalPortGroup : CIM_LogicalPortGroup
{};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_LogicalPortGroupInHostComputerSystem.mof

```
CISCO_LogicalPortGroupInHostComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalPortGroupInHostComputerSystemProviderImpl")]
class CISCO_LogicalPortGroupInHostComputerSystem : CISCO_HostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
    CISCO_HostComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The collection defined in the context of a system." )]
    CISCO_LogicalPortGroup REF Dependent;
};
```

## CISCO\_LogicalSwitchConformsToSwitchProfile.mof

```
[Association, Version ( "3.1.0" ), Description (
    "The SMISConformsToProfile association defines the "
    "RegisteredProfiles that are conformant with a specific "
    "version of SIM-S. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalSwitchConformsToSwitchProfileProviderImpl")
]
class CISCO_LogicalSwitchConformsToSwitchProfile : CIM_ElementConformsToProfile {

    [Key, Override ( "ConformantStandard" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The RegisteredProfile to which the ManagedElement conforms." )]
    CISCO_SwitchProfile REF ConformantStandard;

    [Key, Override ( "ManagedElement" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The ManagedElement that conforms to the RegisteredProfile." )]
    CISCO_LogicalComputerSystem REF ManagedElement;
};
```

## CISCO\_LogicalSwitchElementCapabilities.mof

```
CISCO_LogicalSwitchElementCapabilities
[Association,
    Description("ElementCapabilities represents the association between "
    "ManagedElements and their Capabilities."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalSwitchElementCapabilitiesProviderImpl")]
class CISCO_LogicalSwitchElementCapabilities : CISCO_ElementCapabilities
{
    [Override ( "ManagedElement" ), Key, Min ( 1 ),
    Max ( 1 ),
    Description ( "The managed element." )]
    CISCO_LogicalComputerSystem REF ManagedElement;
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Override ( "Capabilities" ), Key, Description (
    "The Capabilities object associated with the element." )]
CISCO_FCLogicalSwitchCapabilities REF Capabilities;
};
```

## CISCO\_LogicalSwitchInstalledSoftwareIdentity.mof

```
CISCO_LogicalSwitchInstalledSoftwareIdentity
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalSwitchInstalledSoftwareIdentityProviderImpl")]
class CISCO_LogicalSwitchInstalledSoftwareIdentity : CISCO_InstalledSoftwareIdentity
{
    [Override ( "System" ), Key, Description (
        "The system on which the software is installed." )]
    CISCO_LogicalComputerSystem REF System;

    [Override ( "InstalledSoftware" ), Key, Description (
        "The SoftwareIdentity that is installed." )]
    CISCO_LogicalSwitchSoftwareIdentity REF InstalledSoftware;
};
```

## CISCO\_LogicalSwitchSettingData.mof

```
CISCO_LogicalSwitchSettingData
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalSwitchSettingDataProviderImpl")]
class CISCO_LogicalSwitchSettingData : CISCO_ElementSettingData
{
    [Override ( "ManagedElement" ), Key,
    Description ( "The managed element." )]
    CISCO_LogicalComputerSystem REF ManagedElement;

    [Override ( "SettingData" ), Key, Description (
        "The SettingData object associated with the element." )]
    CISCO_FCLogicalSwitchSettings REF SettingData;
};
```

## CISCO\_LogicalSwitchSoftwareIdentity.mof

```
CISCO_LogicalSwitchSoftwareIdentity
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalSwitchSoftwareIdentityProviderImpl")]
class CISCO_LogicalSwitchSoftwareIdentity : CISCO_SoftwareIdentity
{};
```

## CISCO\_LogicalIdentity.mof

```
[Association,
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        Description ("This association represents relation between the ServiceAccessPoints
i.e. "
        "two CISCO_ProtocolEndPoints of the NPV link."
        "Basically it the connection between the "
        "F port of the core NPIV to the F port of NPV which connects to the end
devices"),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalIdentityProviderImpl")]
class CISCO_LogicalIdentity : CIM_LogicalIdentity
{
    [Override ( "SystemElement" ) ,
    Description ("SystemElement represents one aspect of the Managed "
    "Element. The use of \'System\' in the role name does not "
    "limit the scope of the association. The role name was "
    "defined in the original association, where the "
    "referenced elements were limited to LogicalElements. "
    "Since that time, it has been found valuable to "
    "instantiate these types of relationships for "
    "ManagedElements, such as Collections. So, the referenced "
    "elements of the association were redefined to be "
    "ManagedElements. Unfortunately, the role name could not "
    "be changed without deprecating the entire association. "
    "This was not deemed necessary just to correct the role "
    "name." ) ]
    CISCO_ProtocolEndPoint REF SystemElement;
    [Override ( "SameElement" ) ,
    Description ("SameElement represents an alternate aspect of the "
    "ManagedElement.") ]
    CISCO_ProtocolEndPoint REF SameElement;
};

```

## CISCO\_LogicalPortGroupInStorageComputerSystem.mof

```

// =====
// CISCO_LogicalPortGroupInStorageComputerSystem
// =====
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_LogicalPortGroupInStorageComputersSystemProviderImpl")]
class CISCO_LogicalPortGroupInStorageComputerSystem : CISCO_HostedCollection
{
    [Override ( "Antecedent" ) ,
    Min ( 1 ) ,
    Max ( 1 ) ,
    Description ( "The scoping system." ) ]
    CISCO_StorageComputerSystem REF Antecedent;

    [Override ( "Dependent" ) ,
    Description (
    "The collection defined in the context of a system." ) ]
    CISCO_LogicalPortGroup REF Dependent;
};

```

## CISCO\_MediaFRU.mof

```

CISCO_MediaFRU
[Abstract,

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        Indication,
        Description ("This is an abstract indication class." )]
class CISCO_MediaFRU : CISCO_AlertIndication
{
    uint32 PhysicalIndex;
    string PhysicalDescr;
    uint32 PhysicalVendorType_len;
    uint32 PhysicalContainedIn;
    [
        Description ("Entity Physical Class Type "),
        ValueMap {"1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11" },
        Values {"ENT_OTHER", "UNKNOWN_ENTITY", "CHASSIS", "BACKPLANE", "CONTAINER",
"POWERSUPPLY", "FAN", "SENSOR", "MODULE", "PORT", "STACK"}
    ]
    uint32 PhysicalClass;

    uint32 PhysicalParRelPos;
    string PhysicalName;
    string PhysicalHardwareRev;
    string PhysicalFirmwareRev;
    string PhysicalSoftwareRev;
    string PhysicalSerialNum;
    string PhysicalMfgName;
    string PhysicalModelName;
    string PhysicalAlias;
    string PhysicalAssetID;
    boolean PhysicalIsFRU;
    boolean Valid;

    [
        Description ( "Module Admin Status Status"),
        ValueMap {"1", "2", "3", "4"},
        Values {"CEFC_PHYS_STATUS_OTHER ", "CEFC_PHYS_STATUS_SUPPORTED",
"CEFC_PHYS_STATUS_UNSUPPORTED", "CEFC_PHYS_STATUS_INCOMPATIBLE"}
    ]
    uint16 PhysicalStatus;

    string PhySecondSerialNum;
    string PhyProductNumber;
    string PhyPartRevision;
    string PhyMfgDate;
    string PhysicalCLEIcode;
    uint16 PhySramSize;
    string PhysicalNameofSlot;
};

```

## CISCO\_MediaFRUChanged.mof

```

CISCO_MediaFRUChanged
[Indication,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_MediaFRUChangedProviderImpl")]
class CISCO_MediaFRUChanged: CISCO_AlertIndication
{
    uint32 PhysicalIndex;
    [Description (
        "Module Operational Status"),
        ValueMap {"1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12",
"13", "14", "15", "16", "17", "18", "19", "20", "21"},
        Values {
"MOD_OPER_UNKNOWN", "MOD_OPER_OK", "MOD_OPER_DISABLED", "MOD_OPER_OKBUTDIAGFAILED",

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        "MOD_OPER_BOOT", "MOD_OPER_SELFTEST", " MOD_OPER_FAILED", "MOD_OPER_MISSING",
        "MOD_OPER_MISMATCHWITHPARENT", "MOD_OPER_MISMATCHCONFIG",
"MOD_OPER_DIAGFAILED",
        "MOD_OPER_DORMANT" , " MOD_OPER_OUTOFSERVICEADMIN",
"MOD_OPER_OUTOFSERVICEENVTEMP",
        "MOD_OPER_POWEREDDOWN", "MOD_OPER_POWEREDUP", " MOD_OPER_POWERDENIED",
        "MOD_OPER_POWERCYCLED", "MD_OPER_OKBUTPOWEROVERWARNING", "
MOD_OPER_OKBUTPOWEROVERCRITICAL",
        "MOD_OPER_SYNCINPROGRESS" }
    ]
    uint16 ModuleOperStatus;

    [Description (
        "Module Admin Status Status"),
    ValueMap {"1", "2", "3","4"},
    Values {"Admin Enabled","Admin Disabled", "Admin Reset", "Admin Out of Service"}
    ]
    uint16 ModuleAdminStatus;
    [Description (
        "Module Admin Status Status"),
    ValueMap {"1", "2", "3","4","5"},
    Values {"UNKNOWN_RESET ", "POWERUP", "PARITYERROR",
"CLEARCONFIGRESET", "MANUALRESET" }
    ]
    uint16 ModuleResetReason;
    string ModuleResetReasonDescription;
    uint32 numPorts;
    uint32 boot_mode;
    uint8 isValid;
    uint8 mod_state;
    uint8 mod_type;
    uint8 pad[2];
    uint32 mod_no;
    uint32 ModuleUpTime;
    uint32 numFcPorts;
};

```

## CISCO\_MediaFRUInserted.mof

```

CISCO_MediaFRUInserted
[Indication,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_MediaFRUInsertedProviderImpl")]
class CISCO_MediaFRUInserted : CISCO_MediaFRU
{};

```

## CISCO\_MediaFRURemoved.mof

```

CISCO_MediaFRURemoved
[Indication,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_MediaFRURemovedProviderImpl")]
class CISCO_MediaFRURemoved : CISCO_MediaFRU
{};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ModuleEthernetPort.mof

```
CISCO_ModuleEthernetPort
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ModuleEthernetPortProviderImpl")]
class CISCO_ModuleEthernetPort : CISCO_ModulePort
{
    [Aggregate, Override ( "GroupComponent" ),
    Max ( 1 ),
    Description ( "A module that has ports." )]
    CISCO_LogicalModule REF GroupComponent;

    [Override ( "PartComponent" ),
    Description ( "A Port that is associated with a module." )]
    CISCO_EthernetPort REF PartComponent;
};
```

## CISCO\_ModuleFcPort.mof

```
CISCO_ModuleFcPort
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ModuleFcPortProviderImpl")]
class CISCO_ModuleFcPort : CISCO_ModulePort
{
    [Aggregate, Override ( "GroupComponent" ),
    Max ( 1 ),
    Description ( "A module that has ports." )]
    CISCO_LogicalModule REF GroupComponent;

    [Override ( "PartComponent" ),
    Description ( "A Port that is associated with a module." )]
    CISCO_FCPort REF PartComponent;
};
```

## CISCO\_ModulePort.mof

```
CISCO_ModulePort
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_ModulePort : CIM_ModulePort
{};
```

## CISCO\_NameServerDatabaseChanged.mof

```
CISCO_NameServerDatabaseChanged
[Indication,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_NameServerDatabaseChangedProviderImpl")]
class CISCO_NameServerDatabaseChanged: CISCO_AlertIndication
{
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
};
```

## CISCO\_PhysicalComputerSystem.mof

```
CISCO_PhysicalComputerSystem
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalComputerSystemProviderImpl")]
class CISCO_PhysicalComputerSystem : CISCO_ComputerSystem
{
    string IpAddress;
};
```

## CISCO\_PhysicalComputerSystemsInAdminDomain.mof

```
CISCO_PhysicalComputerSystemsInAdminDomain
[Association,
    Description (
        "CISCO_PhysicalComputerSystemsInAdminDomain is a association between
CISCO_AdminDomain and "
        "CISCO_PhysicalComputerSystem."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalComputerSystemsInAdminDomainProviderImpl")]
class CISCO_PhysicalComputerSystemsInAdminDomain : CISCO_Component
{
    [Override ("GroupComponent"), Key, Aggregate, Description (
        "The parent element in the association." )]
    CISCO_AdminDomain REF GroupComponent;

    [Override("PartComponent"), Key, Description (
        "The child element in the association." )]
    CISCO_PhysicalComputerSystem REF PartComponent;
};
```

## CISCO\_PhysicalElement.mof

```
CISCO_PhysicalElement
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalElementProviderImpl")]
class CISCO_PhysicalElement : CIM_PhysicalElement
{};
```

## CISCO\_PhysicalElementEthernetPortRealizes.mof

```
CISCO_PhysicalElementEthernetPortRealizes
[Association,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalElementEthernetPortRealizesProviderImpl")]
class CISCO_PhysicalElementEthernetPortRealizes : CISCO_Realizes
{
    [Override ( "Antecedent" ),
    Description (
        "The physical component that implements the Device." )]
    CISCO_PhysicalElement REF Antecedent;
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
[Override ( "Dependent" ),
  Description ( "The LogicalDevice." )]
CISCO_EthernetPort REF Dependent;
};
```

## CISCO\_PhysicalElementFcPortRealizes.mof

```
CISCO_PhysicalElementFcPortRealizes
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalElementFcPortRealizesProviderImpl")]
class CISCO_PhysicalElementFcPortRealizes : CISCO_Realizes
{
  [Override ( "Antecedent" ),
  Description (
    "The physical component that implements the Device." )]
  CISCO_PhysicalElement REF Antecedent;

  [Override ( "Dependent" ),
  Description ( "The LogicalDevice." )]
  CISCO_FCPort REF Dependent;
};
```

## CISCO\_PhysicalHBA.mof

```
CISCO_PhysicalHBA
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalHBAProviderImpl"),
  Description ("This class represents FDMI enabled physical HBA card attached "
    "to a switch" )]
class CISCO_PhysicalHBA: CIM_PhysicalPackage {

  [Override("Tag"), Key, MaxLen (256), Description (
    "A unique physical identifier that serves as the key for "
    "the HBA. The HBA serial number could be used as a tag.\n" )]
  string Tag;

  [Override ( "ElementName" ),
  MappingStrings { "MIB.IETF|Entity-MIB.entPhysicalName" }]
  string ElementName;

  [Override("CreationClassName"), Key, MaxLen (256), Description (
    "CreationClassName indicates the name of the class or the "
    "subclass used in the creation of an instance. When used "
    "with the other key properties of this class, this "
    "property allows all instances of this class and its "
    "subclasses to be uniquely identified.")]
  string CreationClassName= "CISCO_PhysicalHBA";

  [Override("Manufacturer"), MaxLen (256), Description (
    "The name of the organization responsible for "
    "manufacturing the HBA."),
  MappingStrings {"FC-GS-4 | FDMI | Manufacturer"}]
  string Manufacturer;

  [Override("Model"), MaxLen (64), Description (
    "The name by which the HBA is generally known."),
  MappingStrings {"FC-GS-4 | FDMI | Model"}]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

string Model;

[Description (
    "The detailed description of the model of the HBA. The "
    "value might provide a more detailed identification of the "
    "HBA than the Model property does."),
    MaxLen (256),
    MappingStrings {"FC-GS-4 | FDMI | Model Description"}]
string ModelDescription;

[Override("SerialNumber"), MaxLen (64), Description (
    "A manufacturer-allocated number used to identify the HBA. "
    "This value SHOULD match a serial number engraved or "
    "printed in the HBA."),
    MappingStrings {"FC-GS-4 | FDMI | Serial Number"}]
string SerialNumber;

[Override("Version"), MaxLen (64), Description (
    "A string indicating the version of the HBA card."),
    MappingStrings {"FC-GS-4 | FDMI | Version"}]
string Version;
} ;

```

## CISCO\_PhysicalPackage.mof

```

CISCO_PhysicalPackage
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalPackageProviderImpl")]
class CISCO_PhysicalPackage : CIM_PhysicalPackage
{};

```

## CISCO\_PhysicalPackageLogicalModuleRealizes.mof

```

CISCO_PhysicalPackageLogicalModuleRealizes
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PhysicalPackageLogicalModuleRealizesProviderImpl")]
class CISCO_PhysicalPackageLogicalModuleRealizes : CISCO_Realizes
{
    [Override ( "Antecedent" ),
    Description (
        "The physical component that implements the Device." )]
    CISCO_PhysicalPackage REF Antecedent;

    [Override ( "Dependent" ),
    Description ( "The LogicalDevice." )]
    CISCO_LogicalModule REF Dependent;
};

```

## CISCO\_Platform.mof

```

CISCO_Platform
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PlatformProviderImpl"),
    Description ("CISCO_Platform represents a fabric-connected entity, "
        "containing one or more Node objects, that has registered "

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "with a fabric's Management Server service."
        "Instances of this class can be created and deleted by a "
        "client using createInstance and deleteInstance respectively "
        "This class also represents the HBA host and if the HBA host "
        "information is got through FDMI call then the setInstance will "
        "not be supported for setting the properties like Dedicated, "
        "Management ServerList.")]
class CISCO_Platform: CIM_ComputerSystem {

    [Override ("CreationClassName"), Key, MaxLen (256),
    Description (
        "CreationClassName indicates the name of the class or the "
        "subclass used in the creation of an instance. When used "
        "with the other key properties of this class, this property "
        "allows all instances of this class and its subclasses to "
        "be uniquely identified.")]
    string CreationClassName= "CISCO_Platform";

    [Override ("Name"), Key, MaxLen (256), Description (
        "The inherited Name serves as key of the platform in an "
        "enterprise environment. This value has the following "
        "format:\n"
        "\Proxy WWN\":"Platform Name\").")]
    string Name;

    [Override ("ElementName"), Required, Description (
        "A user-friendly name for the object. This property allows "
        "each instance to define a user-friendly name IN ADDITION TO "
        "its key properties/identity data, and description "
        "information. \n"
        "Note that ManagedSystemElement's Name property is also "
        "defined as a user-friendly name. But, it is often "
        "subclassed to be a Key. It is not reasonable that the same "
        "property can convey both identity and a user friendly name, "
        "without inconsistencies. Where Name exists and is not a Key "
        "(such as for instances of LogicalDevice), the same "
        "information MAY be present in both the Name and ElementName "
        "properties.")]
    string ElementName;

    [Override ( "NameFormat" ),Required, Description (
        "The ComputerSystem object and its derivatives are Top Level "
        "Objects of CIM. They provide the scope for numerous "
        "components. Having unique System keys is required. The "
        "NameFormat property identifies how the ComputerSystem Name "
        "is generated. The NameFormat ValueMap qualifier defines the "
        "various mechanisms for assigning the name. Note that "
        "another name can be assigned and used for the "
        "ComputerSystem that better suit a business, using the "
        "inherited ElementName property."),
    ValueMap { "Other", "IP", "Dial", "HID", "NWA", "HWA", "X25",
        "ISDN", "IPX", "DCC", "ICD", "E.164", "SNA", "OID/OSI",
        "WWN", "NAA" }]
    string NameFormat = "Other";

    [Write, Override ("Dedicated"), Description(
        "Platform type. Although this is represented as an array, "
        "only one type is specified at any given time (array size is "
        "always 1). When writing this property, users should "
        "specify only a single type in an array size of exactly 1. "
        "Specifying more or less than 1 type results in an exception "
        "with an invalid argument error code."),
    Values{"Unknown", "Others", "Gateway", "dummy3", "dummy4",
        "Converter", "HBA", "Swproxy", "StorageDev", "Host",

```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        "Storsubsys", "Module", "Driver", "StorAccess"},
    ValueMap {"0", "1", "2", "3", "4", "5", "6", "7", "8", "9", "10",
        "11", "12", "13"},
    MappingStrings {"API.CISCO | Platform | PlatformType"}}
uint16 Dedicated[];

[Override ("OtherIdentifyingInfo"), Description(
    "Platform name: for example, host name."),
    MappingStrings {"API.CISCO | Platform | PlatformName"}}
string OtherIdentifyingInfo[];

[Write, Description(
    "The set of management IP Addresses used to access this "
    "platform."),
    MappingStrings {"API.CISCO | Platform | ManagementAddrSet"}}
string MgmtAddressList[];
};

```

## CISCO\_PlatformHostedSANAccessPoint.mof

```

CISCO_PlatformHostedSANAccessPoint
[Association,
    Description ("CISCO_PlatformHostedSANAccessPoint is an association "
        "between a ProtocolEndPoint and the platform on which it is "
        "provided. The cardinality of this association is "
        "one-to-many and is weak with respect to the platform. Each "
        "platform can host many ProtocolEndpoints."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PlatformHostedSANAccessPointProvid
erImpl")]
class CISCO_PlatformHostedSANAccessPoint: CIM_HostedAccessPoint {

    [Override ("Antecedent"), Max (1), Min (1), Description (
        "The hosting system.")]
    CISCO_Platform REF Antecedent;

    [Override ("Dependent"), Weak, Description (
        "The SAPs that are hosted on this system.")]
    CISCO_ProtocolEndPoint REF Dependent;
};

```

## CISCO\_PlatformPackage.mof

```

CISCO_PlatformPackage
[Association,
    Description ("This association denotes one or more physical HBAs that "
        "realize a Platform."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PlatformPackageProviderImpl")]
class CISCO_PlatformPackage: CIM_ComputerSystemPackage {

    [Override ("Antecedent"), Description (
        "The physical HBA that realizes a Platform.")]
    CISCO_PhysicalHBA REF Antecedent;

    [Override ("Dependent"), Description (
        "The Platform.")]
    CISCO_Platform REF Dependent;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_PortAdded.mof

```
CISCO_PortAdded
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortAddedProviderImpl")]
class CISCO_PortAdded: CIM_InstCreation
{};
```

## CISCO\_PortChannel.mof

```
CISCO_PortChannel
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortChannelProviderImpl")]
class CISCO_PortChannel : CIM_RedundancySet
{
    [Override("Caption"), Description (
        "An user-friendly name of the port channel. ")]
        string Caption;

    [Override("Description"), Description (
        "An user-friendly name of the port channel. ")]
        string Description;

    [Override("ElementName"), Description (
        "An user-friendly name of the port channel. ")]
        string ElementName;

    [Override("InstanceID"), Description (
        "The ifIndex of port channel interface concatenated with number of members in
that portchannel. (Eg: 67108866:1) ")]
        string InstanceID;

    [Description ("CreationTime of the port channel interface.")]
        datetime CreationTime;
    [Description ("The timestamp indicating the time of last action performed on the port
channel interface.")]
        datetime LastActionTime;
        boolean LastActionStatus;
    // [Description ("The minimum number of members required for PortChannel ")]
    //     uint32 MinNumberNeeded = 1;
    // [Description ("The maximum number of members that can be part for PortChannel ")]
    //     uint32 MaxNumberSupported = 8;
    [Description ("Vsan to which the port channel belongs to. It is zero, if the
portchannel is trunked.")]
        uint16 VsanId;
        boolean isTrunked;
    [Description ("If the addition was forced, it will be set to true.")]
        boolean ChannelAdditionForced;

    [Description ("The number of interface that are part of the portchannel.")]
        uint32 NumberOfMembers;

    [Description("Indicates the Admin Status of the port channel mode."),
    ValueMap { "1", "2", "3", "4", "5"},
    Values { "Auto", "On", "Off", "Desirable", "Active"}]
        uint16 AdminStatus;

    [Description("Indicates the Operational Status of the port channel mode." ),
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
ValueMap { "1", "2", "3", "4", "5"},
Values { "Auto", "On", "Off", "Desirable", "Active"}}
uint16 OperStatus;

[Description (
  "Indicates the current status of the port channel."),
  ValueMap {"0", "1", "2", "3", "4", "5", "6", "7", "8", "9",
    "10", "11", "12", "13", "14", "15", "16", "17", "18"},
  Values {"Unknown", "Other", "OK", "Degraded", "Stressed",
    "Predictive Failure", "Error", "Non-Recoverable Error",
    "Starting", "Stopping", "Stopped", "In Service",
    "No Contact", "Lost Communication", "Aborted",
    "Dormant", "Supporting Entity in Error", "Completed",
    "Power Mode"},
  ArrayType ("Indexed")]
uint16 OperationalStatus[];
};
```

## CISCO\_PortChannelsInSwitch.mof

```
CISCO_PortChannelsInSwitch
[Association,
  Description ("This corresponds to the association between
  CISCO_PhysicalComputerSystem
    "and CISCO_PortChannel. "),

  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortChannelsInSwitchProviderImpl")
]
class CISCO_PortChannelsInSwitch : CIM_HostedCollection
{
  [Override ( "Antecedent" ), Description (
    "The scoping system.")]
  CISCO_PhysicalComputerSystem REF Antecedent;

  [Override ( "Dependent" ), Description (
    "The collection defined in the context of a system.")]
  CISCO_PortChannel REF Dependent;
};
```

## CISCO\_PortController.mof

```
CISCO_PortController
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortControllerProviderImpl"),
  Description("CISCO_PortController represents the port controller of an FDMI
  enabled HBA.")]
class CISCO_PortController: CIM_PortController {

  [Override("SystemCreationClassName"), Key, MaxLen (256), Description (
    "The scoping system's creation class name. The "
    "scoping system is the CISCO_Platform or "
    "CISCO_Fabric of which this device is part.")]
  string SystemCreationClassName;

  [Override("SystemName"), Key, MaxLen (256), Description (
    "The scoping system's Name property. The value "
    "is equivalent to the platform name if the scoping system is an "
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

        "instance of CISCO_Platform or the Proxy Switch WWN if the "
        "scoping system is an instance of CISCO_Fabric.")]
string SystemName;

[Override("CreationClassName"), Key, MaxLen (256),
  Description (
    "CreationClassName indicates the name of the CISCO_PortController "
    "class that, when used with the other key properties of this "
    "class, uniquely identifies an instance of the "
    "CISCO_PortController class.")]
string CreationClassName= "CISCO_PortController";

[Override("DeviceID"), Key, MaxLen (64), Description (
  "This is the Serial Number of the HBA"),
  MappingStrings {"API.CISCO | HBA | WWN",
    "API.CISCO | Node | WWN"}]
string DeviceID;

[Override("ControllerType"), Required, Description (
  "The type or model of the port controller. Specific values "
  "will be enumerated in a later release of this schema. When "
  "set to 1 (\\"Other\\"), the related property "
  "OtherControllerType contains a string description of the "
  "controller's type."),
  ValueMap { "0", "1", "2", "3", "4", "5", "6", "7", "8" },
  Values { "Unknown", "Other", "Ethernet", "IB", "FC", "FDDI",
    "ATM", "Token Ring", "Frame Relay" },
  ModelCorrespondence { "CIM_PortController.OtherControllerType" }}
uint16 ControllerType = 4;
};

```

## CISCO\_PortControllerInFabric.mof

```

CISCO_PortControllerInFabric
[Association,
  Description ("CISCO_PortControllerInFabric defines a SystemSpecificCollection "
    "in the context of a scoping system. This association is "
    "created ONLY if CISCO_PortController cannot be scoped within "
    "CISCO_Platform. This can happen if the scoping platform "
    "cannot be determined for some reason: for example, if it "
    "was not registered in the platform database."),

  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortControllerInFabricProviderImpl
")]
class CISCO_PortControllerInFabric: CIM_SystemDevice {

  [Override ("GroupComponent"), Description (
    "A platform hosts a collection of devices.")]
  CISCO_Vsan REF GroupComponent;

  [Override ("PartComponent"), Description (
    "The devices hosted on a platform.")]
  CISCO_PortController REF PartComponent;
};

```

## CISCO\_PortControllerInPlatform.mof

```

CISCO_PortControllerInPlatform

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Association,
    Description ("CISCO_PortControllerInPlatform defines a SystemSpecificCollection "
        "in the context of a scoping system. The node registered "
        "in the platform database must also be registered in the "
        "Name Server."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortControllerInPlatformProviderImpl")]
class CISCO_PortControllerInPlatform: CIM_SystemDevice {

    [Override ("GroupComponent"), Description (
        "A platform hosts a collection of devices."),
        MappingStrings {"API.CISCO | Platform | PlatformNodeSet "}]
    CISCO_Platform REF GroupComponent;

    [Override ("PartComponent"), Description (
        "The devices hosted on a platform.")]
    CISCO_PortController REF PartComponent;
};
```

## CISCO\_PortControllerRealizes.mof

```
CISCO_PortControllerRealizes
[Association,
    Description ("CISCO_PortControllerRealizes is the association that defines "
        "the mapping between devices and the physical elements "
        "that implement them."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortControllerRealizesProviderImpl")]
class CISCO_PortControllerRealizes: CIM_Realizes {

    [Override ("Antecedent"), Description (
        "The physical HBA that implements the Device.")]
    CISCO_PhysicalHBA REF Antecedent;

    [Override ("Dependent"), Description (
        "The Device.")]
    CISCO_PortController REF Dependent;
};
```

## CISCO\_PortControllerSoftwareIdentity.mof

```
CISCO_PortControllerSoftwareIdentity
[Association,
    Description ("The PortControllerSoftwareIdentity relationship identifies any "
        "software that is associated with the device and this association "
        "can return multiple instances."),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortControllerSoftwareIdentityProviderImpl")]
class CISCO_PortControllerSoftwareIdentity: CIM_ElementSoftwareIdentity {

    [Override ("Antecedent"), Description (
        "The SoftwareIdentity on the device.")]
    CISCO_HBASoftwareIdentity REF Antecedent;

    [Override ("Dependent"), Description (
        "The logical device that requires or uses the software.")]
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
CISCO_PortController REF Dependent;
};
```

## CISCO\_PortRemoved.mof

```
CISCO_PortRemoved
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PortRemovedProviderImpl")]
class CISCO_PortRemoved: CIM_InstDeletion
{
};
```

## CISCO\_PowerAlert.mof

```
CISCO_PowerAlert
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_PowerAlertProviderImpl")]
class CISCO_PowerAlert: CISCO_EnvironmentalAlert
{
    uint32 FRUPowerAdminStatus;
    uint32 FRUCurrent;
};
```

## CISCO\_Product.mof

```
CISCO_Product
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProductProviderImpl")]
class CISCO_Product : CIM_Product
{
};
```

## CISCO\_ProductPhysicalComponent.mof

```
CISCO_ProductPhysicalComponent
[Association,

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProductPhysicalComponentProviderImpl")]
class CISCO_ProductPhysicalComponent : CIM_ProductPhysicalComponent
{
    [Override ( "GroupComponent" ),
        Max ( 1 ),
        Description ( "The Product." )]
    CISCO_Product REF GroupComponent;

    [Override ( "PartComponent" ),
        Description (
            "The PhysicalElement which is a part of the Product." )]
    CISCO_PhysicalElement REF PartComponent;
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ProductPhysicalHBA.mof

```
CISCO_ProductPhysicalHBA
[Association,
    Description ("The HBA is shipped to the customer by a third party "
        "(OEM/reseller) to the customer. This class associates "
        "the HBA with the product."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProductPhysicalHBAProviderImpl")]
class CISCO_ProductPhysicalHBA: CIM_ProductPhysicalComponent {

    [Override ("GroupComponent"), Description (
        "The product.")]
    CISCO_HBAProduct REF GroupComponent;

    [Override ("PartComponent"), Description (
        "The HBA that is shipped as a product.")]
    CISCO_PhysicalHBA REF PartComponent;
};
```

## CISCO\_ProductSoftwareComponent.mof

```
[Association, Version("3.1.0"),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_ProductSoftwareComponent : WBEMSolutions_ProductSoftwareComponent {
};
```

## CISCO\_ProtocolEndPoint.mof

```
CISCO_ProtocolEndPoint
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProtocolEndPointProviderImpl")]
class CISCO_ProtocolEndPoint : CIM_ProtocolEndPoint
{};
```

## CISCO\_ProtocolEndPointHostComputerSystem.mof

```
CISCO_ProtocolEndPointHostComputerSystem
[Association,

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProtocolEndPointHostComputerSystem
    ProviderImpl")]
class CISCO_ProtocolEndPointHostComputerSystem : CISCO_HostedAccessPoint
{
    [Override ( "Antecedent" ),
        Min ( 1 ),
        Max ( 1 ),
        Description ( "The hosting System." )]
    CISCO_HostComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
        Weak, Description (
            "The SAPs that are hosted on this System." )]
    CISCO_ProtocolEndPoint REF Dependent;
};
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
};
```

## CISCO\_ProtocolEndPointLogicalComputerSystem.mof

```
CISCO_ProtocolEndPointLogicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProtocolEndPointLogicalComputerSystemProviderImpl")]
class CISCO_ProtocolEndPointLogicalComputerSystem : CISCO_HostedAccessPoint
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_LogicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description (
        "The SAPs that are hosted on this System." )]
    CISCO_ProtocolEndPoint REF Dependent;
};
```

## CISCO\_ProtocolEndPointStorageComputerSystem.mof

```
CISCO_ProtocolEndPointStorageComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ProtocolEndPointStorageComputerSystemProviderImpl")]
class CISCO_ProtocolEndPointStorageComputerSystem : CISCO_HostedAccessPoint
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_StorageComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description (
        "The SAPs that are hosted on this System." )]
    CISCO_ProtocolEndPoint REF Dependent;
};
```

## CISCO\_Realizes.mof

```
CISCO_Realizes
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_Realizes : CIM_Realizes
{};
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ReferencedProfile.mof

```
[Association, Version ( "2.6.0" ), Description (
    "A subprofile requires another RegisteredProfile for context. "
    "This association mandates the scoping relationship between a "
    "subprofile and its scoping profile."),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_ReferencedProfile : WBEMSolutions_ReferencedProfile {

    [Override ( "Antecedent" ), Min ( 1 ), Description (
        "The RegisteredProfile that is referenced/required by the "
        "subprofile.")]
    CISCO_RegisteredProfile REF Antecedent;

    [Override ( "Dependent" ), Description (
        "A RegisteredSubProfile that requires a scoping profile, for "
        "context.")]
    CISCO_RegisteredSubProfile REF Dependent;
};
```

## CISCO\_RegisteredProfile.mof

```
[Version ( "3.1.0" ), Description (
    "A RegisteredProfile describes a set of CIM Schema classes with "
    "required properties and/or methods, necessary to manage a "
    "real-world entity or to support a usage scenario, in an "
    "interoperable fashion. RegisteredProfiles can be defined by "
    "the DMTF or other standards organizations. Note that this "
    "class should not be confused with CIM_Profile, which collects "
    "SettingData instances, to be applied as a 'configuration "
    "profile' for an element. \n"
    "A RegisteredProfile is a named 'standard' for CIM-based "
    "management of a particular System, subsystem, Service or other "
    "entity, for a specified set of uses. It is a complete, "
    "standalone definition, as opposed to the subclass "
    "RegisteredSubProfile, which requires a scoping profile for "
    "context. \n"
    "The uses for a RegisteredProfile or SubProfile MUST be "
    "specified in the document that defines the profile. Examples "
    "of Profiles are to manage various aspects of an Operating "
    "System, Storage Array, or Database. The name of the profile is "
    "defined and scoped by its authoring organization."),
    //Provider("jsr48:com.wbemsolutions.wbem.cimom."
    //        "GenericReadOnlyProvider")

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_RegisteredProfileProviderImpl")

]
class CISCO_RegisteredProfile : WBEMSolutions_RegisteredProfile {
};
```

## CISCO\_RegisteredProfileInstances.mof

```
instance of CISCO_RegisteredProfile as $DMTF100_PRP {

    InstanceID = "CISCO:CISCO_RegisteredProfile.2.Profile Registration.1.0.0";
    RegisteredOrganization = 2;
};
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

RegisteredName = "Profile Registration";
RegisteredVersion = "1.0.0";
AdvertiseTypes = {3};
Caption = "2:Profile Registration:1.0.0";
Description = "2:Profile Registration:1.0.0";
ElementName = "2:Profile Registration:1.0.0";
};

instance of CISCO_ServerSoftware as $software {

    InstanceID = "CISCO:CISCO_ServerSoftware-CISCO SMI-S Agent";
    MajorVersion = "1";
    MinorVersion = "1";
    RevisionNumber = "0";
    VersionString = "1.1.0";
    Manufacturer = "Cisco Systems";
    SerialNumber = "CISCO SMI-S Agent" " " "1.1.0";
    Caption = "CISCO SMI-S Agent";
    Description = "CISCO SMI-S Agent";
    ElementName = "CISCO SMI-S Agent";
    Name = "CISCO SMI-S Agent";
    Classifications = {5};
};

instance of CISCO_ElementSoftwareIdentity {
    Antecedent = $software;
    Dependent = $DMTF100_PRP;
};

instance of CISCO_RegisteredSubProfile as $SMIS100_PRP {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Profile Registration.1.0.0";
    RegisteredOrganization = 11;
    RegisteredName = "Profile Registration";
    RegisteredVersion = "1.0.0";
    AdvertiseTypes = {2};
    Caption = "11:Profile Registration:1.0.0";
    Description = "11:Profile Registration:1.0.0";
    ElementName = "11:Profile Registration:1.0.0";
};

//The following instance reference the SNIA PRP to the DMTF PRP
instance of CISCO_ReferencedProfile {
    Antecedent = $DMTF100_PRP;
    Dependent = $SMIS100_PRP;
};

instance of CISCO_SubProfileSoftwareIdentity {
    Antecedent = $software;
    Dependent = $SMIS100_PRP;
};

instance of WBEMsolutions_RegisteredProfile as $SMIS140 {

    InstanceID = "WBEMsolutions:WBEMsolutions_RegisteredProfile.11.SMI-S.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "SMI-S";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {3};
    Caption = "SMI-S";
    Description = "SMI-S";
    ElementName = "SMI-S";
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

instance of CISCO_ServerProduct as $product {

    Name = "CISCO SMI-S Agent";
    IdentifyingNumber = "CISCO SMI-S Agent 1.1.0";
    Vendor = "Cisco Systems";
    Version = "1.1.0";
    Caption = "CISCO SMI-S Agent";
    Description = "CISCO SMI-S Agent";
    ElementName = "CISCO SMI-S Agent";
    SKUNumber = "CISCO SMI-S Agent";
};

instance of WBEMSolutions_ProductSoftwareComponent {

    GroupComponent = $product;
    PartComponent = $software;
};

instance of CISCO_FabricProfile as $SMI140_Fabric {

    InstanceID = "CISCO:CISCO_RegisteredProfile.11.Fabric.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Fabric";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {3};
    Caption = "11:Fabric:1.4.0";
    Description = "11:Fabric:1.4.0";
    ElementName = "11:Fabric:1.4.0";
};

instance of CISCO_RegisteredSubProfile as $SMI140_Fabric_ZoneControl {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Zone Control.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Zone Control";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:ZoneControl:1.4.0";
    Description = "11:ZoneControl:1.4.0";
    ElementName = "11:ZoneControl:1.4.0";
};

instance of CISCO_RegisteredSubProfile as $SMI140_Fabric_EnhancedZoneControl {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Enhanced Zoning and Enhanced Zoning
Control.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Enhanced Zoning and Enhanced Zoning Control";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:Enhanced Zoning and Enhanced Zoning Control:1.4.0";
    Description = "11:Enhanced Zoning and Enhanced Zoning Control:1.4.0";
    ElementName = "11:Enhanced Zoning and Enhanced Zoning Control:1.4.0";
};

instance of CISCO_RegisteredSubProfile as $SMI140_Fabric_FDAMI {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.FDAMI.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "FDAMI";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:FDAMI:1.4.0";
    Description = "11:FDAMI:1.4.0";
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

    ElementName = "11:FDMI:1.4.0";
};

instance of CISCO_RegisteredSubProfile as $SMI140_Fabric_VirtualFabrics {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Virtual Fabrics.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Virtual Fabrics";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:Virtual Fabrics:1.4.0";
    Description = "11:Virtual Fabrics:1.4.0";
    ElementName = "11:Virtual Fabrics:1.4.0";
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $DMTF100_PRP;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMIS100_PRP;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Fabric;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Fabric_ZoneControl;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Fabric_EnhancedZoneControl;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Fabric_FDMI;
};

instance of WBEMSolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Fabric_VirtualFabrics;
};

instance of CISCO_SubProfileRequiresProfile {
    Antecedent = $SMI140_Fabric;
    Dependent = $SMIS100_PRP;
};

instance of CISCO_SubProfileRequiresProfile {

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

    Antecedent = $SMI140_Fabric;
    Dependent = $SMI140_Fabric_ZoneControl;
};

instance of CISCO_SubProfileRequiresProfile {

    Antecedent = $SMI140_Fabric;
    Dependent = $SMI140_Fabric_FDMI;
};

instance of CISCO_SubProfileRequiresProfile {

    Antecedent = $SMI140_Fabric;
    Dependent = $SMI140_Fabric_EnhancedZoneControl;
};

instance of CISCO_SubProfileRequiresProfile {

    Antecedent = $SMI140_Fabric;
    Dependent = $SMI140_Fabric_VirtualFabrics;
};

instance of CISCO_ElementSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Fabric;
};

instance of CISCO_SubProfileSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Fabric_FDMI;
};

instance of CISCO_SubProfileSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Fabric_ZoneControl;
};

instance of CISCO_SubProfileSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Fabric_EnhancedZoneControl;
};

instance of CISCO_SubProfileSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Fabric_VirtualFabrics;
};

instance of CISCO_SwitchProfile as $SMI140_Switch {

    InstanceID = "CISCO:CISCO_RegisteredProfile.11.Switch.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Switch";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {3};
    Caption = "11:Switch:1.4.0";
    Description = "11:Switch:1.4.0";
    ElementName = "11:Switch:1.4.0";
};

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

instance of CISCO_RegisteredSubProfile as $SMI140_Switch_SwitchPartitioning {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Switch Partitioning.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Switch Partitioning";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:SwitchPartitioning:1.4.0";
    Description = "11:SwitchPartitioning:1.4.0";
    ElementName = "11:SwitchPartitioning:1.4.0";
};

instance of CISCO_RegisteredSubProfile as $SMI140_Switch_Blades {

    InstanceID = "CISCO:CISCO_RegisteredSubProfile.11.Blades.1.4.0";
    RegisteredOrganization = 11;
    RegisteredName = "Blades";
    RegisteredVersion = "1.4.0";
    AdvertiseTypes = {2};
    Caption = "11:Blades:1.4.0";
    Description = "11:Blades:1.4.0";
    ElementName = "11:Blades:1.4.0";
};

instance of WBEMsolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Switch;
};

instance of WBEMsolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Switch_Blades;
};

instance of WBEMsolutions_SMISConformsToProfile {

    ConformantStandard = $SMIS140;
    ManagedElement = $SMI140_Switch_SwitchPartitioning;
};

instance of CISCO_SubProfileRequiresProfile {
    Antecedent = $SMI140_Switch;
    Dependent = $SMIS100_PRP;
};

instance of CISCO_SubProfileRequiresProfile {

    Antecedent = $SMI140_Switch;
    Dependent = $SMI140_Switch_Blades;
};

instance of CISCO_SubProfileRequiresProfile {

    Antecedent = $SMI140_Switch;
    Dependent = $SMI140_Switch_SwitchPartitioning;
};

instance of CISCO_ElementSoftwareIdentity {

    Antecedent = $software;
    Dependent = $SMI140_Switch;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
instance of CISCO_SubProfileSoftwareIdentity {
    Antecedent = $software;
    Dependent = $SMI140_Switch_Blades;
};

instance of CISCO_SubProfileSoftwareIdentity {
    Antecedent = $software;
    Dependent = $SMI140_Switch_SwitchPartitioning;
};
```

## CISCO\_RegisteredSubProfile.mof

```
[Version ( "3.1.0" ), Description (
    "A RegisteredSubProfile subclasses RegisteredProfile to "
    "indicate that a scoping profile is required to provide "
    "context. The latter is specified by the mandatory association, "
    "SubProfileRequiresProfile."),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_RegisteredSubProfile : WBEMSolutions_RegisteredSubProfile {
};
```

## CISCO\_RemoteFCIPPort.mof

```
CISCO_RemoteFCIPPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_RemoteFCIPPortProviderImpl")]
class CISCO_RemoteFCIPPort : CIM_RemotePort
{};
```

## CISCO\_RemoteIPServiceAccessPoint.mof

```
CISCO_RemoteIPServiceAccessPoint
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_RemoteIPServiceAccessPointProviderImpl")]
class CISCO_RemoteIPServiceAccessPoint: CIM_RemoteServiceAccessPoint
{};
```

## CISCO\_RemoteServiceAccessPoint.mof

```
CISCO_RemoteServiceAccessPoint
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_RemoteServiceAccessPointProviderImpl")]
class CISCO_RemoteServiceAccessPoint : CIM_RemoteServiceAccessPoint
{};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_RemoteTCPPort.mof

```
CISCO_RemoteTCPPort
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_RemoteTCPPortProviderImpl")]

class CISCO_RemoteTCPPort : CIM_RemotePort
{};
```

## CISCO\_SANFCIPEndpoint.mof

```
CISCO_SANFCIPEndpoint
[Association,
    Description ("This corresponds to the association between
CISCO_FCIPProtocolEndpoint "
    "and CISCO_ProtocolEndPoint. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SANFCIPEndpointProviderImpl")]
class CISCO_SANFCIPEndpoint : CIM_BindsTo {

    [Override ("Antecedent"), Description (
        "The underlying SANEndpoint, which is depended upon.")]
    CISCO_FCIPProtocolEndPoint REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The FCIP ProtocolEndPoint dependent on the SANEndpoint.")]
    CISCO_RemoteFCIPPort REF Dependent;
};
```

## CISCO\_SANIPEndpoint.mof

```
CISCO_SANIPEndpoint
[Association,
    Description ("This corresponds to the association between CISCO_IPProtocolEndpoint
"
    "and CISCO_RemoteFCIPServiceAccessPoint. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SANIPEndpointProviderImpl")]
class CISCO_SANIPEndpoint : CIM_BindsTo {

    [Override ("Antecedent"), Description (
        "The underlying SANEndpoint, which is depended upon.")]
    CISCO_IPProtocolEndPoint REF Antecedent ;

    [Override ( "Dependent" ), Description (
        "The FCIP ProtocolEndPoint dependent on the SANEndpoint.")]
    CISCO_RemoteIPServiceAccessPoint REF Dependent;
};
```

## CISCO\_SANTCPEndpoint.mof

```
CISCO_SANTCPEndpoint
[Association,
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        Description ("This corresponds to the association between CISCO_IPProtocolEndpoint
"
        "and CISCO_TCPProtocolEndPoint. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SANTCPEndpointProviderImpl"])
class CISCO_SANTCPEndpoint : CIM_BindsTo {

    [Override ( "Antecedent" ), Description (
        "The underlying IP Endpoint, which is depended upon.")]
    CISCO_TCPProtocolEndpoint REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The TCP ProtocolEndpoint dependent on the IP Endpoint.")]
    CISCO_RemoteTCPPEndpoint REF Dependent;
};

```

## CISCO\_SAPAvailableForElement.mof

```

CISCO_SAPAvailableForElement
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SAPAvailableForElementProviderImpl
")]
class CISCO_SAPAvailableForElement : CIM_SAPAvailableForElement
{
    [Override ("AvailableSAP"), Key, Description (
        "The Service Access Point that is available." )]
    CISCO_RemoteServiceAccessPoint REF AvailableSAP;

    [Override ("ManagedElement"), Key, Description (
        "The ManagedElement for which the SAP is available." )]
    CISCO_PhysicalComputerSystem REF ManagedElement;
};

```

## CISCO\_SecurityAlert.mof

```

CISCO_SecurityAlert
[Abstract,
    Indication,
    Description ("This is an abstract indication class." )]
class CISCO_SecurityAlert : CISCO_AlertIndication
{};

```

## CISCO\_ServerProduct.mof

```

[Version("3.1.0"),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_ServerProduct : WBEMSolutions_WBEMServerProduct {
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ServerSoftware.mof

```
[Version("3.1.0"), Description("WBEM Server Software"),
  Provider("jsr48:com.wbemsolutions.wbem.cimom."
    "GenericReadOnlyProvider")
]
class CISCO_ServerSoftware : WBEMSolutions_WBEMServerSoftware {
};
```

## CISCO\_SoftwareIdentity.mof

```
CISCO_SoftwareIdentity
  [Abstract,
    Description ("This is an abstract class." )]
class CISCO_SoftwareIdentity : CIM_SoftwareIdentity
{};
```

## CISCO\_StatisticsCollection.mof

```
CISCO_StatisticsCollection
  [Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StatisticsCollectionProviderImpl"
  )]
class CISCO_StatisticsCollection : CIM_StatisticsCollection
{};
```

## CISCO\_StatisticsHostedCollection.mof

```
CISCO_StatisticsHostedCollection
  [Association,

  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StatisticsHostedCollectionProvider
  Impl")]
class CISCO_StatisticsHostedCollection : CISCO_HostedCollection
{
  [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
  CISCO_PhysicalComputerSystem REF Antecedent;

  [Override ( "Dependent" ),
    Description (
      "The collection defined in the context of a system." )]
  CISCO_StatisticsCollection REF Dependent;
};
```

## CISCO\_StatisticsHostedCollectionInComputerSystem.mof

```
CISCO_StatisticsHostedCollectionInComputerSystem
  [Association,

  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StatisticsHostedCollectionInComput
  erSystemProviderImpl")]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
class CISCO_StatisticsHostedCollectionInComputerSystem : CISCO_HostedCollection
{
    [Override ( "Antecedent" ),
     Min ( 1 ),
     Max ( 1 ),
     Description ( "The scoping system." )]
    CISCO_PhysicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
     Description (
         "The collection defined in the context of a system." )]
    CISCO_StatisticsHostedCollection REF Dependent;
};
```

## CISCO\_StatisticsMemberOfCollection.mof

```
CISCO_StatisticsMemberOfCollection
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StatisticsMemberOfCollectionProvid
erImpl")]
class CISCO_StatisticsMemberOfCollection : CIM_MemberOfCollection
{
    [Override ("Collection"), Key, Aggregate, Description (
        "The Collection that aggregates members." )]
    CISCO_StatisticsCollection REF Collection;

    [Override ("Member"), Key, Description (
        "The aggregated member of the Collection." )]
    CISCO_FCPortStatistics REF Member;

};
```

## CISCO\_StorageComputerSystem.mof

```
CISCO_StorageComputerSystem

[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StorageComputerSystemProviderImpl
")]
class CISCO_StorageComputerSystem : CISCO_ComputerSystem
{
    String IpAddress;
};
```

## CISCO\_StorageComputerSystemsInAdminDomain.mof

```
CISCO_StorageComputerSystemsInAdminDomain
[Association,
 Description (
     "CISCO_StorageComputerSystemsInAdminDomain is a association between
CISCO_AdminDomain and "
     "CISCO_StorageComputerSystem." ),
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_StorageComputerSystemsInAdminDomainProviderImpl")
class CISCO_StorageComputerSystemsInAdminDomain : CISCO_Component
{
    [Override ("GroupComponent"), Key, Aggregate, Description (
        "The parent element in the association." )]
    CISCO_AdminDomain REF GroupComponent;

    [Override("PartComponent"), Key, Description (
        "The child element in the association." )]
    CISCO_StorageComputerSystem REF PartComponent;
};

```

## CISCO\_SubProfileRequiresProfile.mof

```

[Association, Version ( "3.1.0" ), Description (
    "A subprofile requires another RegisteredProfile for context. "
    "This association mandates the scoping relationship between a "
    "subprofile and its scoping profile.\n"
    "Note that this is only used for SMI profiles. Newer profiles "
    "do not have the concept of sub profiles."),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_SubProfileRequiresProfile : WBEMSolutions_SubProfileRequiresProfile {

    [Override ( "Antecedent" ), Min ( 1 ), Description (
        "The RegisteredProfile that is referenced/required by the "
        "subprofile.")]
    CISCO_RegisteredProfile REF Antecedent;

    [Override ( "Dependent" ), Description (
        "A RegisteredSubProfile that requires a scoping profile, for "
        "context.")]
    CISCO_RegisteredSubProfile REF Dependent;
};

```

## CISCO\_SubProfileSoftwareIdentity.mof

```

[Association, Version("3.1.0"),
    Provider("jsr48:com.wbemsolutions.wbem.cimom."
        "GenericReadOnlyProvider")
]
class CISCO_SubProfileSoftwareIdentity : WBEMSolutions_SubProfileSoftwareIdentity {

    [Override ( "Antecedent" ), Description (
        "A LogicalElement's Software Asset.")]
    CISCO_ServerSoftware REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The ManagedElement that requires or uses the software.")]
    CISCO_RegisteredSubProfile REF Dependent;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_SwitchAdded.mof

```
CISCO_SwitchAdded
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchAddedProviderImpl")]
class CISCO_SwitchAdded: CIM_InstCreation
{};
```

## CISCO\_SwitchConformsToFabricProfile.mof

```
[Association, Version ( "3.1.0" ), Description (
    "The SMISConformsToProfile association defines the "
    "RegisteredProfiles that are conformant with a specific "
    "version of SIM-S. "),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchConformsToFabricProfileProviderImpl")
]
class CISCO_SwitchConformsToFabricProfile : CIM_ElementConformsToProfile {
    [Key, Override ( "ConformantStandard" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The RegisteredProfile to which the ManagedElement conforms.")]
    CISCO_FabricProfile REF ConformantStandard;

    [Key, Override ( "ManagedElement" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The ManagedElement that conforms to the RegisteredProfile.")]
    CISCO_LogicalComputerSystem REF ManagedElement;
};
```

## CISCO\_SwitchConformsToSwitchProfile.mof

```
[Association, Version ( "3.1.0" ), Description (
    "The SMISConformsToProfile association defines the "
    "RegisteredProfiles that are conformant with a specific "
    "version of SIM-S. "),
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchConformsToSwitchProfileProviderImpl")
]
class CISCO_SwitchConformsToSwitchProfile : CIM_ElementConformsToProfile {
    [Key, Override ( "ConformantStandard" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The RegisteredProfile to which the ManagedElement conforms.")]
    CISCO_SwitchProfile REF ConformantStandard;

    [Key, Override ( "ManagedElement" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The ManagedElement that conforms to the RegisteredProfile.")]
    CISCO_PhysicalComputerSystem REF ManagedElement;
};
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

## CISCO\_SwitchElementCapabilities.mof

```
CISCO_SwitchElementCapabilities
[Association,
    Description("ElementCapabilities represents the association between "
        "ManagedElements and their Capabilities."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchElementCapabilitiesProviderI
        mpl")]
class CISCO_SwitchElementCapabilities : CISCO_ElementCapabilities
{
    [Override ( "ManagedElement" ), Key, Min ( 1 ),
        Max ( 1 ),
        Description ( "The managed element." )]
    CISCO_PhysicalComputerSystem REF ManagedElement;

    [Override ( "Capabilities" ), Key, Description (
        "The Capabilities object associated with the element." )]
    CISCO_FCISwitchCapabilities REF Capabilities;
};
```

## CISCO\_SwitchHostedFCIPAccessPoint.mof

```
CISCO_SwitchHostedFCIPAccessPoint
[Association,
    Description (
        "CISCO_SwitchHostedFCIPAccessPoint is an association between an "
        "FCIP protocol endpoint and the switch on which it is provided. "
        "The cardinality of this association is one-to-many and is "
        "weak with respect to the switch. Each switch can host many "
        "FCIP protocol endpoints."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchHostedFCIPAccessPointProvide
        rImpl")]
class CISCO_SwitchHostedFCIPAccessPoint: CIM_HostedAccessPoint {

    [Override ("Antecedent"), Max (1), Min (1), Description (
        "The hosting system.")]
    CISCO_LogicalComputerSystem REF Antecedent;

    [Override ("Dependent"), Weak, Description (
        "The SAPs that are hosted on this system.")]
    CISCO_FCIPProtocolEndPoint REF Dependent;
};
```

## CISCO\_SwitchHostedIPAccessPoint.mof

```
CISCO_SwitchHostedIPAccessPoint
[Association,
    Description (
        "CISCO_SwitchHostedIPAccessPoint is an association between an "
        "IP protocol endpoint and the switch on which it is provided. "
        "The cardinality of this association is one-to-many and is "
        "weak with respect to the switch. Each switch can host many "
        "IP protocol endpoints."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchHostedIPAccessPointProviderI
        mpl")]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
class CISCO_SwitchHostedIPAccessPoint: CIM_HostedAccessPoint {

    [Override ("Antecedent"), Max (1), Min (1), Description (
        "The hosting system.")]
    CISCO_LogicalComputerSystem REF Antecedent;

    [Override ("Dependent"), Weak, Description (
        "The SAPs that are hosted on this system.")]
    CISCO_IPProtocolEndPoint REF Dependent;
};
```

## CISCO\_SwitchHostedTCPAccessPoint.mof

```
CISCO_SwitchHostedTCPAccessPoint
[Association,
    Description (
        "CISCO_SwitchHostedTCPAccessPoint is an association between a "
        "TCP protocol endpoint and the switch on which it is provided. "
        "The cardinality of this association is one-to-many and is "
        "weak with respect to the switch. Each switch can host many "
        "TCP protocol endpoints."),

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchHostedTCPAccessPointProvider
    Impl")]
class CISCO_SwitchHostedTCPAccessPoint: CIM_HostedAccessPoint {

    [Override ("Antecedent"), Max (1), Min (1), Description (
        "The hosting system.")]
    CISCO_LogicalComputerSystem REF Antecedent;

    [Override ("Dependent"), Weak, Description (
        "The SAPs that are hosted on this system.")]
    CISCO_TCPProtocolEndPoint REF Dependent;
};
```

## CISCO\_SwitchInstalledSoftwareIdentity.mof

```
CISCO_SwitchInstalledSoftwareIdentity
[Association,

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchInstalledSoftwareIdentityPro
    viderImpl")]
class CISCO_SwitchInstalledSoftwareIdentity : CISCO_InstalledSoftwareIdentity
{
    [Override ( "System" ), Key, Description (
        "The system on which the software is installed." )]
    CISCO_PhysicalComputerSystem REF System;

    [Override ( "InstalledSoftware" ), Key, Description (
        "The SoftwareIdentity that is installed." )]
    CISCO_SwitchSoftwareIdentity REF InstalledSoftware;
};
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

## CISCO\_SwitchProfile.mof

```
[Version ( "3.1.0" ), Description (
    "A RegisteredProfile describes a set of CIM Schema classes with "
    "required properties and/or methods, necessary to manage a "
    "real-world entity or to support a usage scenario, in an "
    "interoperable fashion. RegisteredProfiles can be defined by "
    "the DMTF or other standards organizations. Note that this "
    "class should not be confused with CIM_Profile, which collects "
    "SettingData instances, to be applied as a 'configuration "
    "profile' for an element. \n"
    "A RegisteredProfile is a named 'standard' for CIM-based "
    "management of a particular System, subsystem, Service or other "
    "entity, for a specified set of uses. It is a complete, "
    "standalone definition, as opposed to the subclass "
    "RegisteredSubProfile, which requires a scoping profile for "
    "context. \n"
    "The uses for a RegisteredProfile or SubProfile MUST be "
    "specified in the document that defines the profile. Examples "
    "of Profiles are to manage various aspects of an Operating "
    "System, Storage Array, or Database. The name of the profile is "
    "defined and scoped by its authoring organization."),
    Provider("jsr48:com.wbem solutions.wbem.cimom."
            "GenericReadOnlyProvider")
]
class CISCO_SwitchProfile : CISCO_RegisteredProfile {
};
```

## CISCO\_SwitchRemoved.mof

```
CISCO_SwitchRemoved
    [Indication,

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchRemovedProviderImpl")]
class CISCO_SwitchRemoved: CIM_InstDeletion
{};
```

## CISCO\_SwitchSettingData.mof

```
CISCO_SwitchSettingData
[Association,

    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchSettingDataProviderImpl")]
class CISCO_SwitchSettingData : CISCO_ElementSettingData
{
    [Override ( "ManagedElement" ), Key,
    Description ( "The managed element." )]
    CISCO_PhysicalComputerSystem REF ManagedElement;

    [Override ( "SettingData" ), Key, Description (
        "The SettingData object associated with the element." )]
    CISCO_FCSwitchSettings REF SettingData;
};
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_SwitchSoftwareIdentity.mof

```
CISCO_SwitchSoftwareIdentity
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_SwitchSoftwareIdentityProviderImpl")]
class CISCO_SwitchSoftwareIdentity : CISCO_SoftwareIdentity
{};
```

## CISCO\_SystemDevice.mof

```
CISCO_SystemDevice
[Abstract,
  Association,
  Description ("This is an abstract association." )]
class CISCO_SystemDevice : CIM_SystemDevice
{};
```

## CISCO\_TCPElementSettingData.mof

```
CISCO_TCPElementSettingData
[Association,
  Description ("This corresponds to the association between CISCO_IPProtocolEndpoint
"
  "and CISCO_IPSettings. "),
  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPElementSettingDataProviderImpl"
)]
class CISCO_TCPElementSettingData : CIM_ElementSettingData
{
  [Override ("ManagedElement"), Description (
    "Reference to CISCO_IPProtocolEndpoint instance.")]
  CISCO_TCPProtocolEndpoint REF ManagedElement;

  [Override ("SettingData"), Description (
    "Reference to CISCO_FCIPSettings instance.")]
  CISCO_TCPSettings REF SettingData;
};
```

## CISCO\_TCPEndPointStatisticalData.mof

```
CISCO_TCPEndPointStatisticalData
[Association,
  Description ("CISCO_IPEndPointStatistics is an association that associates "
    "CISCO_IPProtocolEndPoint to its StatisticalData "),
  Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPEndPointStatisticalDataProviderImpl")]
class CISCO_TCPEndPointStatisticalData : CIM_ElementStatisticalData {
  [Override ("ManagedElement"), Description (
    "Reference to CISCO_IPProtocolEndpoint instance.")]
  CISCO_TCPProtocolEndPoint REF ManagedElement;

  [Override("Stats"), Key, Description (
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
        "The statistic information.")]
    CISCO_TCPEndPointStatistics REF Stats;
};
```

## CISCO\_TCPEndPointStatistics.mof

```
CISCO_TCPEndPointStatistics
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPEndPointStatisticsProviderImpl
")]
class CISCO_TCPEndPointStatistics : CIM_TCPEndpointStatistics
{
    [Description ("The TCP Keep alive timeout for all links within this entity.")]
    uint32 KeepAliveTimeOut;

    [Description ("The Maximum number of times that the same item of data"
        "will be retransmitted over a TCP connection. If delivery"
        "is not acknowledged after this number of retransmissions"
        " then the TCP connection is terminated. ")]
    uint32 MaxReTransmission;

    [Description (
        "The path MTU discovery is enabled if the value of this object is true(1), else
it is disabled, and"
        "has the value false(2). ")
    ]
    boolean PathMTU;

    [Description (
        "The time interval for which the discovered pathMTU is valid, before MSS reverts
back to the negotiated"
        "TCP value. This object is writeble only if"
        "cfmFcipEntityExtPMTUEnable is 'true'. ")
    ]
    uint32 PathMTUResetTimeOut;

    [Description(
        "The TCP minimum retransmit timeout for all the links on"
        "this entity. ")
    ]
    uint32 MinimumRTO;

    [Description (
        "The aggregate TCP send window for all TCP connections on all"
        " Links within this entity. This value is used for Egress"
        "Flow Control. When the aggregate of the data queued"
        "on all connections within this entity reaches this value,"
        " the sender is flow controlled. ")
    ]
    uint32 SendBufSize ;

    [Description (
        "This is an estimate of the Bandwidth of the network pipe used for the B-D
product computation,which lets decide"
        "the TCP receive window to advertise."
        "The cfmFcipEntityExtTcpMaxBW,cfmFcipEntityExtTcpMinAvailBW,"
        "cfmFcipEntityExtTcpRndTrpTimeEst must be set in the same"
        "SNMP set request. SET operation would fail if this object"
        "is set individually."
    )]
    uint32 TcpMaxBW;
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Description (
    "The minimum available bandwidth for the TCP connections"
    " on the Links within this entity."
    " The cfmFcipEntityExtTcpMaxBW, cfmFcipEntityExtTcpMinAvailBW, "
    " cfmFcipEntityExtTcpRndTrpTimeEst must be set in the same"
    " SNMP set request. SET operation would fail if this object"
    " is set individually. "
)]
uint32 TcpMinAvailBW;

[Description (
    "This is an estimate of the round trip delay of the network"
    " pipe used for the B-D product computation, which lets us"
    " derive the TCP receive window to advertise."
    " The cfmFcipEntityExtTcpMaxBW, cfmFcipEntityExtTcpMinAvailBW, "
    " cfmFcipEntityExtTcpRndTrpTimeEst must be set in the same"
    " SNMP set request. SET operation would fail if this object"
    " is set individually. microseconds "
)]
uint32 TcpRndTrpTimeEst;

[Description (
    "This object is used for enabling/disabling the congestion"
    "window monitoring. If the value of this object is true(1),"
    " it is enabled. It is disabled if the value is false(2). "
)]
boolean ExtCWMEnable=true;

[Description (
    "The maximum burst sent after a tcp sender idle period. This object is writeble
only if"
    " cfmFcipEntityExtCWMEnable is 'true'. kilobytes"
)]
uint32 CWMBurstSize;

[Description (
    "The maximum delay variation that is not due to"
    " congestion that can be experienced by TCP"
    " connections for all links on this entity in milliseconds."
)]
uint32 MaxJitter;
};
```

## CISCO\_TCPIPEndpoint.mof

```
CISCO_TCPIPEndpoint
[Association,
    Description ("This corresponds to the association between CISCO_IPProtocolEndpoint
"
    "and CISCO_TCPProtocolEndPoint. "),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPIPEndpointProviderImpl")]
class CISCO_TCPIPEndpoint : CIM_BindsTo {

    [Override ( "Antecedent" ), Description (
        "The underlying IP Endpoint, which is depended upon.")]
    CISCO_IPProtocolEndpoint REF Antecedent;

    [Override ( "Dependent" ), Description (
        "The TCP ProtocolEndpoint dependent on the IP Endpoint.")]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
CISCO_TCPProtocolEndPoint REF Dependent;
};
```

## CISCO\_TCPProtocolEndpoint.mof

```
CISCO_TCPProtocolEndpoint
[Description ("A protocol endpoint that is dedicated to running TCP. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPProtocolEndPointProviderImpl")]
class CISCO_TCPProtocolEndPoint: CIM_TCPProtocolEndPoint {

    [Override("SystemCreationClassName"), Key, Propagated("CIM_System.CreationClassName"),
        Description ("The scoping System's CreationClassName."),
        MaxLen ( 256 )]
    string SystemCreationClassName;

    [Override("SystemName"), Key, Propagated("CIM_System.Name"),
        Description ("The scoping System's Name."),
        MaxLen ( 256 )]
    string SystemName;

    [Override("CreationClassName"), Key, Description (
        "CreationClassName indicates the name of the class or the "
        "subclass used in the creation of an instance. When used "
        "with the other key properties of this class, this property "
        "allows all instances of this class and its subclasses to be "
        "uniquely identified."),
        MaxLen ( 256 )]
    string CreationClassName;

    [Override("Name"), Key, Description (
        "A string that identifies this ProtocolEndpoint with either "
        "a port or an interface on a device. To ensure uniqueness, "
        "the Name property should be prepended or appended with "
        "information from the Type or OtherTypeDescription "
        "properties. The method selected is described in the "
        "NameFormat property of this class."),
        MaxLen ( 256 )]
    string Name;

    [Override("NameFormat"), Description (
        "NameFormat contains the naming heuristic that is chosen to "
        "ensure that the value of the Name property is unique. For "
        "example, one might choose to prepend the name of the port "
        "or interface with the Type of ProtocolEndpoint that this "
        "instance is (e.g., IPv4) followed by an underscore."),
        MaxLen ( 256 )]
    string NameFormat;

    [Override("PortNumber"), Description (
        "The TCP port number for data connection traffic.")]
    uint32 PortNumber = 3226;

    [Override("ProtocolIFType"), Description (
        "ProtocolIFType's enumeration is limited to TCP and reserved "
        "values for this subclass of ProtocolEndpoint."),
        ValueMap { "1", "222..4095", "4111", "4116..32767", "32768.." },
        Values { "Other", "IANA Reserved", "TCP", "DMTF Reserved", "Vendor Reserved" }]
    uint16 ProtocolIFType = 4111;

    [Description ("The default maximum TCP Receiver Window size for this TCP connection")]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
uint32 ReceiverWindowSize;

[Description ("The TCP Maximum Segment Size (MSS) for this TCP connection. ")]
uint32 MaximumSegmentSize;

[Description ("The timeout value for this TCP connection.")]
uint32 ConnectionTimeOut;

[Description ("Remote Port number for this TCP Connection.")]
uint32 RemotePortNumber;

[Description (
    "The nature of messages that get transmitted on this TCP connection.",
    ValueMap { "1", "2", "3"},
    Values { "Control", "Data", "Both" }]
string ConnectionPurpose;
};
```

## CISCO\_TCPSettings.mof

```
CISCO_TCPSettings
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TCPSettingsProviderImpl")]
class CISCO_TCPSettings : CIM_TCPSettings {

    [Write, Description (
        "Sets the TCP/IP retransmit time for an initial SYN segment "
        "when establishing a connection. The suggested value is 240 "
        "seconds based on RFC 793. "),
        Units ("Seconds"), MinValue (30), MaxValue (240) ]
    uint8 WaitTimeTotalTime = 240;

    [Write, Description (
        "Selects TCP/IP delayed acknowledgements (ACKs) if set to 1 "
        "(default), and selects immediate ACKs if set to 0. If "
        "delayed ACKs are set, TCP/IP does not send an ACK "
        "immediately on receiving data. TCP/IP normally delays "
        "sending an ACK to improve the chance that it can bundle "
        "it with transmitted data ") ]
    boolean DelayedACKsEnabled;

    [Write, Description (
        "Control system-wide implementation of TCP/IP performance "
        "extensions including timestamps and large window scaling "
        "(as defined in RFC 1323). These features provide more "
        "efficient and reliable usage of high-bandwidth, "
        "high-latency links. If set to 1 (the default), negotiation "
        "is turned on and will permit a TCP/IP receive window size "
        "as large as 1,073,725,440 bytes (just under 1GB). "
        "If set to 0, negotiation is disabled and the largest "
        "possible window size is 65,535 bytes (64KB-1). "
        "Window size negotiation may be disabled on a per-interface "
        "basis by specifying the -rfc1323 option to ifconfig(1Mtcp). "
        "This is necessary for PPP and SLIP interfaces that allow "
        "header compression. ") ]
    boolean WindowSizeNegotiationEnabled;

    [Write, Description (
        "Enable RFC1323 TCP timestamps. ") ]
    boolean TimeStampsEnabled;

    [Write, Description (
        "Sets the idle time before TCP/IP keepalives are sent "
        "(if enabled). The default value is 7200 seconds. "
        "The suggested value is 7200 seconds. "),
        Units ("Seconds"), MinValue (300), MaxValue (86400) ]
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

uint32 KeepAliveIdleTime = 7200;
    [Write, Description (
        "Sets the number of TCP/IP keepalives that will be sent before "
        "giving up. The suggested value is 8. "),
        MinValue (1), MaxValue (256) ]
uint16 KeepAlivePackets = 8;
    [Write, Description (
        "Sets the TCP/IP keepalive interval between keepalive packets "
        "once they start being sent. The suggested value is 75."),
        Units ("Seconds"), MinValue (1), MaxValue (43200) ]
uint16 KeepAliveInterval = 75;
    [Write, Description (
        "Sets the number of keep-alive probes to be sent per slow timer "
        "run. The suggested value is 5. "),
        MinValue (1), MaxValue (64) ]
uint8 MaxKeepAliveProbes = 5;
    [Write, Description (
        "Default maximum segment size used in communicating with remote "
        "networks. The suggested value is 512."),
        Units ("Bytes"), MinValue (512), MaxValue (32768) ]
uint32 DefaultSegmentSize = 512;
    [Write, Description (
        "Enable RFC2018 TCP Selective Acknowledgements. ") ]
boolean SelectiveACKsEnabled;
    [Write, Description (
        "Enable TCP syncookies. The kernel must be compiled with "
        "CONFIG_SYN_COOKIES. Syncookies protects a socket from overload "
        "when too many connection attempts arrive. Client machines may "
        "not be able to detect an overloaded machine with a short timeout "
        "anymore when syncookies are enabled. ") ]
boolean SYN_cookiesEnabled;
};

```

## CISCO\_TempAlert.mof

```

CISCO_TempAlert
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_TempAlertProviderImpl")]
class CISCO_TempAlert: CISCO_EnvironmentalAlert
{
    uint32 SensorValue;
    uint32 SensorThresholdValue;
    uint32 SensorThresholdIndex;
};

```

## CISCO\_UserAddedOnSwitch.mof

```

CISCO_UserAddedOnSwitch
[Indication,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_UserAddedProviderImpl")]
class CISCO_UserAddedOnSwitch: CISCO_SecurityAlert
{};

```

## CISCO\_UserLoginFailed.mof

```

CISCO_UserLoginFailed

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```
[Indication,
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_UserLoginFailedProviderImpl")]
class CISCO_UserLoginFailed: CISCO_SecurityAlert
{};
```

## CISCO\_UserModifiedOnSwitch.mof

```
CISCO_UserModifiedOnSwitch
[Indication,
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_UserModifiedProviderImpl")]
class CISCO_UserModifiedOnSwitch: CISCO_SecurityAlert
{};
```

## CISCO\_UserRemovedOnSwitch.mof

```
CISCO_UserRemovedOnSwitch
[Indication,
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_UserRemovedProviderImpl")]
class CISCO_UserRemovedOnSwitch: CISCO_SecurityAlert
{};
```

## CISCO\_Vsan.mof

```
CISCO_Vsan
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_VsanProviderImpl")]
class CISCO_Vsan : CIM_AdminDomain {
    string LoadBalancingType;
    string InteropMode;
};
```

## CISCO\_VSANChanged.mof

```
CISCO_VSANChanged
[Indication,
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_VsanChangedProviderImpl")]
class CISCO_VSANChanged: CISCO_AlertIndication
{};
```

## CISCO\_VsanComputerSystemComponent.mof

```
CISCO_VsanComputerSystemComponent
[Association,
Description (
"CISCO_VsanComputerSystemComponent is a association between CISCO_Vsan and "
"CISCO_LogicalComputerSystem."),
Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_VsanComputerSystemComponentProvide
rImpl")]
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
class CISCO_VsanComputerSystemComponent : CISCO_Component
{
    [Override ("GroupComponent"), Key, Aggregate, Description (
        "The parent element in the association." )]
    CISCO_Vsan REF GroupComponent;

    [Override("PartComponent"), Key, Description (
        "The child element in the association." )]
    CISCO_LogicalComputerSystem REF PartComponent;
};
```

## CISCO\_VsanConformsToFabricProfile.mof

```
[Association, Version ( "3.1.0" ), Description (
    "The SMISConformsToProfile association defines the "
    "RegisteredProfiles that are conformant with a specific "
    "version of SIM-S. "),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_VsanConformsToFabricProfileProviderImpl")
]
class CISCO_VsanConformsToFabricProfile : CIM_ElementConformsToProfile {

    [Key, Override ( "ConformantStandard" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The RegisteredProfile to which the ManagedElement conforms.")]
    CISCO_FabricProfile REF ConformantStandard;

    [Key, Override ( "ManagedElement" ), Min ( 1 ), Max ( 1 ),
    Description (
        "The ManagedElement that conforms to the RegisteredProfile.")]
    CISCO_Vsan REF ManagedElement;
};
```

## CISCO\_VsanZoneCapabilities.mof

```
CISCO_VsanZoneCapabilities
[Association,
    Description("ElementCapabilities represents the association between "
        "ManagedElements and their Capabilities."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_VsanZoneCapabilitiesProviderImpl")
]
class CISCO_VsanZoneCapabilities : CISCO_ElementCapabilities
{
    [Override ( "ManagedElement" ), Key, Min ( 1 ),
    Max ( 1 ),
    Description ( "The managed element." )]
    CISCO_Vsan REF ManagedElement;

    [Override ( "Capabilities" ), Key, Description (
        "The Capabilities object associated with the element." )]
    CISCO_ZoneCapabilities REF Capabilities;
};
```



***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_Zone.mof

```
CISCO_Zone
    [Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneProviderImpl")]
class CISCO_Zone : CIM_Zone
{
};
```

## CISCO\_ZoneAlert.mof

```
CISCO_ZoneAlert
    [Indication,
        Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneAlertProviderImpl")]
class CISCO_ZoneAlert : CISCO_AlertIndication
{
    uint32 VsanId;
};
```

## CISCO\_ZoneAlias.mof

```
CISCO_ZoneAlias
    [Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneAliasProviderImpl")]
class CISCO_ZoneAlias : CIM_NamedAddressCollection
{
};
```

## CISCO\_ZoneAliasForZone.mof

```
CISCO_ZoneAliasForZone
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneAliasForZoneProviderImpl")]
class CISCO_ZoneAliasForZone : CISCO_ZoneMemberOfCollection
{
    [Override("Collection"), Key, Aggregate, Description (
        "The Collection that aggregates members." )]
    CISCO_Zone REF Collection;

    [Override("Member"), Key, Description ( "The aggregated member of the Collection."
)]
    CISCO_ZoneAlias REF Member;
};
```

## CISCO\_ZoneAliasInVsan.mof

```
CISCO_ZoneAliasInVsan
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneAliasInVsanProviderImpl")]
class CISCO_ZoneAliasInVsan : CISCO_ZoneHostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```
CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
      Description (
        "The collection defined in the context of a system." )]
    CISCO_ZoneAlias REF Dependent;
};
```

## CISCO\_ZoneAliasSettingData.mof

```
CISCO_ZoneAliasSettingData
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneAliasSettingDataProviderImpl")
]
class CISCO_ZoneAliasSettingData : CISCO_ElementSettingData
{

    [Override ( "ManagedElement" ), Key,
      Description ( "The managed element." )]
    CISCO_ZoneAlias REF ManagedElement;

    [Override ( "SettingData" ), Key, Description (
      "The SettingData object associated with the element." )]
    CISCO_ZoneMemberSettingData REF SettingData;
};
```

## CISCO\_ZoneCapabilities.mof

```
CISCO_ZoneCapabilities
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneCapabilitiesProviderImpl")]
class CISCO_ZoneCapabilities : CIM_ZoneCapabilities
{};
```

## CISCO\_ZoneCapInAdminDomain.mof

```
CISCO_ZoneCapInAdminDomain
[Association,
  Description("ElementCapabilities represents the association between "
    "ManagedElements and their Capabilities."),

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneCapInAdminDomainProviderImpl")
]
class CISCO_ZoneCapInAdminDomain : CISCO_ElementCapabilities
{

    [Override ( "ManagedElement" ), Key, Min ( 1 ),
      Max ( 1 ),
      Description ( "The managed element." )]
    CISCO_AdminDomain REF ManagedElement;

    [Override ( "Capabilities" ), Key, Description (
      "The Capabilities object associated with the element." )]
    CISCO_ZoneCapabilities REF Capabilities;
};
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ZoneHostedCollection.mof

```
CISCO_ZoneHostedCollection
[Abstract,
 Association,
 Description ("This is an abstract association." )]
class CISCO_ZoneHostedCollection : CISCO_HostedCollection
{};
```

## CISCO\_ZoneInLogicalComputerSystem.mof

```
CISCO_ZoneInLogicalComputerSystem
[Association,

 Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneInLogicalComputerSystemProvide
rImpl")]
class CISCO_ZoneInLogicalComputerSystem : CISCO_HostedCollection
{
 [Override ( "Antecedent" ),
  Min ( 1 ),
  Max ( 1 ),
  Description ( "The scoping system." )]
 CISCO_LogicalComputerSystem REF Antecedent;

 [Override ( "Dependent" ),
  Description (
   "The collection defined in the context of a system." )]
 CISCO_Zone REF Dependent;
};
```

## CISCO\_ZoneInPhysicalComputerSystem.mof

```
CISCO_ZoneInPhysicalComputerSystem
[Association,

 Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneInPhysicalComputerSystemProvid
erImpl")]
class CISCO_ZoneInPhysicalComputerSystem : CISCO_HostedCollection
{
 [Override ( "Antecedent" ),
  Min ( 1 ),
  Max ( 1 ),
  Description ( "The scoping system." )]
 CISCO_PhysicalComputerSystem REF Antecedent;

 [Override ( "Dependent" ),
  Description (
   "The collection defined in the context of a system." )]
 CISCO_Zone REF Dependent;
};
```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

## CISCO\_ZoneInVsan.mof

```
CISCO_ZoneInVsan
[Association,
    Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneInVsanProviderImpl")]
class CISCO_ZoneInVsan : CISCO_ZoneHostedCollection
{
    [Override ( "Antecedent" ),
        Min ( 1 ),
        Max ( 1 ),
        Description ( "The scoping system." )]
    CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
        Description (
            "The collection defined in the context of a system." )]
    CISCO_Zone REF Dependent;
};
```

## CISCO\_ZoneMemberOfCollection.mof

```
CISCO_ZoneMemberOfCollection
[Abstract,
    Association,
    Description ("This is an abstract association." )]
class CISCO_ZoneMemberOfCollection : CIM_MemberOfCollection
{};
```

## CISCO\_ZoneMemberSettingData.mof

```
CISCO_ZoneMemberSettingData
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneMemberSettingDataProviderImpl
")]
class CISCO_ZoneMemberSettingData : CIM_ZoneMembershipSettingData
{
    [Override ( "ConnectivityMemberType" ), Description (
        "ConnectivityMemberType specifies the type of identification "
        "used in the ConnectivityMemberID field. For Fibre Channel, "
        "several of the enumerated values require additional "
        "explanation: \n"
        "** A ConnectivityMemberType equal to 2 (Permanent Address) "
        "indicates that an NxPort WWN (pWWN) value should be specified in "
        "the related ConnectivityMemberID property. \n"
        "** A ConnectivityMemberType of 3 (FCID) indicates "
        "that an NxPort Address ID(FCID) value should be specified in the "
        "related ConnectivityMemberID property. \n"
        "** A ConnectivityMemberType of 4 (Switch Port ID) indicates "
        "that a Domain or Port Number(DomainID) value should be specified in "
        "the related ConnectivityMemberID property. \n"
        "** A ConnectivityMemberType of 5 (fcalias) "
        "indicates that alias name which denotes a port ID or WWN should be "
        "specified in the related ConnectivityMemberID property."
        "** A ConnectivityMemberType of 6 (Interface) "
        "indicates that a interface of local switch. The fc interface should"
        "be specified in the related ConnectivityMemberID property(eg. fc1/9) "
        "** A ConnectivityMemberType of 7 (fWWN) "
        "indicates that Fabric port WWN.The WWN of the fabric "
        "port value should be specified in the "
        "related ConnectivityMemberID property."
    )]
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

    ** A ConnectivityMemberType of 8 (Network Address IPv4) "
    "indicates that IPv4 address of an attached device in 32 bits"
    "in dotted decimal format should be specified in the "
    "related ConnectivityMemberID property."
    ** A ConnectivityMemberType of 9 (Network Address IPv6) "
    "indicates that IPv6 address. The IPv6 address of an attached device "
    "in 128 bits in colon(:)-separated hexadecimal format should be specified"
    " in related ConnectivityMemberID property."
    ** A ConnectivityMemberType of 10 (Interface with Remote SWWN) "
    "indicates that a interface of remote switch. The fc interface should"
    "be specified along with Switch WWN in the related ConnectivityMemberID"
    "property(eg. fc1/9;20000005300084DF)"
    ** A ConnectivityMemberType of 11 (Interface with DomainID) "
    "indicates that a interface of local switch. The fc interface should"
    "be specified along with the Domain Id in the related "
    "ConnectivityMemberID property(eg.fc1/9;25)"
    ** A ConnectivityMemberType of 12 (Symbolic-node name) "
    "indicates that a symbolic-node name"
    "should be specified in the "
    "related ConnectivityMemberID property."
    ** A ConnectivityMemberType of 13 (Device alias) "
    "indicates that a device alias"
    "should be specified in the "
    "related ConnectivityMemberID property.")]
uint16 ConnectivityMemberType;
};

```

## CISCO\_ZoneService.mof

```

CISCO_ZoneService
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneServiceProviderImpl")]
class CISCO_ZoneService : CIM_ZoneService
{};

```

## CISCO\_ZoneServiceInAdminDomain.mof

```

CISCO_ZoneServiceInAdminDomain
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneServiceInAdminDomainProviderImpl")]
class CISCO_ZoneServiceInAdminDomain : CISCO_HostedService
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_AdminDomain REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description ( "The Service hosted on the System." )]
    CISCO_ZoneService REF Dependent;
};

```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

## CISCO\_ZoneServiceInVsan.mof

```
CISCO_ZoneServiceInVsan
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneServiceInVsanProviderImpl")]
class CISCO_ZoneServiceInVsan : CISCO_HostedService
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The hosting System." )]
    CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
    Weak, Description ( "The Service hosted on the System." )]
    CISCO_ZoneService REF Dependent;
};
```

## CISCO\_ZoneSet.mof

```
CISCO_ZoneSet
[Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetProviderImpl")]
class CISCO_ZoneSet : CIM_ZoneSet
{};
```

## CISCO\_ZoneSetAlert.mof

```
CISCO_ZoneSetAlert
[Indication,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetAlertProviderImpl")]
class CISCO_ZoneSetAlert: CISCO_AlertIndication
{
    string ZoneSetName;
    uint32 VsanId;
};
```

## CISCO\_ZoneSetInAdminDomain.mof

```
CISCO_ZoneSetInAdminDomain
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetInAdminDomainProviderImpl")
]
class CISCO_ZoneSetInAdminDomain : CISCO_ZoneHostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
    CISCO_AdminDomain REF Antecedent;

    [Override ( "Dependent" ),
    Description (
```

***Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)***

```

        "The collection defined in the context of a system." ]]
    CISCO_ZoneSet REF Dependent;
};

```

## CISCO\_ZoneSetInLogicalComputerSystem.mof

```

CISCO_ZoneSetInLogicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetInLogicalComputerSystemProviderImpl")]
class CISCO_ZoneSetInLogicalComputerSystem : CISCO_HostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
    CISCO_LogicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The collection defined in the context of a system." )]
    CISCO_ZoneSet REF Dependent;
};

```

## CISCO\_ZoneSetInPhysicalComputerSystem.mof

```

CISCO_ZoneSetInPhysicalComputerSystem
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetInPhysicalComputerSystemProviderImpl")]
class CISCO_ZoneSetInPhysicalComputerSystem : CISCO_HostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),
    Max ( 1 ),
    Description ( "The scoping system." )]
    CISCO_PhysicalComputerSystem REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The collection defined in the context of a system." )]
    CISCO_ZoneSet REF Dependent;
};

```

## CISCO\_ZoneSetInVsan.mof

```

CISCO_ZoneSetInVsan
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSetInVsanProviderImpl")]
class CISCO_ZoneSetInVsan : CISCO_ZoneHostedCollection
{
    [Override ( "Antecedent" ),
    Min ( 1 ),

```

**Send documentation comments to [dcnm-san-docfeedback@cisco.com](mailto:dcnm-san-docfeedback@cisco.com)**

```

    Max ( 1 ),
    Description ( "The scoping system." )]
CISCO_Vsan REF Antecedent;

    [Override ( "Dependent" ),
    Description (
        "The collection defined in the context of a system." )]
CISCO_ZoneSet REF Dependent;
};

```

## CISCO\_ZoneSettingData.mof

```

CISCO_ZoneSettingData
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZoneSettingDataProviderImpl")]
class CISCO_ZoneSettingData : CISCO_ElementSettingData
{

    [Override ( "ManagedElement" ), Key,
    Description ( "The managed element." )]
CISCO_Zone REF ManagedElement;

    [Override ( "SettingData" ), Key, Description (
        "The SettingData object associated with the element." )]
CISCO_ZoneMemberSettingData REF SettingData;
};

```

## CISCO\_ZonesInZoneSet.mof

```

CISCO_ZonesInZoneSet
[Association,

Provider("jsr48:com.cisco.dcbu.smis.provider.impl.CISCO_ZonesInZoneSetProviderImpl")]
class CISCO_ZonesInZoneSet : CISCO_ZoneMemberOfCollection
{

    [Override("Collection"), Key, Aggregate, Description (
        "The Collection that aggregates members." )]
CISCO_Zoneset REF Collection;

    [Override("Member"), Key, Description ( "The aggregated member of the Collection."
)]
CISCO_Zone REF Member;

};

```