**Title : Device Specification 2.46.0**
**Filename : CIM_Device.vsd**
**Author : DMTF Core Schema WG**
**Date : 24 Mar 2016**


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**Page 2 – Cooling & Power**
**Page 3 – Processors**
**Page 4 – Controllers**
**Page 5 – Video Controllers**
**Page 6 – PCI Controllers**
**Page 7.8,9 – Logical Ports 1,2,3**
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**Page 12 – Network Adapters**
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**Page 17 – InfiniBand**
**Page 18 – Storage Devices**
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**Page 22 – SCC Extent Model**
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**Page 28 – Storage Tiers 1**
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**Page 30 – Storage Protection**
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**Page 38 – Storage Settings**
**Page 39,40 – Storage Statistics 1,2**
**Page 41 – Storage Library**
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**Page 63 – Dependency (3) [Po - S]**
**Page 64 – Dependency (4) [Po - S]**
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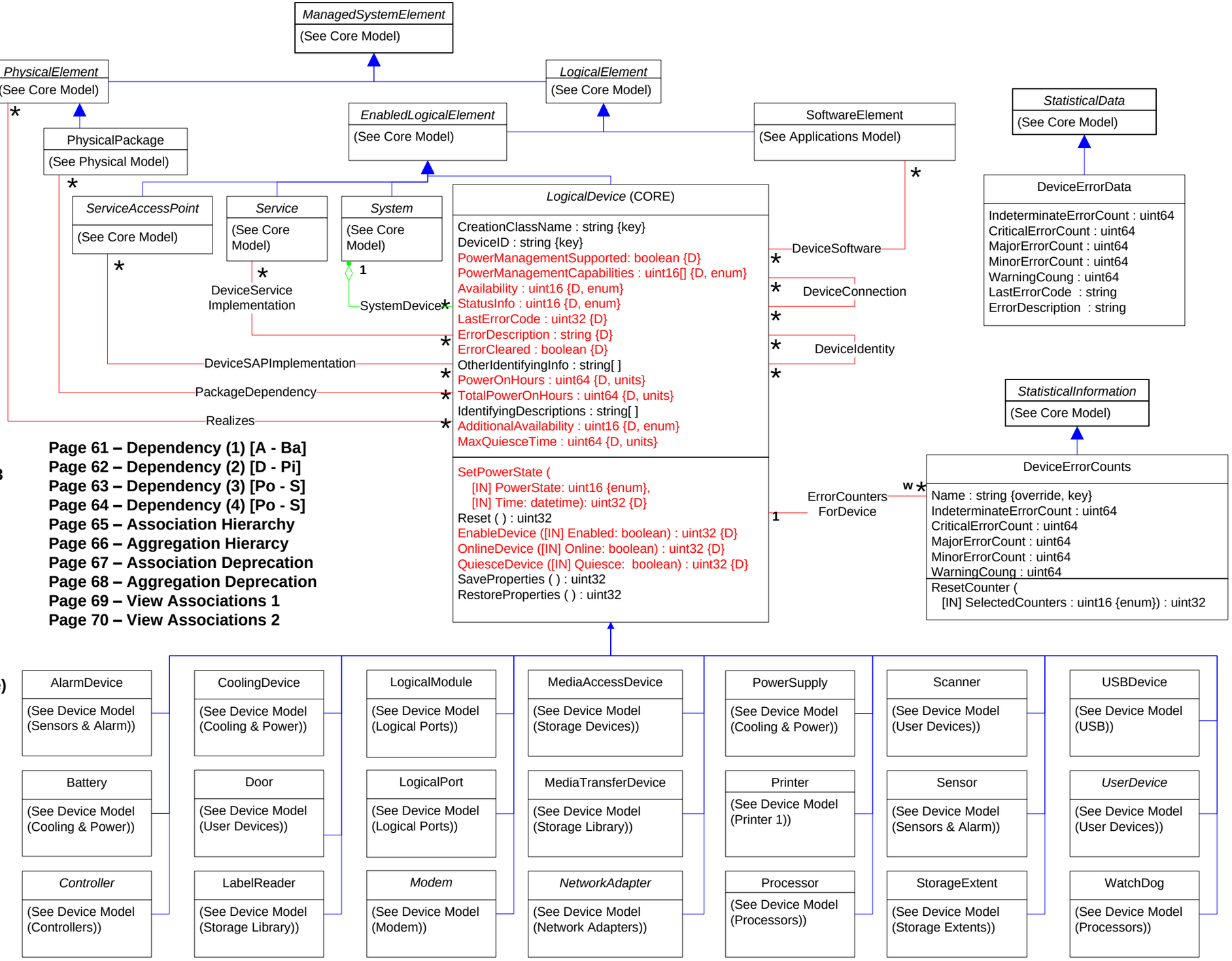
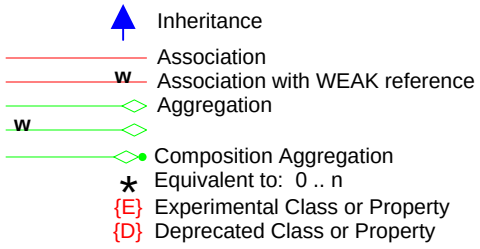
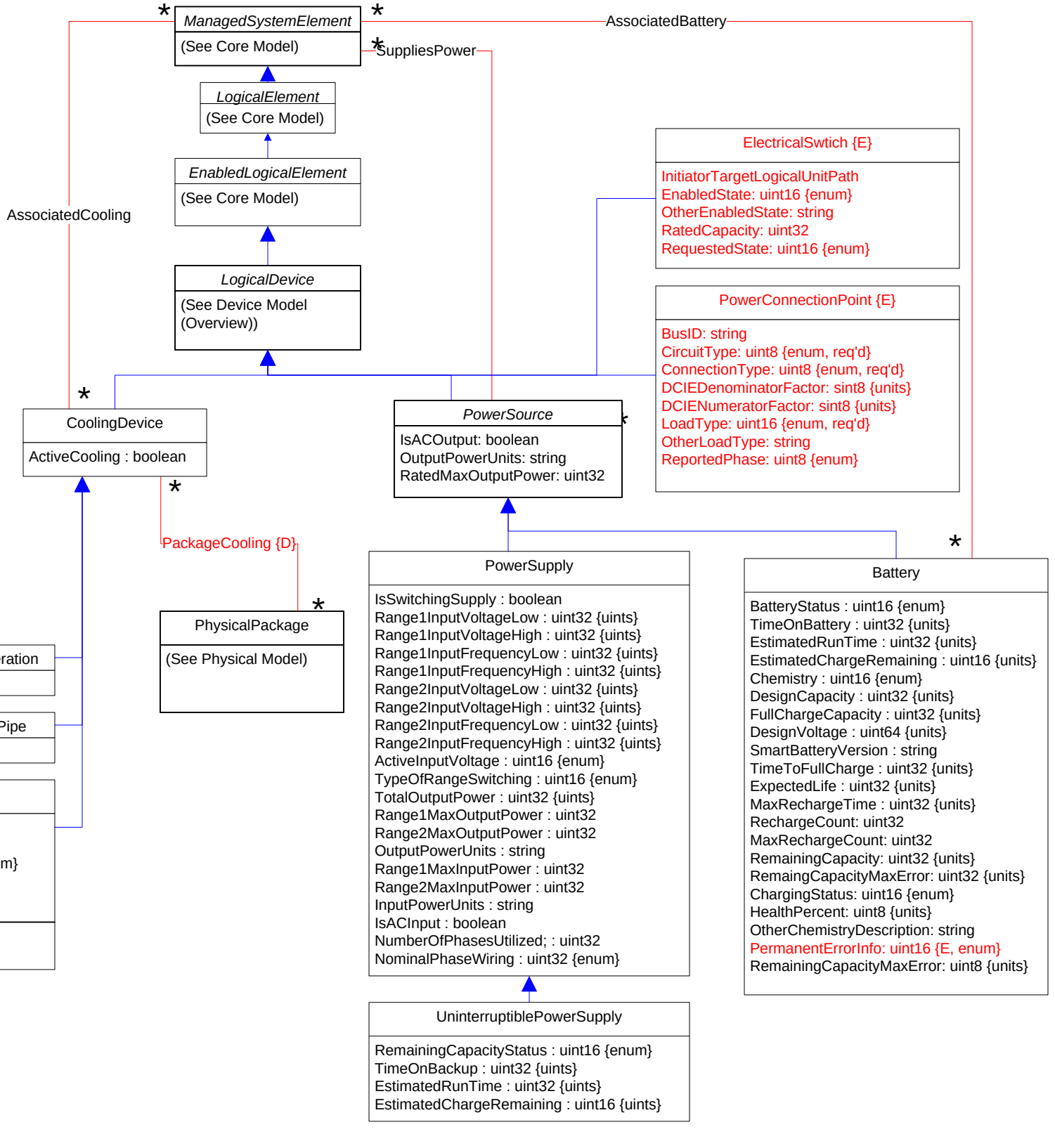
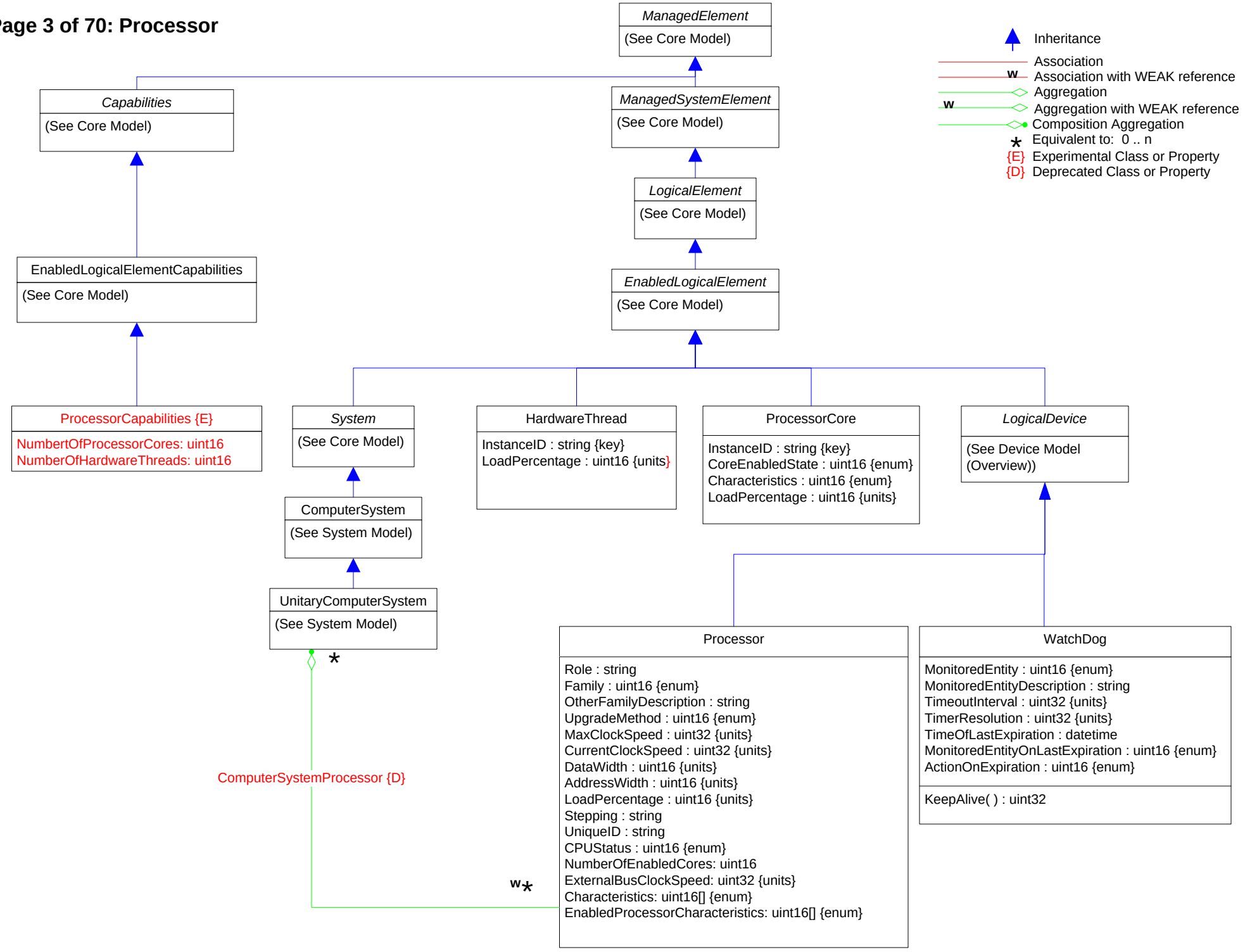
**Page 66 – Aggregation Hierarcy**
**Page 67 – Association Deprecation**
**Page 68 – Aggregation Deprecation**
**Page 69 – View Associations 1**
**Page 70 – View Associations 2**

# Page 2 of 70: Cooling & Power

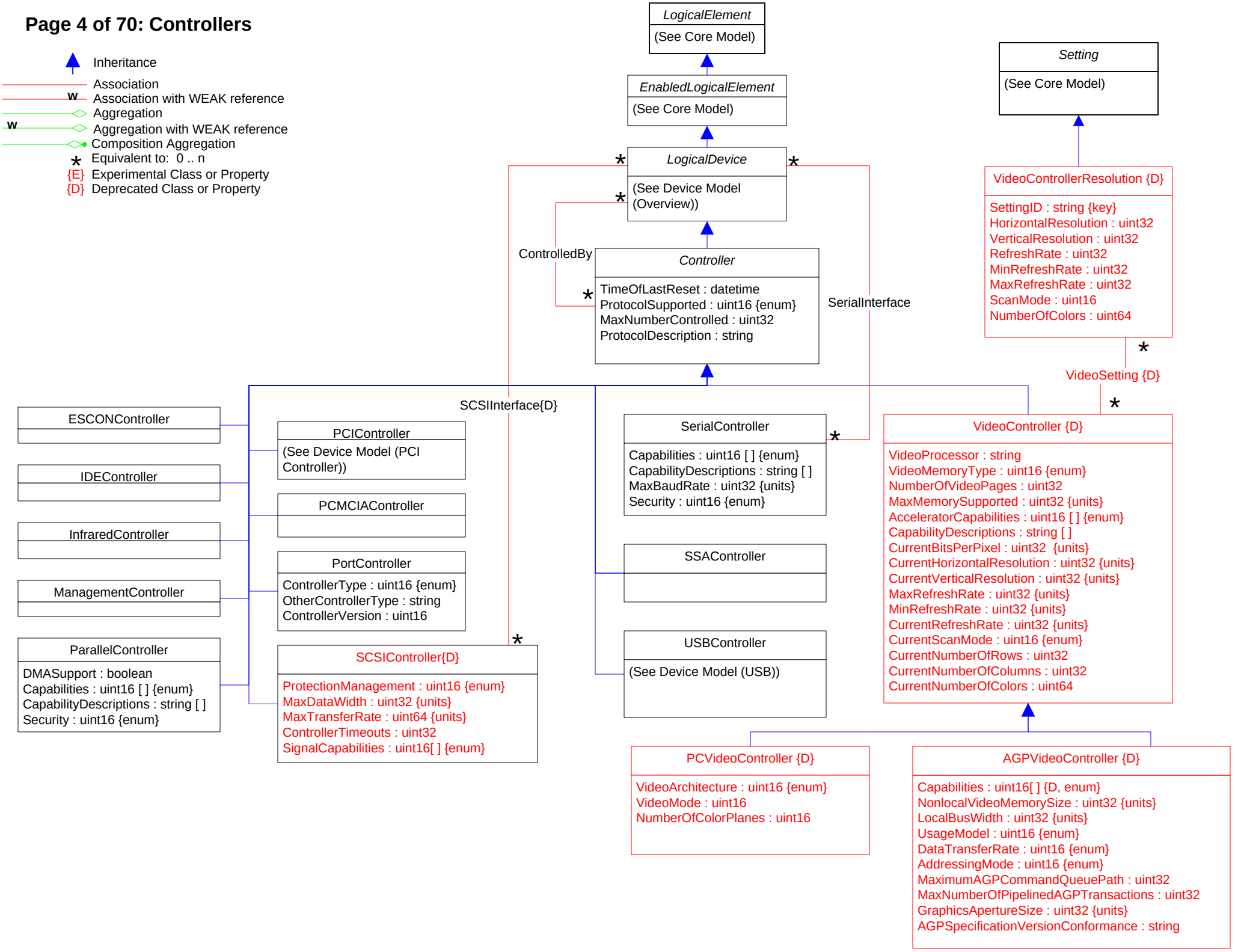


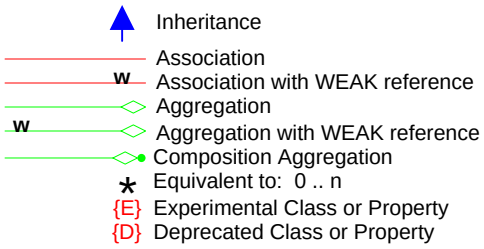

ManagedElement
(See Core Model)
Capabilities
(See Core Model)
ManagedSystemElement
(See Core Model)
LogicalElement
(See Core Model)
EnabledLogicalElementCapabilities
(See Core Model)
EnabledLogicalElement
(See Core Model)
ProcessorCapabilities {E}
NumbertOfProcessorCores: uint16
NumberOfHardwareThreads: uint16
System
(See Core Model)
HardwareThread
InstanceID : string {key}
LoadPercentage : uint16 {units}
ProcessorCore
InstanceID : string {key}
CoreEnabledState : uint16 {enum}
Characteristics : uint16 {enum}
LoadPercentage : uint16 {units}
LogicalDevice
(See Device Model (Overview))
ComputerSystem
(See System Model)
UnitaryComputerSystem
(See System Model)
*
ComputerSystemProcessor {D}
w*
Processor
Role : string
Family : uint16 {enum}
OtherFamilyDescription : string
UpgradeMethod : uint16 {enum}
MaxClockSpeed : uint32 {units}
CurrentClockSpeed : uint32 {units}
DataWidth : uint16 {units}
AddressWidth : uint16 {units}
LoadPercentage : uint16 {units}
Stepping : string
UniqueID : string
CPUStatus : uint16 {enum}
NumberOfEnabledCores: uint16
ExternalBusClockSpeed: uint32 {units}
Characteristics: uint16[] {enum}
EnabledProcessorCharacteristics: uint16[] {enum}
WatchDog
MonitoredEntity : uint16 {enum}
MonitoredEntityDescription : string
TimeoutInterval : uint32 {units}
TimerResolution : uint32 {units}
TimeOfLastExpiration : datetime
MonitoredEntityOnLastExpiration : uint16 {enum}
ActionOnExpiration : uint16 {enum}
KeepAlive( ) : uint32
Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

# Page 4 of 70: Controllers



# Page 5 of 70: Video Controllers




*LogicalElement*
(See Core Model)

*EnabledLogicalElement*
(See Core Model)

*LogicalDevice*
(See Device Model (Overview))

*Setting*
(See Core Model)

*Controller*
TimeOfLastReset : datetime
ProtocolSupported : uint16 {enum}
MaxNumberControlled : uint32
ProtocolDescription : string

VideoHead
CurrentBitsPerPixel : uint32
CurrentHorizontalResolution : uint32
CurrentVerticalResolution : uint32
CurrentRefreshRate : uint32
MinRefreshRate : uint32
MaxRefreshRate : uint32
CurrentScanMode : uint16
OtherScanMode : string
CurrentNumberOfRows : uint32
CurrentNumberOfColumns : uint32
CurrentNumberOfColors : uint64

VideoHeadResolution {E}
HorizontalResolution : uint32
VerticalResolution : uint32
RefreshRate : uint32
MinRefreshRate : uint32
MaxRefreshRate : uint32
ScanMode : uint16
OtherScanMode : string
CurrentNumberOfColors : uint64

VideoControllerResolution {D}
SettingID : string {key}
HorizontalResolution : uint32
VerticalResolution : uint32
RefreshRate : uint32
MinRefreshRate : uint32
MaxRefreshRate : uint32
ScanMode : uint16
NumberOfColors : uint64

VideoHeadOn Controller {E}

DisplayController {E}
VideoProcessor : string
VideoMemoryType : uint16 {enum}
OtherVideoMemoryType : string
NumberOfVideoPages : uint32
MaxMemorySupported : uint32 {units}
AcceleratorCapabilities : uint16 [ ] {enum}
CapabilityDescriptions : string [ ]
Description: string
OtherVideoArchitecture: string
VideoArchitecture: uint16 {enum}

VideoSetting {D}
*
*

VideoController {D}
VideoProcessor : string
VideoMemoryType : uint16 {enum}
NumberOfVideoPages : uint32
MaxMemorySupported : uint32 {units}
AcceleratorCapabilities : uint16 [ ] {enum}
CapabilityDescriptions : string [ ]
CurrentBitsPerPixel : uint32 {units}
CurrentHorizontalResolution : uint32 {units}
CurrentVerticalResolution : uint32 {units}
MaxRefreshRate : uint32 {units}
MinRefreshRate : uint32 {units}
CurrentRefreshRate : uint32 {units}
CurrentScanMode : uint16 {enum}
CurrentNumberOfRows : uint32
CurrentNumberOfColumns : uint32
CurrentNumberOfColors : uint64

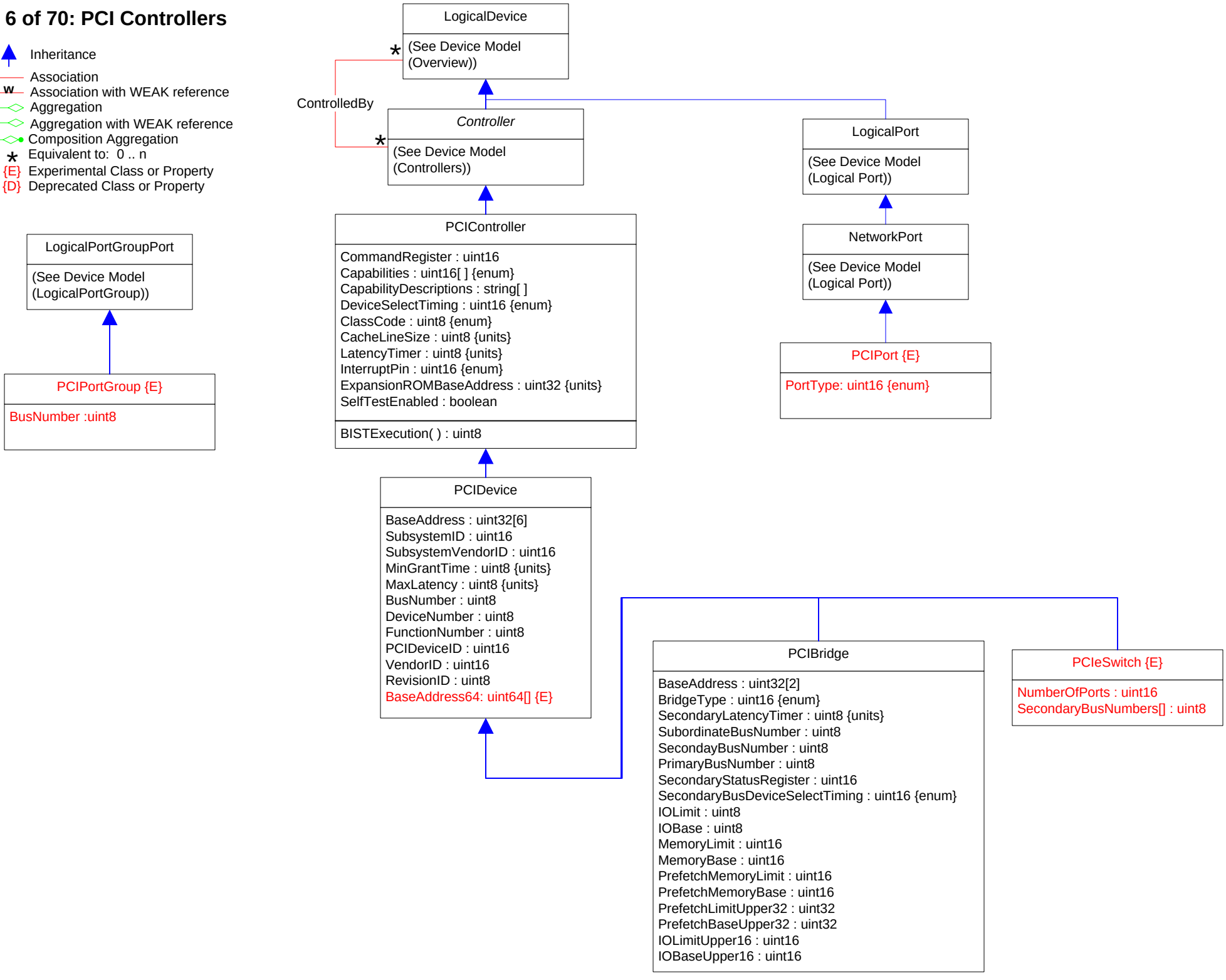
AGPVideoDisplayController {E}
NonlocalVideoMemorySize : uint32 {units}
LocalBusWidth : uint32 {units}
UsageModel : uint16 {enum}
OtherUsageModel : string
DataTransferRate : uint16 {enum}
OtherDataTransferRate : string
AddressingMode : uint16 {enum}
OtherAddressingMode : string
MaximumAGPCommandQueuePath : uint32
MaxNumberOfPipelinedAGPTransactions : uint32
GraphicsApertureSize : uint32 {units}
AGPSpecificationVersionConformance : string

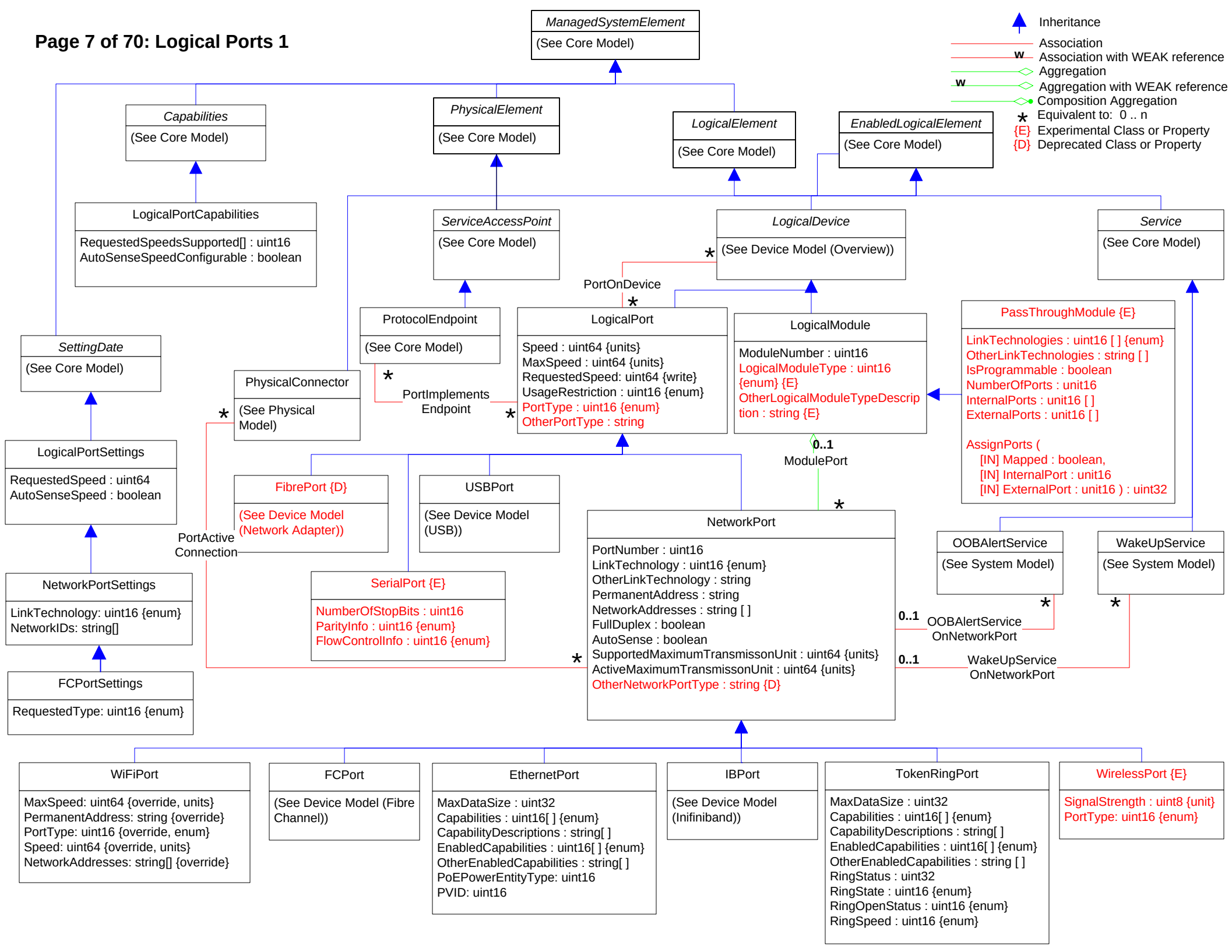
PCVideoController {D}
VideoArchitecture : uint16 {enum}
VideoMode : uint16
NumberOfColorPlanes : uint16

AGPVideoController {D}
Capabilities : uint16[ ] {D, enum}
NonlocalVideoMemorySize : uint32 {units}
LocalBusWidth : uint32 {units}
UsageModel : uint16 {enum}
DataTransferRate : uint16 {enum}
AddressingMode : uint16 {enum}
MaximumAGPCommandQueuePath : uint32
MaxNumberOfPipelinedAGPTransactions : uint32
GraphicsApertureSize : uint32 {units}
AGPSpecificationVersionConformance : string

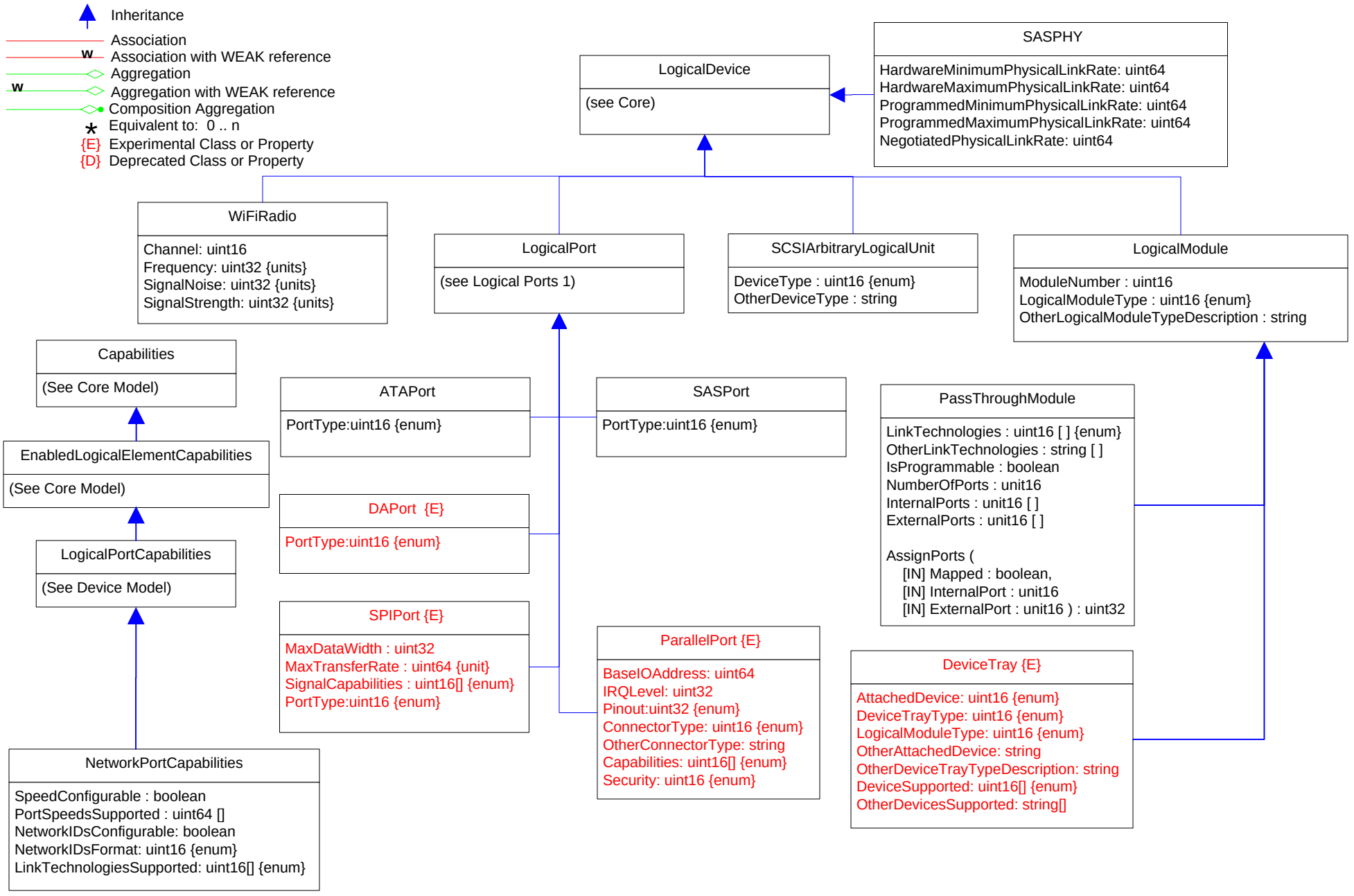
# Page 6 of 70: PCI Controllers

Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

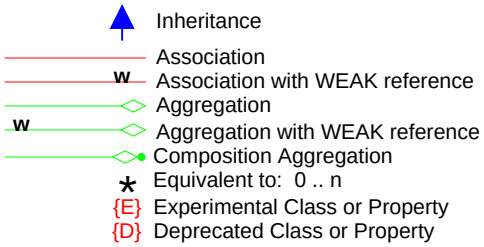



ManagedSystemElement
(See Core Model)
Inheritance
Association
Association with WEAK reference
Aggregation
Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
Capabilities
(See Core Model)
PhysicalElement
(See Core Model)
LogicalElement
(See Core Model)
EnabledLogicalElement
(See Core Model)
LogicalPortCapabilities
RequestedSpeedsSupported[] : uint16
AutoSenseSpeedConfigurable : boolean
ServiceAccessPoint
(See Core Model)
LogicalDevice
(See Device Model (Overview))
Service
(See Core Model)
PortOnDevice
ProtocolEndpoint
(See Core Model)
LogicalPort
Speed : uint64 {units}
MaxSpeed : uint64 {units}
RequestedSpeed: uint64 {write}
UsageRestriction : uint16 {enum}
PortType : uint16 {enum}
OtherPortType : string
LogicalModule
ModuleNumber : uint16
LogicalModuleType : uint16 {enum} {E}
OtherLogicalModuleTypeDescription : string {E}
PassThroughModule {E}
LinkTechnologies : uint16 [ ] {enum}
OtherLinkTechnologies : string [ ]
IsProgrammable : boolean
NumberOfPorts : unit16
InternalPorts : unit16 [ ]
ExternalPorts : unit16 [ ]
AssignPorts (
[IN] Mapped : boolean,
[IN] InternalPort : unit16
[IN] ExternalPort : unit16 ) : uint32
SettingDate
(See Core Model)
PhysicalConnector
(See Physical Model)
PortImplements Endpoint
0..1
ModulePort
LogicalPortSettings
RequestedSpeed : uint64
AutoSenseSpeed : boolean
FibrePort {D}
(See Device Model (Network Adapter))
USBPort
(See Device Model (USB))
PortActive Connection
NetworkPort
PortNumber : uint16
LinkTechnology : uint16 {enum}
OtherLinkTechnology : string
PermanentAddress : string
NetworkAddresses : string [ ]
FullDuplex : boolean
AutoSense : boolean
SupportedMaximumTransmissonUnit : uint64 {units}
ActiveMaximumTransmissonUnit : uint64 {units}
OtherNetworkPortType : string {D}
OOBAlertService
(See System Model)
WakeUpService
(See System Model)
0..1
OOBAlertService OnNetworkPort
0..1
WakeUpService OnNetworkPort
NetworkPortSettings
LinkTechnology: uint16 {enum}
NetworkIDs: string[]
SerialPort {E}
NumberOfStopBits : uint16
ParityInfo : uint16 {enum}
FlowControlInfo : uint16 {enum}
FCPortSettings
RequestedType: uint16 {enum}
WiFiPort
MaxSpeed: uint64 {override, units}
PermanentAddress: string {override}
PortType: uint16 {override, enum}
Speed: uint64 {override, units}
NetworkAddresses: string[] {override}
FCPort
(See Device Model (Fibre Channel))
EthernetPort
MaxDataSize : uint32
Capabilities : uint16[ ] {enum}
CapabilityDescriptions : string[ ]
EnabledCapabilities : uint16[ ] {enum}
OtherEnabledCapabilities : string[ ]
PoEPowerEntityType: uint16
PVID: uint16
IBPort
(See Device Model (Inifiniband))
TokenRingPort
MaxDataSize : uint32
Capabilities : uint16[ ] {enum}
CapabilityDescriptions : string[ ]
EnabledCapabilities : uint16[ ] {enum}
OtherEnabledCapabilities : string [ ]
RingStatus : uint32
RingState : uint16 {enum}
RingOpenStatus : uint16 {enum}
RingSpeed : uint16 {enum}
WirelessPort {E}
SignalStrength : uint8 {unit}
PortType: uint16 {enum}

# Page 8 of 70: Logical Ports 2



# Page 9 of 70: Logical Ports 3




*EthernetPort*

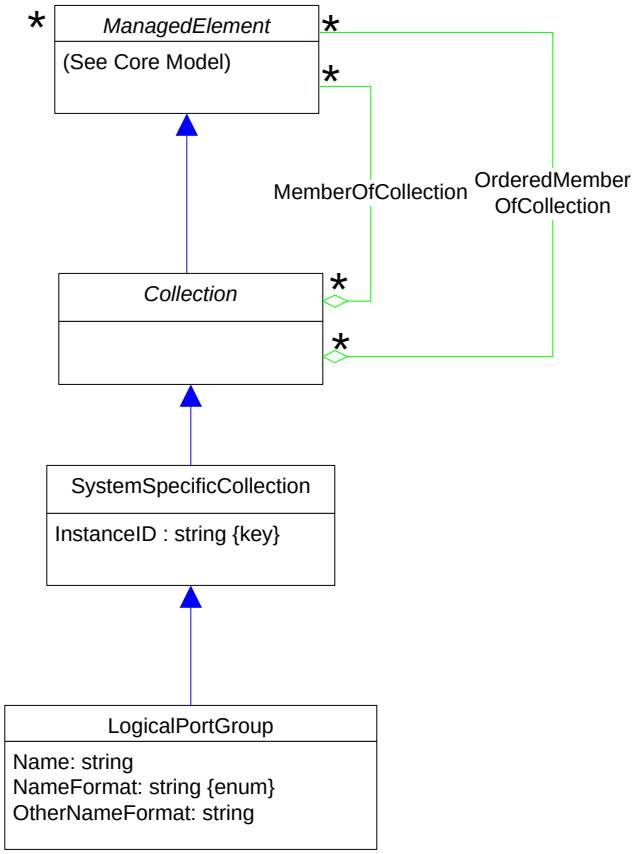
(See Logical Ports 1)

LLDPEthernetPort

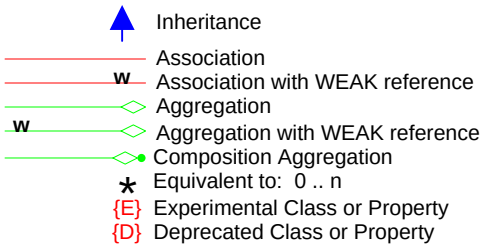
ConfigPortVlanTxEnable: boolean; ConfigManVidTxEnable: boolean;
MessageTxInterval=30: uint16; MessageTxHoldMultiplier=4: uint8; ReinitDelay=2: uint8
NotificationInterval=30: uint16; TxCreditMax=5: uint8; DestMacAddress: string[]
PortConfigAdminStatus: uint8[] {enum}; PortConfigNotificationEnable: boolean[]
PortConfigPortDescriptionTLVTxEnable: boolean[];
PortConfigSystemNameTLVTxEnable: boolean[]
PortConfigSystemDescriptionTLVTxEnable: boolean[]
PortConfigSystemCapabilitiesTLVTxEnable: boolean[]
ManAddrConfigDestAddress: string[]; ManAddrConfigLocManAddrSubtype: uint16[] {enum}
ManAddrConfigLocManAddr: string[]; ManAddrConfigTxEnable: boolean[]
LocChassisIdSubtype: uint8 {enmum}; LocChassisId: string; LocSysName: string
LocSysDesc: string; LocSysCapSupported: uint8[]; LocSysCapEnabled: boolean[]
LocPortIdSubtype: uint8 {enmum}; LocPortID: string; LocPortDesc: string;
LocTxSystemValue: uint16; RemTxSystemValueEcho: uint16; LocRxSystemValue: uint16
RemRxSystemValueEcho: uint16; LocFbSystemValue: uint16; RemTxSystemValue: uint16
LocTxSystemValueEcho: uint16; RemRxSystemValue: uint16;
LocRxSystemValueEcho: uint16; LocResolvedTxSystemValue: uint16
LocResolvedRxSystemValue: uint16; MaximumFrameSizeTLVEnabled: boolean
LocManAddrSubType: uint16[]; LocManAddr: string[]; LocManAddrIfSubtype: uint16[];
LocManAddrIfId: uint32[]; RemLocalDestMacAddress: string[]; RemManAddrSubType: uint16[]
RemManAddr: string[]; RemManAddrSubType: uint16[]; RemManAddrIfId: uint32[]
RemChassisIdSubtype: uint8[]; RemChassisId: string[]; RemSysName: string[]
RemSysDesc: string[]; RemSysCapSupported: uint8[]; RemSysCapEnabled: boolean[]
RemPortIdSubtype: uint8[]; RemPortID: string[]; RemPortDesc: string[]

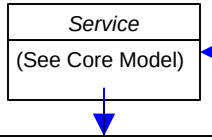
DataCenterEthernetPort

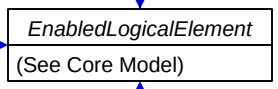
PfcLinkDelayAllowance: uint32; ETSConfigurationTxEnable: boolean; ETSRecommendationTxEnable: boolean
PFCTxEnable: boolean; ApplicationPriorityTxEnable: boolean; LocETSConCreditBasedShaperSupport: boolean
LocETSConTrafficClassesSupported: uint8; LocETSConWilling: boolean; LocETSConPriority: uint8[]
LocETSConPriTrafficClass: uint8[]; LocETSConTrafficClass: uint8[]; LocETSConTrafficClassBandwidth: uint8[]
LocETSConTrafficSelectionAlgorithm: uint8[] {Enum}; LocETSRecoTrafficClass: uint8[]
LocETSRecoTrafficClassBandwidth: uint8[]; LocETSRecoTSATrafficClass: uint8[]
LocETSRecoTrafficSelectionAlgorithm: uint8[] {Enum}; LocPFCWilling: boolean
LocPFCMBC: boolean; LocPFCCap: uint8; LocPFCEnablePriority: uint8[]; LocPFCEnableEnabled: boolean[]
LocApplicationPriorityAESelector: uint16[] {Enum}; LocApplicationPriorityAEProtocol: uint16[]
LocApplicationPriorityAEPriority: uint8[]; RemETSConCreditBasedShaperSupport: boolean
RemETSConTrafficClassesSupported: uint8; RemETSConWilling: boolean; RemETSConPriority: uint8[]
RemETSConPriTrafficClass: uint8[]; RemETSConTrafficClass: uint8[];
RemETSConTrafficClassBandwidth: uint8[]; RemETSConTSATrafficClass: uint8[]
RemETSConTrafficSelectionAlgorithm: uint8[] {Enum}; RemETSRecoTrafficClass: uint8[]
RemETSRecoTrafficClassBandwidth: uint64[]; RemETSRecoTSATrafficClass: uint8[]
RemETSRecoTrafficSelectionAlgorithm: uint8[] {Enum}; RemPFCWilling: boolean
RemPFCMBC: boolean; RemPFCCap: uint8; RemPFCEnablePriority: uint8[]
RemPFCEnableEnabled: boolean[]; RemApplicationPriorityAESelector: uint16[] {Enum}
RemApplicationPriorityAEProtocol: uint16[]; RemApplicationPriorityAEPriority: uint8[]
AdminETSConCreditBasedShaperSupport: boolean; AdminETSConTrafficClassesSupported: uint8
AdminETSConWilling: boolean; AdminETSConPriority: uint8[]; AdminETSConPriTrafficClass: uint8[]
AdminETSConTrafficClass: uint8[]; AdminETSConTrafficClassBandwidth: uint8[]
AdminETSConTSATrafficClass: uint8[]; AdminETSConTrafficSelectionAlgorithm: uint8[] {Enum}
AdminETSRecoTrafficClass: uint8[]; AdminETSRecoTrafficClassBandwidth: uint64[]
AdminETSRecoTSATrafficClass: uint8[]; AdminETSRecoTrafficSelectionAlgorithm: uint8[] {Enum}
AdminPFCWilling: boolean; AdminPFCMBC: boolean; AdminPFCCap: uint8; AdminPFCEnablePriority: uint8[]
AdminPFCEnableEnabled: boolean[]; AdminApplicationPriorityAESelector: uint16[] {Enum}
AdminApplicationPriorityAEProtocol: uint16[]; AdminApplicationPriorityAEPriority: uint8[]

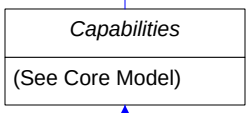

*
ManagedElement
(See Core Model)
*
*
MemberOfCollection
OrderedMember
OfCollection
Collection
*
*
SystemSpecificCollection
InstanceID : string {key}
LogicalPortGroup
Name: string
NameFormat: string {enum}
OtherNameFormat: string

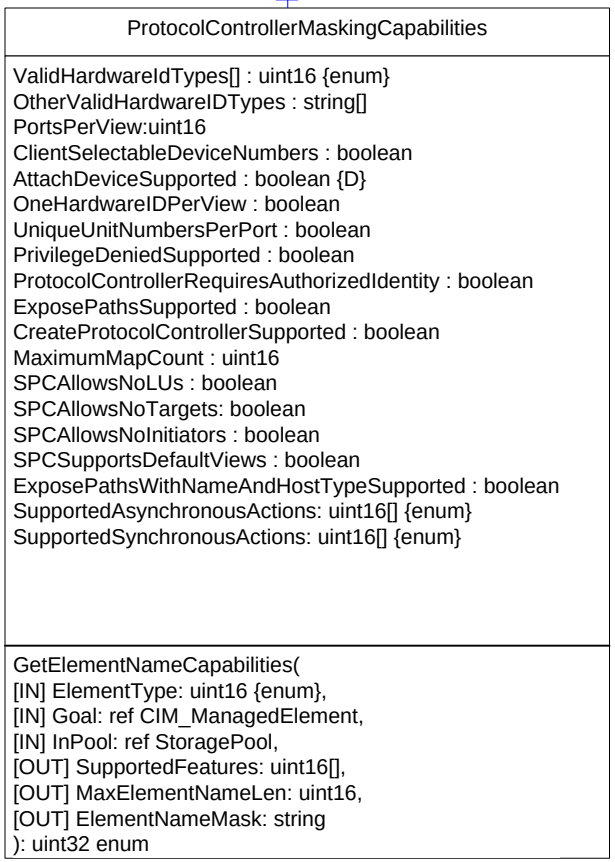
# Page 11 of 70: Protocol Controller

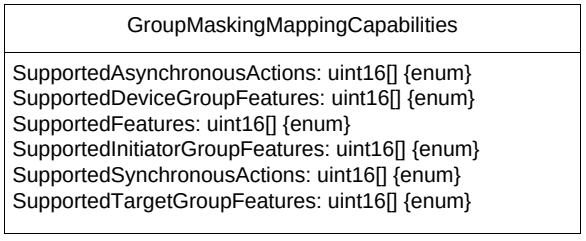


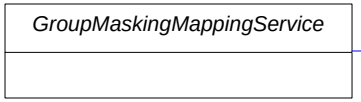



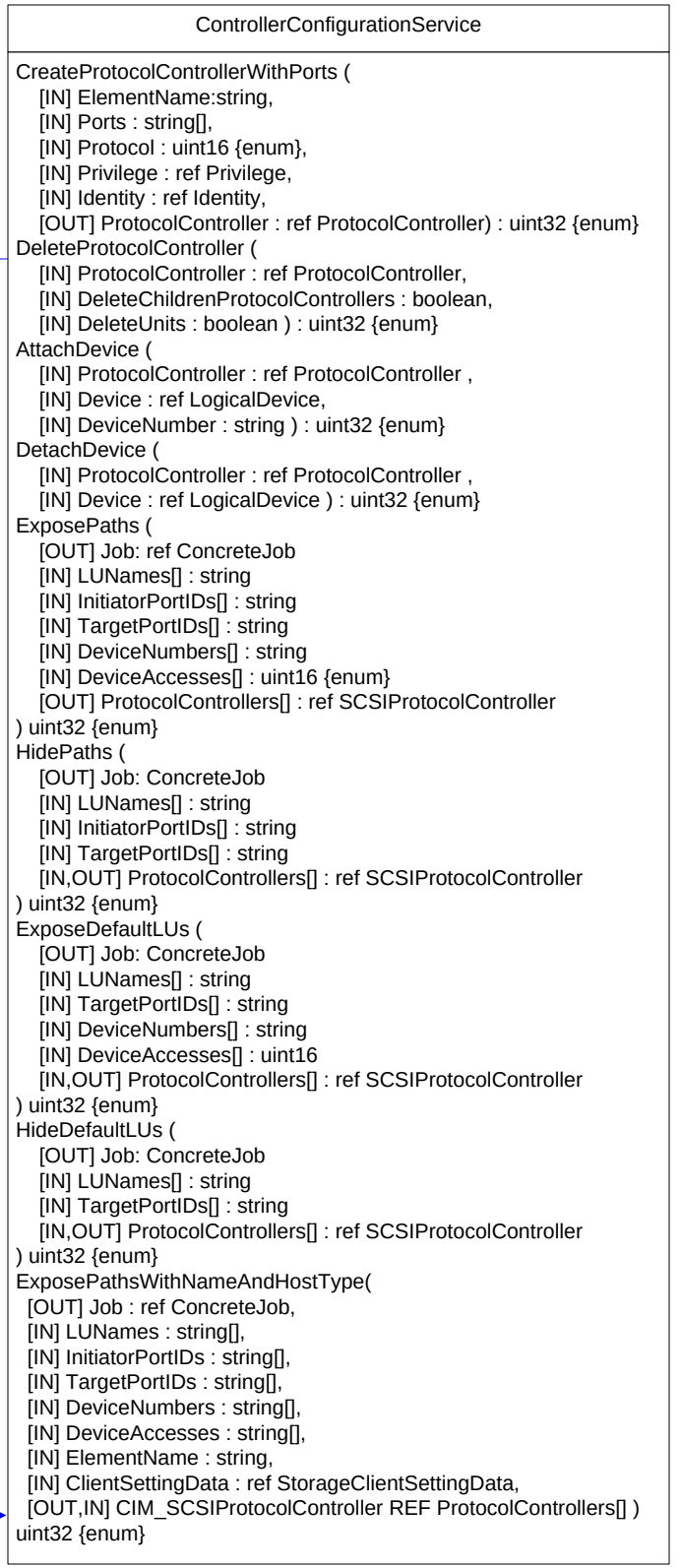



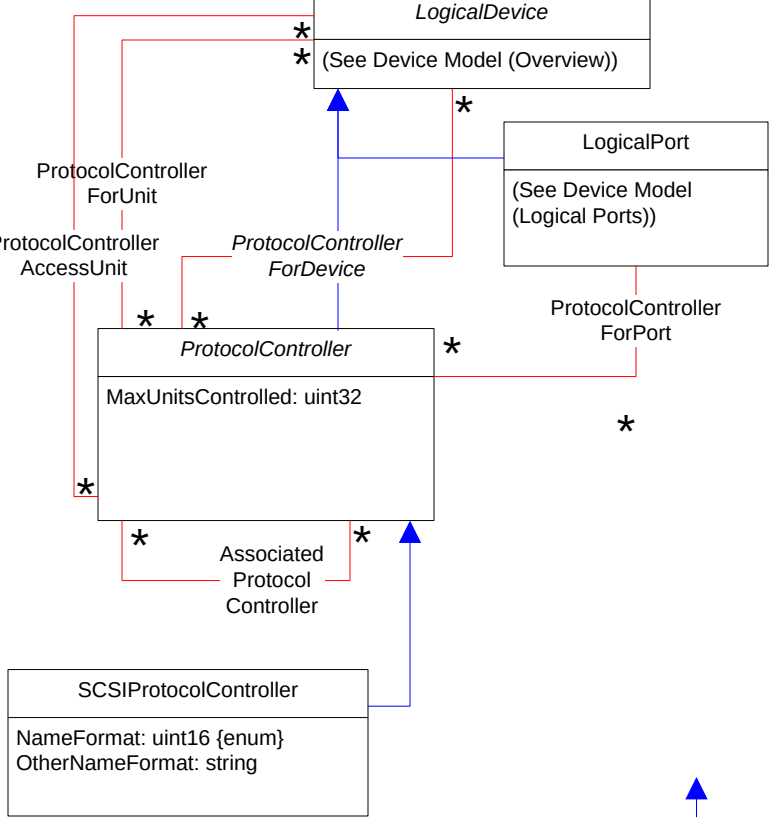



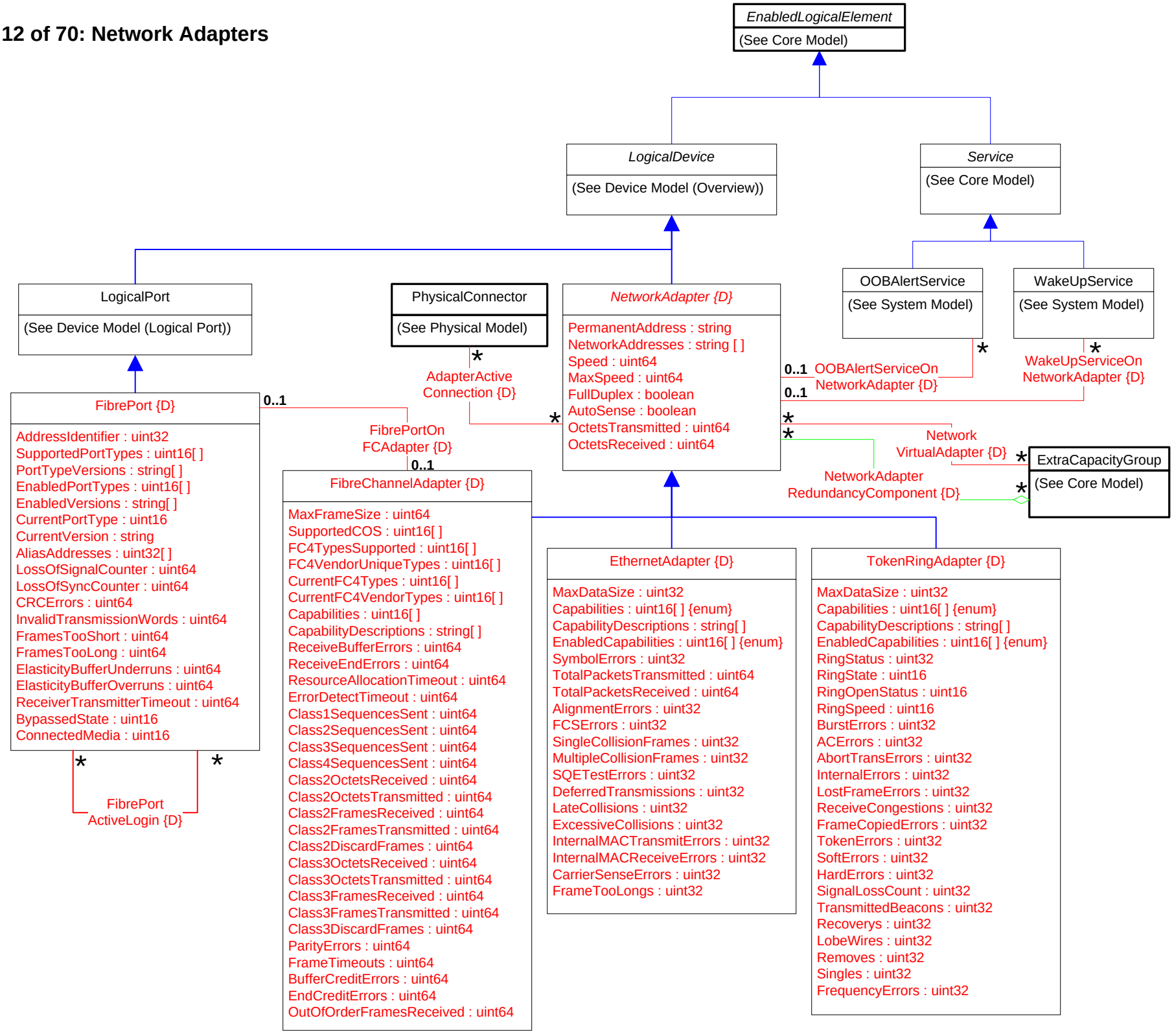



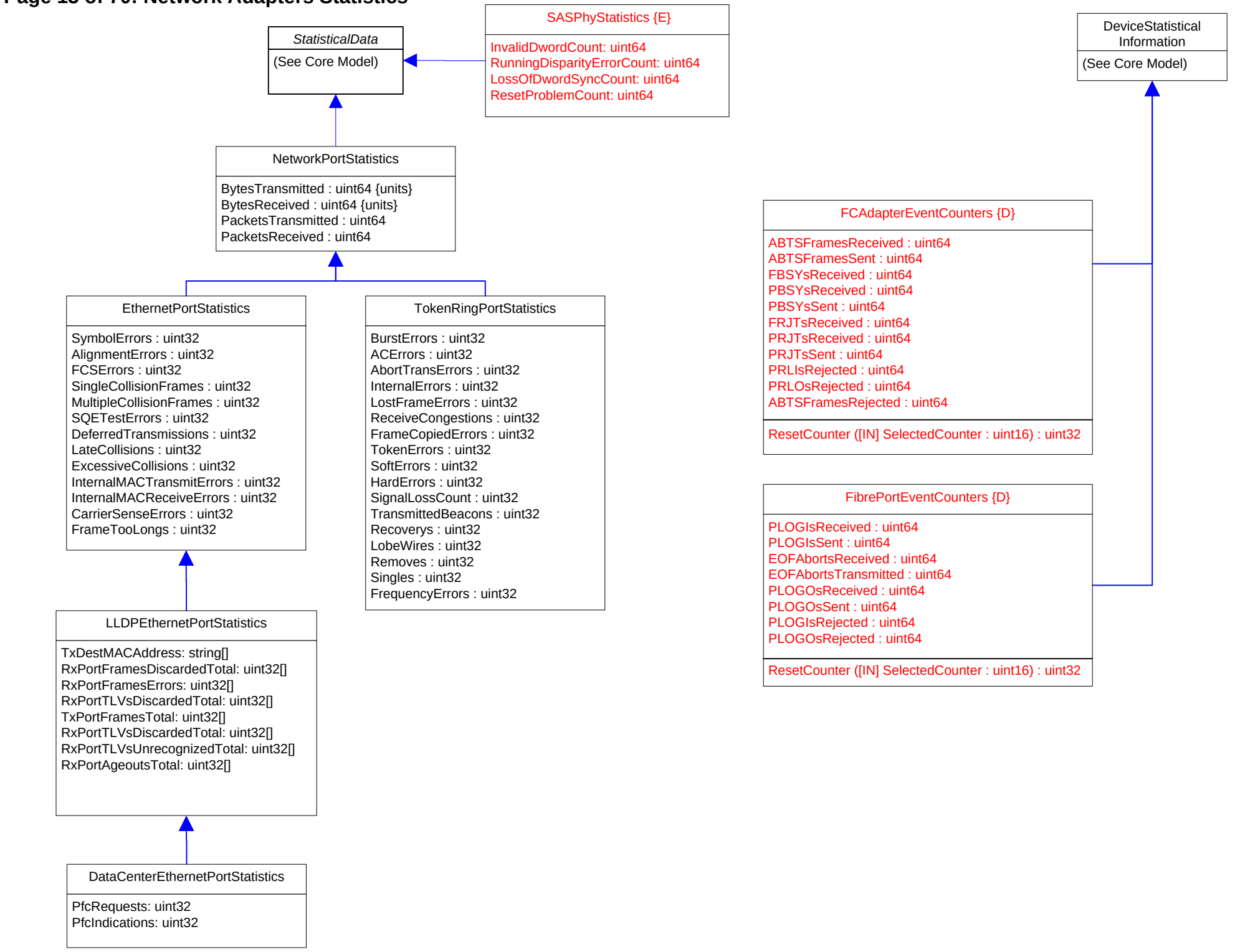



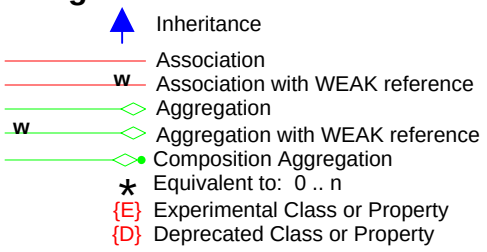




EnabledLogicalElement
(See Core Model)
LogicalDevice
(See Device Model (Overview))
Service
(See Core Model)
LogicalPort
(See Device Model (Logical Port))
PhysicalConnector
(See Physical Model)
NetworkAdapter {D}
PermanentAddress : string
NetworkAddresses : string [ ]
Speed : uint64
MaxSpeed : uint64
FullDuplex : boolean
AutoSense : boolean
OctetsTransmitted : uint64
OctetsReceived : uint64
OOBAlertService
(See System Model)
WakeUpService
(See System Model)
FibrePort {D}
AddressIdentifier : uint32
SupportedPortTypes : uint16[ ]
PortTypeVersions : string[ ]
EnabledPortTypes : uint16[ ]
EnabledVersions : string[ ]
CurrentPortType : uint16
CurrentVersion : string
AliasAddresses : uint32[ ]
LossOfSignalCounter : uint64
LossOfSyncCounter : uint64
CRCErrors : uint64
InvalidTransmissionWords : uint64
FramesTooShort : uint64
FramesTooLong : uint64
ElasticityBufferUnderruns : uint64
ElasticityBufferOverruns : uint64
ReceiverTransmitterTimeout : uint64
BypassedState : uint16
ConnectedMedia : uint16
FibrePort
ActiveLogin {D}
AdapterActive
Connection {D}
FibrePortOn
FCAdapter {D}
FibreChannelAdapter {D}
MaxFrameSize : uint64
SupportedCOS : uint16[ ]
FC4TypesSupported : uint16[ ]
FC4VendorUniqueTypes : uint16[ ]
CurrentFC4Types : uint16[ ]
CurrentFC4VendorTypes : uint16[ ]
Capabilities : uint16[ ]
CapabilityDescriptions : string[ ]
ReceiveBufferErrors : uint64
ReceiveEndErrors : uint64
ResourceAllocationTimeout : uint64
ErrorDetectTimeout : uint64
Class1SequencesSent : uint64
Class2SequencesSent : uint64
Class3SequencesSent : uint64
Class4SequencesSent : uint64
Class2OctetsReceived : uint64
Class2OctetsTransmitted : uint64
Class2FramesReceived : uint64
Class2FramesTransmitted : uint64
Class2DiscardFrames : uint64
Class3OctetsReceived : uint64
Class3OctetsTransmitted : uint64
Class3FramesReceived : uint64
Class3FramesTransmitted : uint64
Class3DiscardFrames : uint64
ParityErrors : uint64
FrameTimeouts : uint64
BufferCreditErrors : uint64
EndCreditErrors : uint64
OutOfOrderFramesReceived : uint64
EthernetAdapter {D}
MaxDataSize : uint32
Capabilities : uint16[ ] {enum}
CapabilityDescriptions : string[ ]
EnabledCapabilities : uint16[ ] {enum}
SymbolErrors : uint32
TotalPacketsTransmitted : uint64
TotalPacketsReceived : uint64
AlignmentErrors : uint32
FCSErrors : uint32
SingleCollisionFrames : uint32
MultipleCollisionFrames : uint32
SQETestErrors : uint32
DeferredTransmissions : uint32
LateCollisions : uint32
ExcessiveCollisions : uint32
InternalMACTransmitErrors : uint32
InternalMACReceiveErrors : uint32
CarrierSenseErrors : uint32
FrameTooLongs : uint32
TokenRingAdapter {D}
MaxDataSize : uint32
Capabilities : uint16[ ] {enum}
CapabilityDescriptions : string[ ]
EnabledCapabilities : uint16[ ] {enum}
RingStatus : uint32
RingState : uint16
RingOpenStatus : uint16
RingSpeed : uint16
BurstErrors : uint32
ACErrors : uint32
AbortTransErrors : uint32
InternalErrors : uint32
LostFrameErrors : uint32
ReceiveCongestions : uint32
FrameCopiedErrors : uint32
TokenErrors : uint32
SoftErrors : uint32
HardErrors : uint32
SignalLossCount : uint32
TransmittedBeacons : uint32
Recoverys : uint32
LobeWires : uint32
Removes : uint32
Singles : uint32
FrequencyErrors : uint32
0..1
OOBAlertServiceOn
NetworkAdapter {D}
WakeUpServiceOn
NetworkAdapter {D}
Network
VirtualAdapter {D}
NetworkAdapter
RedundancyComponent {D}
ExtraCapacityGroup
(See Core Model)


StatisticalData
(See Core Model)
SASPhyStatistics {E}
InvalidDwordCount: uint64
RunningDisparityErrorCount: uint64
LossOfDwordSyncCount: uint64
ResetProblemCount: uint64
DeviceStatistical Information
(See Core Model)
NetworkPortStatistics
BytesTransmitted : uint64 {units}
BytesReceived : uint64 {units}
PacketsTransmitted : uint64
PacketsReceived : uint64
FCAdapterEventCounters {D}
ABTSFramesReceived : uint64
ABTSFramesSent : uint64
FBSYsReceived : uint64
PBSYsReceived : uint64
PBSYsSent : uint64
FRJTsReceived : uint64
PRJTsReceived : uint64
PRJTsSent : uint64
PRLIsRejected : uint64
PRLOsRejected : uint64
ABTSFramesRejected : uint64
ResetCounter ([IN] SelectedCounter : uint16) : uint32
EthernetPortStatistics
SymbolErrors : uint32
AlignmentErrors : uint32
FCSErrors : uint32
SingleCollisionFrames : uint32
MultipleCollisionFrames : uint32
SQETestErrors : uint32
DeferredTransmissions : uint32
LateCollisions : uint32
ExcessiveCollisions : uint32
InternalMACTransmitErrors : uint32
InternalMACReceiveErrors : uint32
CarrierSenseErrors : uint32
FrameTooLongs : uint32
TokenRingPortStatistics
BurstErrors : uint32
ACErrors : uint32
AbortTransErrors : uint32
InternalErrors : uint32
LostFrameErrors : uint32
ReceiveCongestions : uint32
FrameCopiedErrors : uint32
TokenErrors : uint32
SoftErrors : uint32
HardErrors : uint32
SignalLossCount : uint32
TransmittedBeacons : uint32
Recoverys : uint32
LobeWires : uint32
Removes : uint32
Singles : uint32
FrequencyErrors : uint32
FibrePortEventCounters {D}
PLOGIsReceived : uint64
PLOGIsSent : uint64
EOFAbortsReceived : uint64
EOFAbortsTransmitted : uint64
PLOGOsReceived : uint64
PLOGOsSent : uint64
PLOGIsRejected : uint64
PLOGOsRejected : uint64
ResetCounter ([IN] SelectedCounter : uint16) : uint32
LLDPEthernetPortStatistics
TxDestMACAddress: string[]
RxPortFramesDiscardedTotal: uint32[]
RxPortFramesErrors: uint32[]
RxPortTLVsDiscardedTotal: uint32[]
TxPortFramesTotal: uint32[]
RxPortTLVsDiscardedTotal: uint32[]
RxPortTLVsUnrecognizedTotal: uint32[]
RxPortAgeoutsTotal: uint32[]
DataCenterEthernetPortStatistics
PfcRequests: uint32
PfcIndications: uint32

# Page 14 of 70: Fibre Channel




*ManagedElement*
(See Core Model)

*SettingDate*
(See Core Model)

*Capabilities*
(See Core Model)

*ManagedSystemElement*
(See Core Model)

FCSwitchSettings

PreferredDomainID : uint8
DomainIDLocked : boolean
PrincipalPriority : uint16 {enum}

FCPortSettings

RequestedType[] : uint16 {enum}

*LogicalElement*
(See Core Model)

*EnabledLogicalElement*
(See Core Model)

NetworkPortCapabilities

AutoSenseSpeedConfigurable : boolean
AutoSenseSpeedConfigurable : uint64[]

EnabledLogicalElementCapabilities

(See Core Model (Capabilities))

ZoneCapabilities

ZoneNameMaxLen : uint32
ZoneNameFormat : uint16 {enum}
MaxNumZoneSets : uint32
MaxNumZone : uint32
MaxNumZoneMembers : uint32
MaxNumZonesPerZoneSet : uint32
MaxNumZoneAliases : uint32
OtherSupportedConnectivityMemberTypes: string[]
SupportedConnectivityMemberTypes: uint16[] {enum}
PerrZoningSupportedt : uint16[] {enum, E}

*LogicalDevice*
(See Device Model (Overview))

NetworkPortCapabilities

NetworkIDsConfigurable : boolean
NetworkIDsFormat: uint16[] {enum}
SpeedConfigurable : boolean
LinkTechnologiesSupported : uint16[]
LinkTechnologiesSupported : uint64[]

FCSwitchCapabilities

DomainIDConfigureable : boolean
MinDomainID : uint8
MaxDomainID : uint8
DomainIDLockedSupported : boolean
PrincipalPrioritiesSupported: uint16[] {enum}
NPIVSupported: boolean

LogicalPort
(See Device Model (Logical Port))

*Service*
(See Core Model)

FCPortCapabilities

RequestedTypesSupported[] : uint16 {enum}
MaxNPIVLogins: uint16
NPIVSupported: boolean

FCPort

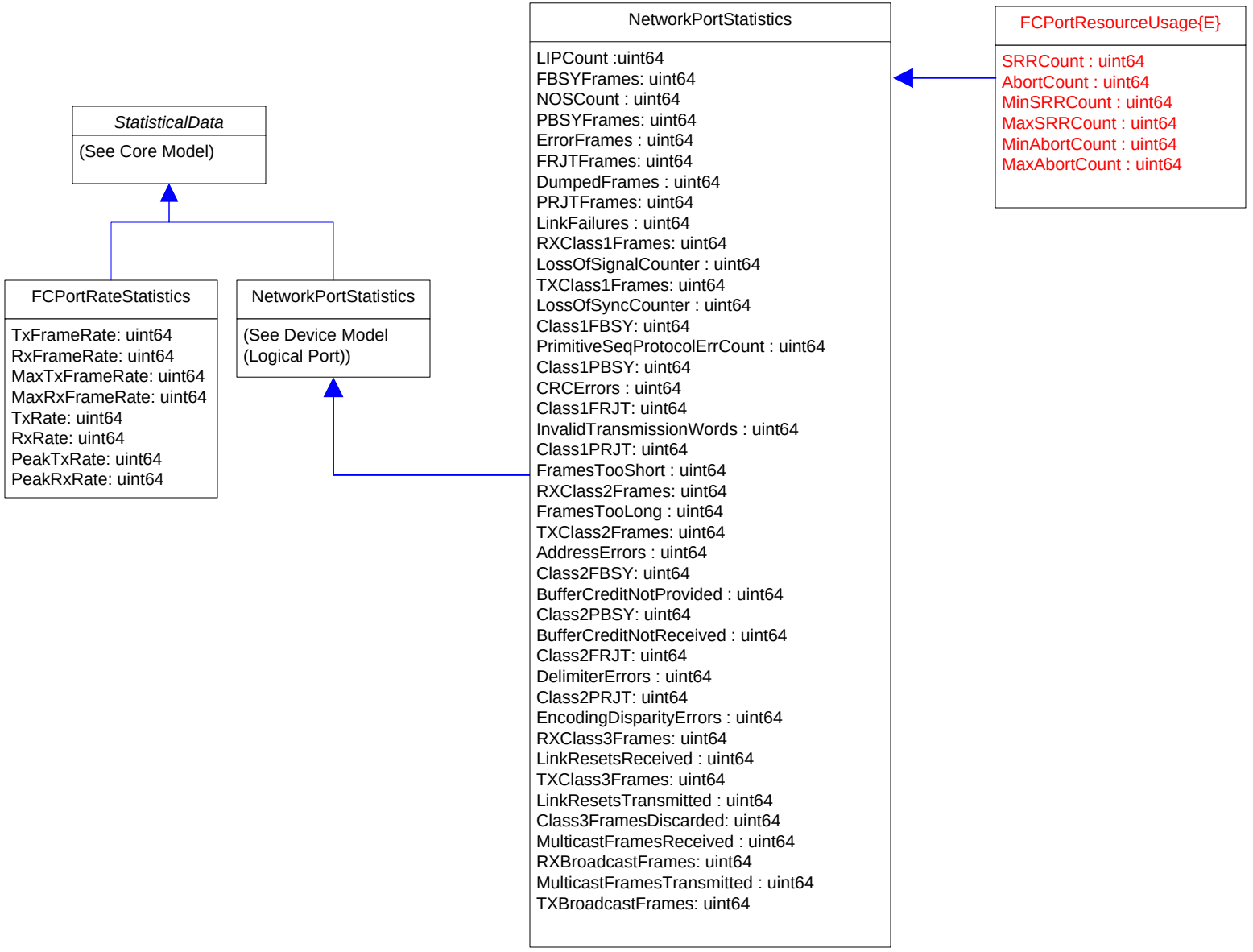
SupportedCOS : uint16[ ] {enum}
ActiveCOS : uint16[ ] {enum}
SupportedFC4Types : uint16[ ] {enum}
ActiveFC4Types : uint16[ ] {enum}
DetailedPortState: uint16 {enum}
DomainPortNumber: uint16 {E}
LogicalModulePortNumber: uint16
PortAvailability: uint16 {enum}
PortNumber: uint16
PortType: uint16 {enum}
PortDiscriminator: uint16[] {enum}

Decommission(
[IN] Force : boolean,
[IN] Messages : string[] ) uint32 {enum}

Decommission(
[IN] Messages : string[] ) uint32 {enum}

NetworkPort
(See Device Model (Logical Port))

FibreProtocolService
(See Device Model (FibreChannelService and Zoning))


NetworkPortStatistics
LIPCount :uint64
FBSYFrames: uint64
NOSCount : uint64
PBSYFrames: uint64
ErrorFrames : uint64
FRJTFrames: uint64
DumpedFrames : uint64
PRJTFrames: uint64
LinkFailures : uint64
RXClass1Frames: uint64
LossOfSignalCounter : uint64
TXClass1Frames: uint64
LossOfSyncCounter : uint64
Class1FBSY: uint64
PrimitiveSeqProtocolErrCount : uint64
Class1PBSY: uint64
CRCErrors : uint64
Class1FRJT: uint64
InvalidTransmissionWords : uint64
Class1PRJT: uint64
FramesTooShort : uint64
RXClass2Frames: uint64
FramesTooLong : uint64
TXClass2Frames: uint64
AddressErrors : uint64
Class2FBSY: uint64
BufferCreditNotProvided : uint64
Class2PBSY: uint64
BufferCreditNotReceived : uint64
Class2FRJT: uint64
DelimiterErrors : uint64
Class2PRJT: uint64
EncodingDisparityErrors : uint64
RXClass3Frames: uint64
LinkResetsReceived : uint64
TXClass3Frames: uint64
LinkResetsTransmitted : uint64
Class3FramesDiscarded: uint64
MulticastFramesReceived : uint64
RXBroadcastFrames: uint64
MulticastFramesTransmitted : uint64
TXBroadcastFrames: uint64
FCPortResourceUsage{E}
SRRCount : uint64
AbortCount : uint64
MinSRRCount : uint64
MaxSRRCount : uint64
MinAbortCount : uint64
MaxAbortCount : uint64
StatisticalData
(See Core Model)
FCPortRateStatistics
TxFrameRate: uint64
RxFrameRate: uint64
MaxTxFrameRate: uint64
MaxRxFrameRate: uint64
TxRate: uint64
RxRate: uint64
PeakTxRate: uint64
PeakRxRate: uint64
NetworkPortStatistics
(See Device Model
(Logical Port))

# Page 16 of 70: Fibre Channel Service & Zoning

Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

*Service*
(See Core Model)

ConnectivityCollection
(See Network Model)

ConnectivityMembershipSettingData
(See Network Model)

FibreProtocolSevice

ZoneMembershipSettingData

ZoneService

SessionState: uint16 {enum}
RequestedSessionState : uint16 {enum}
DefaultZoningState : uint16 {enum}
ConfigurationID: string

CreateZoneSet(
[IN] ZoneSetName: string {req'd},
[IN, OUT] ZoneSet: ref CIM_ZoneSet): uint32 enum

CreateZone(
[IN] ZoneName : string {req'd},
[IN] ZoneType : uint16 {enum},
[IN] ZoneSubType : uint16 {enum},
[IN, OUT] Zone : ref CIM_Zone) : uint32 {enum}

CreateZoneAlias(
[IN] CollectionAlias : string {req'd},
[IN, OUT] ZoneAlias : ref CIM_NamedAddressCollection) : uint32 {enum}

CreateZoneMembershipSettingData(
[IN] ConnectivityMemberType: uint16 {enum, req'd},
[IN] ConnectivityMemberID: string {req'd},
[IN] SystemSpecificCollection: ref CIM_SystemSpecificCollection {req'd},
[IN, OUT] ZoneMembershipSettingData : ref CIM_ZoneMembershipSettingData) : uint32 {enum}

AddZone(
[IN, OUT] ZoneSet : ref CIM_ZoneSet {req'd},
[IN] Zone : ref CIM_Zone) : uint32 {enum}

AddZoneAlias(
[IN] Zone : ref CIM_Zone {req'd},
[IN] ZoneAlias: ref CIM_NamedAddressCollection) : uint32 {enum}

ActivateZoneSetWithJob(
[IN] Activate: boolean,
[IN, OUT] ConfigurationID: string,
[OUT] Job: ref CIM_ConcreteJob,
[IN] ZoneSet: ref CIM_ZoneSet): uint32 {enum}

SessionControlWithJob (
[IN, OUT] ConfigurationID: string,
[IN] RequestedSessionState: uint16 {enum},
[OUT] Job: ref CIM_ConcreteJob): uint32 {enum}

ZoneSet

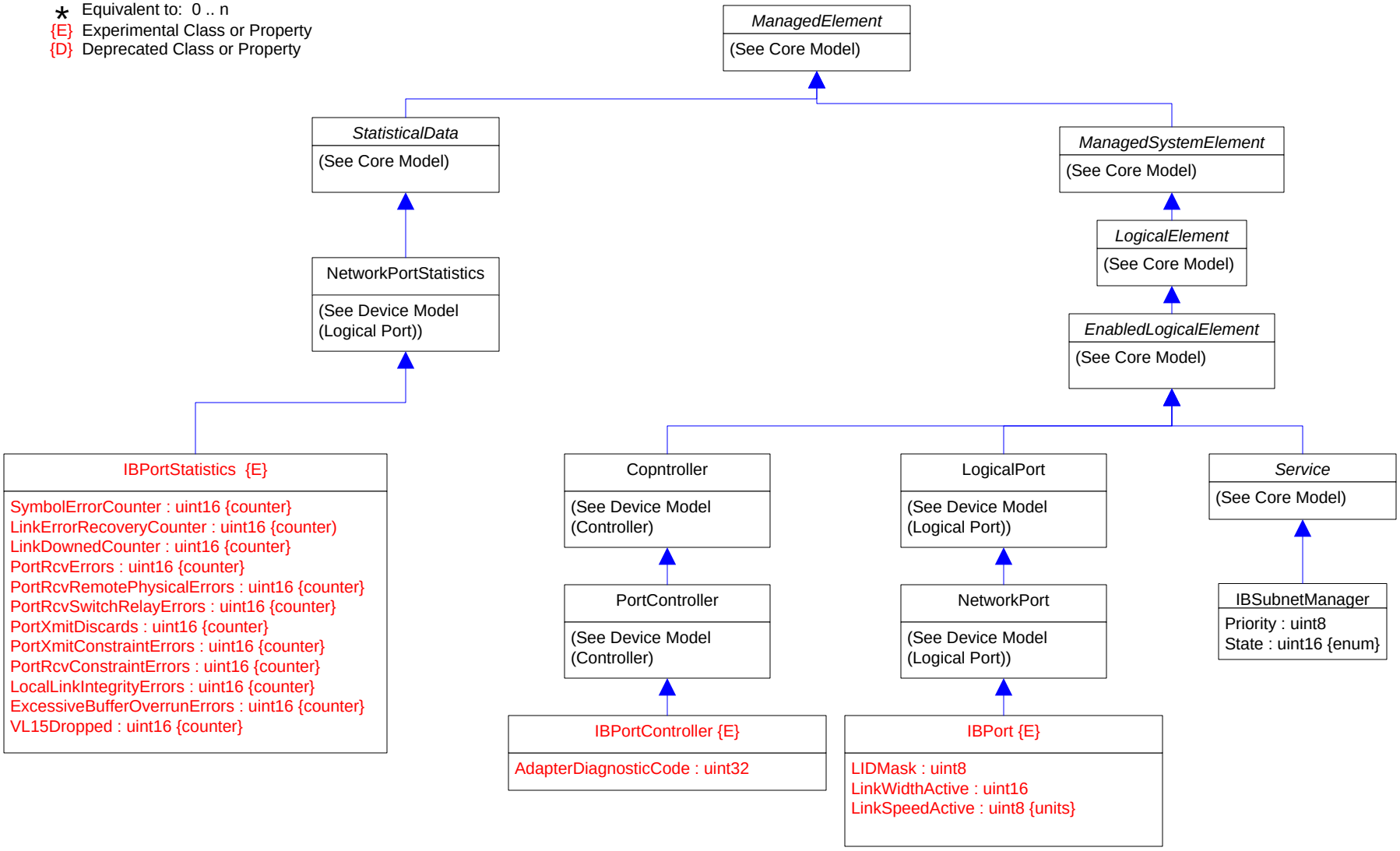
ElementName : string {override, req'd}
Active : boolean {req'd}

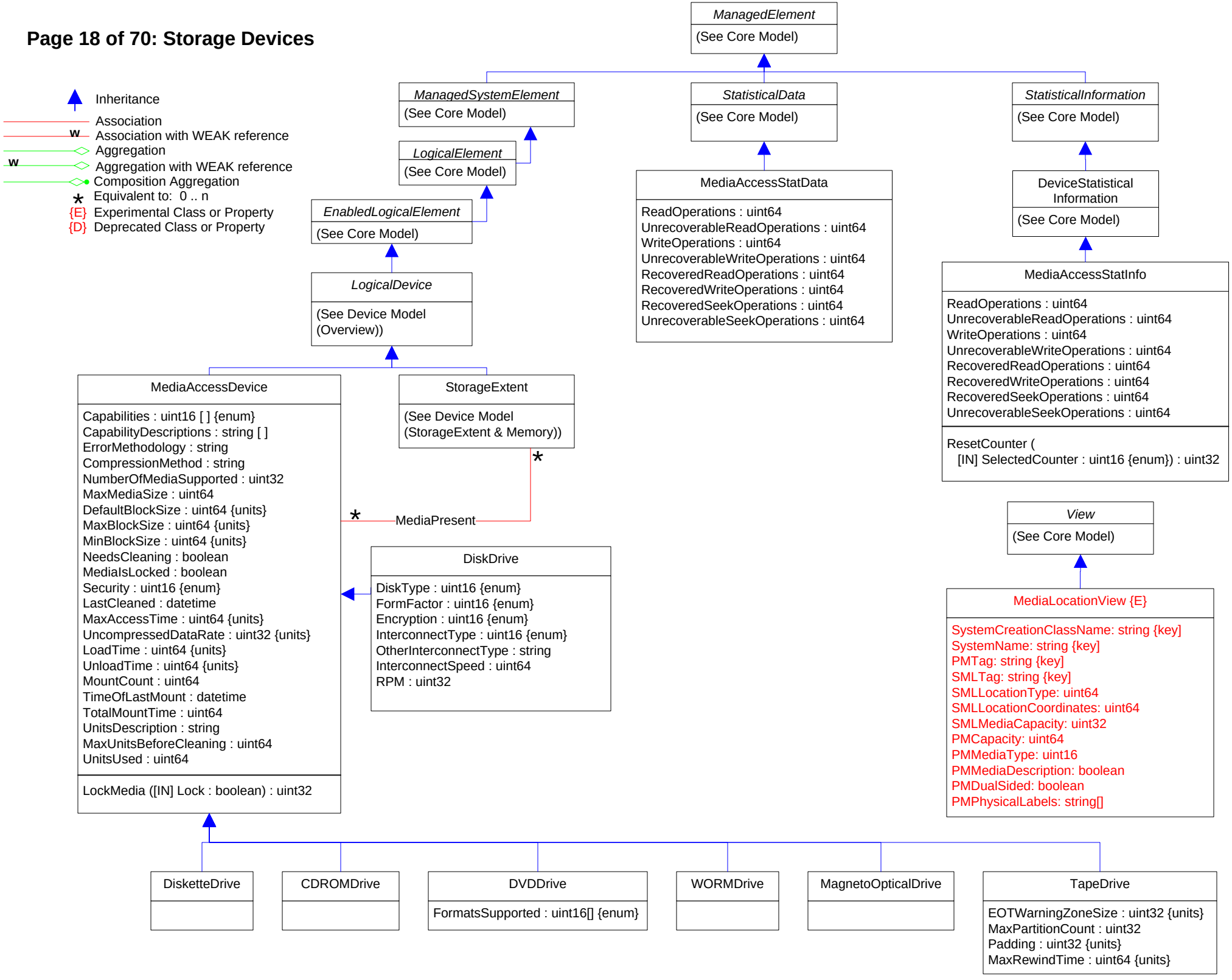
Zone

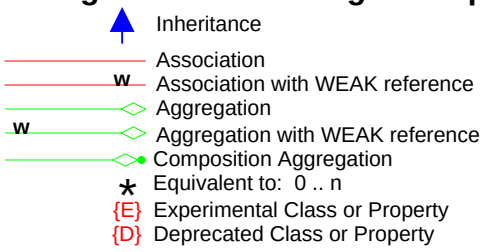
ElementName : string {override, req'd}
Active : boolean {req'd}
ZoneType : uint16 {enum, req'd}
OtherZoneTypeDescription : string
ZoneSubType : uint16 {enum}
OtherZoneSubTypeDescription : string

# Page 17 of 70: InfiniBand

Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property




Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
ManagedElement
(See Core Model)
ManagedSystemElement
(See Core Model)
StatisticalData
(See Core Model)
StatisticalInformation
(See Core Model)
LogicalElement
(See Core Model)
MediaAccessStatData
ReadOperations : uint64
UnrecoverableReadOperations : uint64
WriteOperations : uint64
UnrecoverableWriteOperations : uint64
RecoveredReadOperations : uint64
RecoveredWriteOperations : uint64
RecoveredSeekOperations : uint64
UnrecoverableSeekOperations : uint64
DeviceStatistical Information
(See Core Model)
EnabledLogicalElement
(See Core Model)
MediaAccessStatInfo
ReadOperations : uint64
UnrecoverableReadOperations : uint64
WriteOperations : uint64
UnrecoverableWriteOperations : uint64
RecoveredReadOperations : uint64
RecoveredWriteOperations : uint64
RecoveredSeekOperations : uint64
UnrecoverableSeekOperations : uint64
ResetCounter (
[IN] SelectedCounter : uint16 {enum}) : uint32
LogicalDevice
(See Device Model (Overview))
MediaAccessDevice
Capabilities : uint16 [ ] {enum}
CapabilityDescriptions : string [ ]
ErrorMethodology : string
CompressionMethod : string
NumberOfMediaSupported : uint32
MaxMediaSize : uint64
DefaultBlockSize : uint64 {units}
MaxBlockSize : uint64 {units}
MinBlockSize : uint64 {units}
NeedsCleaning : boolean
MediaIsLocked : boolean
Security : uint16 {enum}
LastCleaned : datetime
MaxAccessTime : uint64 {units}
UncompressedDataRate : uint32 {units}
LoadTime : uint64 {units}
UnloadTime : uint64 {units}
MountCount : uint64
TimeOfLastMount : datetime
TotalMountTime : uint64
UnitsDescription : string
MaxUnitsBeforeCleaning : uint64
UnitsUsed : uint64
LockMedia ([IN] Lock : boolean) : uint32
StorageExtent
(See Device Model (StorageExtent & Memory))
*
*
MediaPresent
DiskDrive
DiskType : uint16 {enum}
FormFactor : uint16 {enum}
Encryption : uint16 {enum}
InterconnectType : uint16 {enum}
OtherInterconnectType : string
InterconnectSpeed : uint64
RPM : uint32
View
(See Core Model)
MediaLocationView {E}
SystemCreationClassName: string {key}
SystemName: string {key}
PMTag: string {key}
SMLTag: string {key}
SMLLocationType: uint64
SMLLocationCoordinates: uint64
SMLMediaCapacity: uint32
PMCapacity: uint64
PMMediaType: uint16
PMMediaDescription: boolean
PMDualSided: boolean
PMPhysicalLabels: string[]
DisketteDrive
CDROMDrive
DVDDrive
FormatsSupported : uint16[] {enum}
WORMDrive
MagnetoOpticalDrive
TapeDrive
EOTWarningZoneSize : uint32 {units}
MaxPartitionCount : uint32
Padding : uint32 {units}
MaxRewindTime : uint64 {units}




*SystemSpecificCollection*
(See Core Model)

*Service*
(See Core Model)

*Capabilities*
(See Core Model)

*SCSITargetPortGroup*

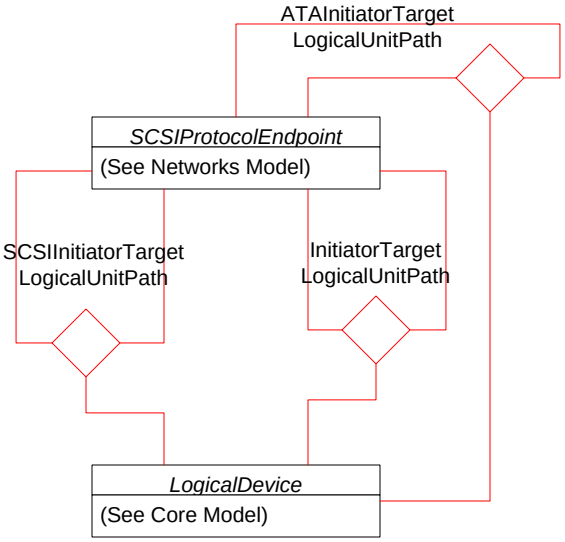
AccessState : uint16 {enum}
SupportsLuAssignment : boolean
ExplicitFailover : boolean
Preferred : boolean
Identifier : uint16

*SCSIPathConfigurationService*

SetTPGAccess (
  [IN] LogicalUnit : ref LogicalDevice
  [IN] TargetPortGroups : ref SCSITargetPortGroup []
  [IN] AccessStates {enum}
) : uint32 {enum}
SetLoadBalanceAlgorithm (
  [IN] LogicaDevice : ref LogicalDevice
  [IN] LoadBalanceAlgorithm : uint16 {enum}
  [IN] OtherLoadBalanceAlgorithmDescription : string
) : uint32 {enum}
AssignLogicalUnitToPortGroup (
  [IN] LogicalUnit : ref LogicalDevice
  [IN] TargetPortGroup : ref SCSITargetPortGroup
) : uint32 {enum}
SetOverridePath (
  [IN] Path : ref SCSIInitiatorTargetLogicalUnitPatH
) : uint32 {enum}
CancelOverridePath (
  [IN] LogicalUnit: ref LogicalDevice
) : uint32 {enum}

*SCSIMultipathConfigurationCapabilities*

SupportedLoadBalanceTypes : uint16 {enum}
OtherSupportedLoadBalanceAlgorithmNames : string []
OtherSupportedLoadBalanceVendorNames : string[]
CanSetTPGAccess : boolean
CanOverridePaths : boolean
ExposesPathDeviceFiles : boolean
DeviceNameFilespace : string
OnlySupportsSpecifiedProducts : boolean
MaximumWeight : uint32
PollingRateMax : uint32
CurrentPollingRate: uint32
AutoFailbackSupport : uint16 {Enum}
AutoFailbackEnabled : boolean
DefaultLoadBalanceType : uint16 {enum}



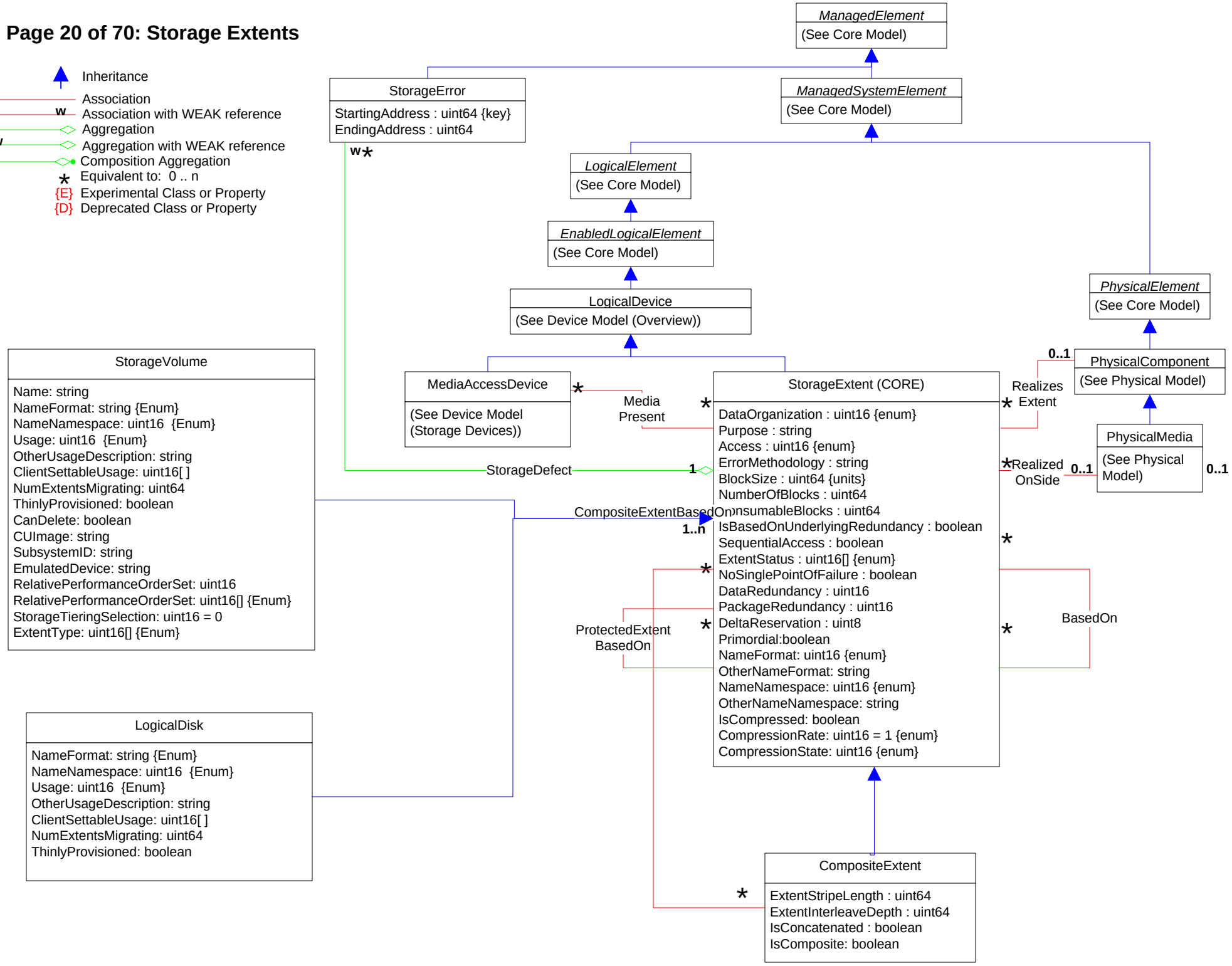

*SettingData*
(See Core Model)

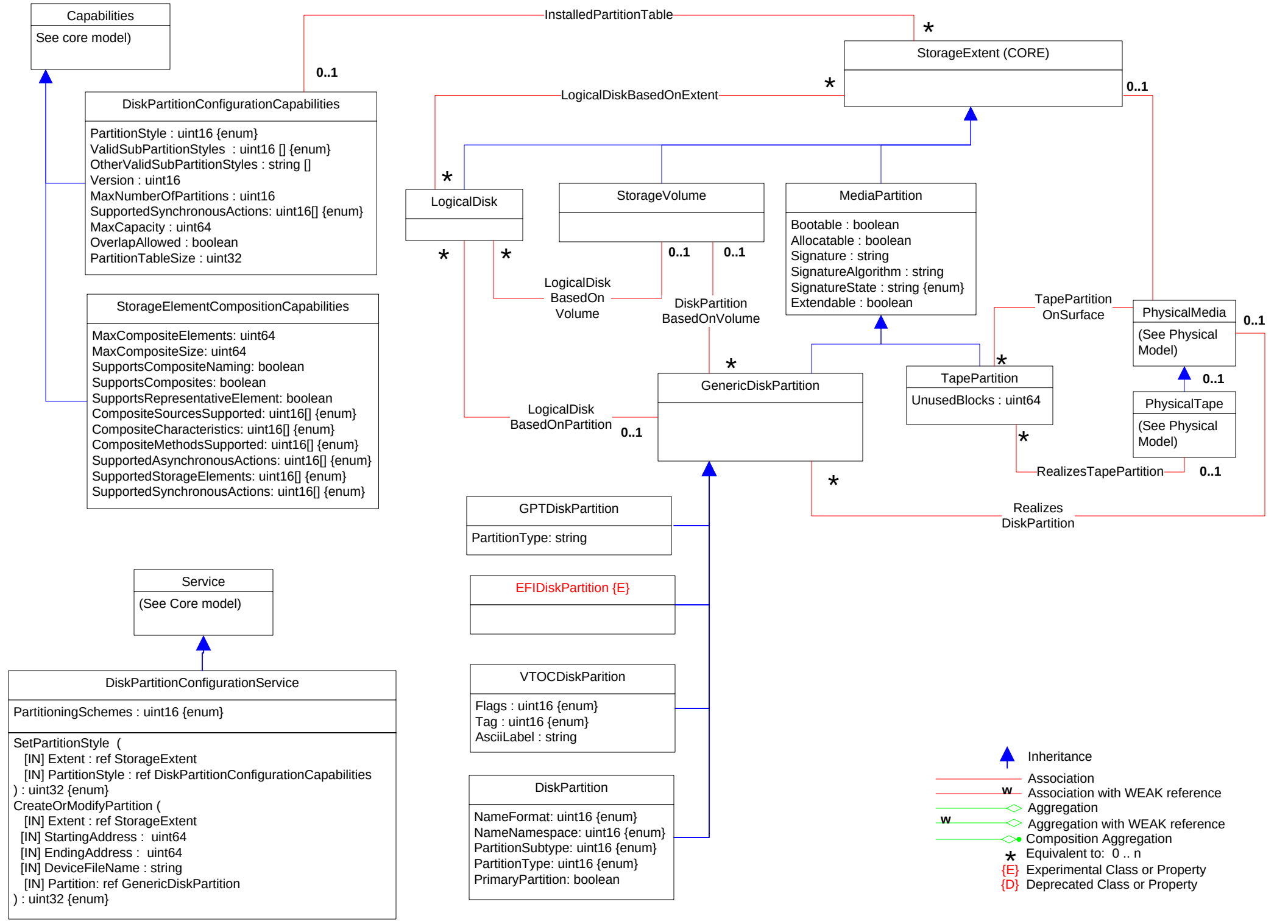
*SCSIMultipathSettings*

Asymmetric: boolean
AutoFailbackEnabled: uint16 {enum}
CurrentLoadBalanceType: uint16 {enum}
CurrentPollingRate: uint32
OtherCurrentLoadBalanceType: string
PollingRateMax: uint32

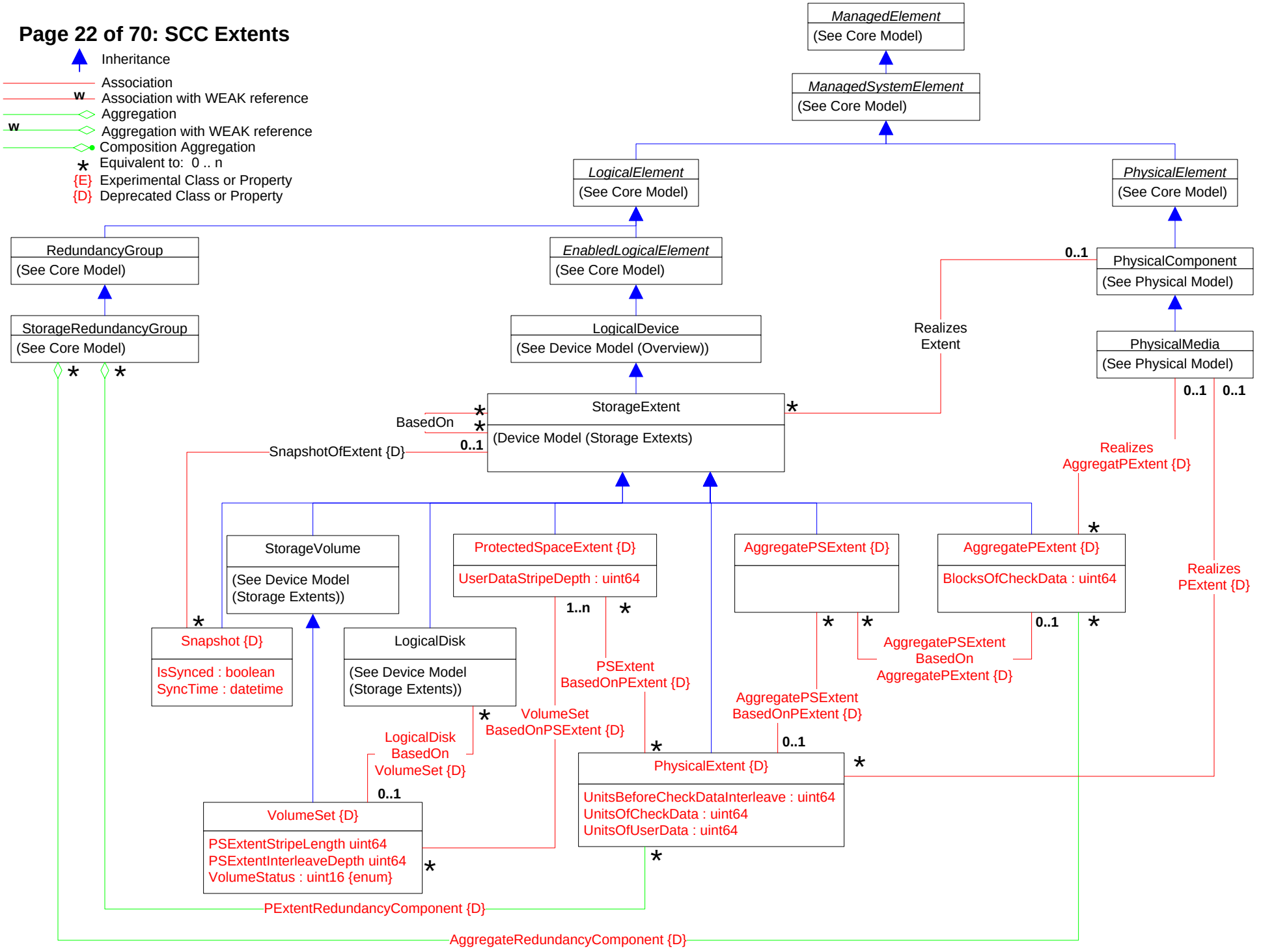
# Page 20 of 70: Storage Extents

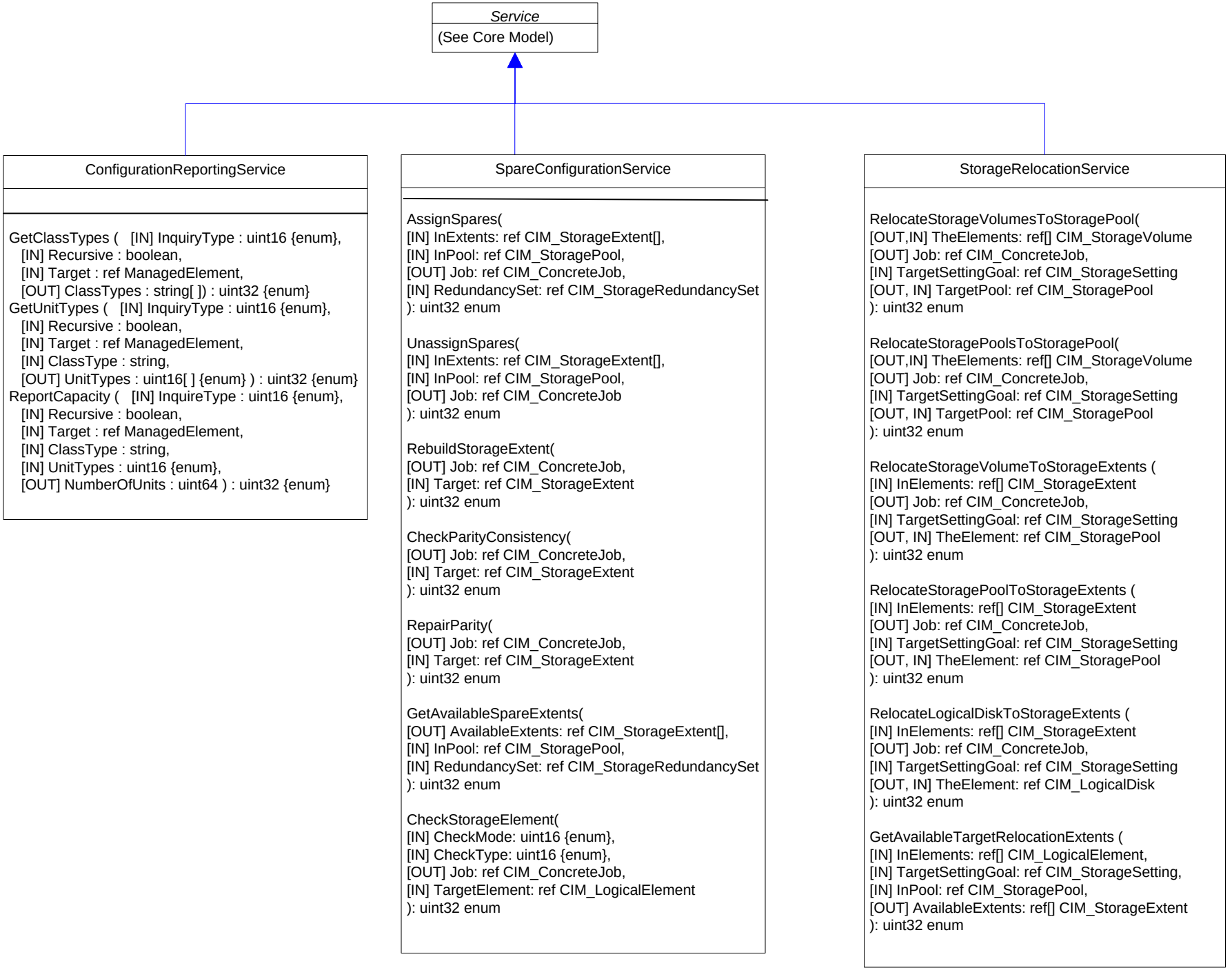


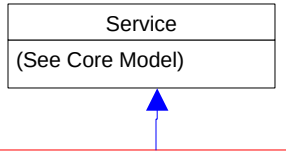




Capabilities
See core model)
InstalledPartitionTable
0..1
*
StorageExtent (CORE)
DiskPartitionConfigurationCapabilities
PartitionStyle : uint16 {enum}
ValidSubPartitionStyles : uint16 [] {enum}
OtherValidSubPartitionStyles : string []
Version : uint16
MaxNumberOfPartitions : uint16
SupportedSynchronousActions: uint16[] {enum}
MaxCapacity : uint64
OverlapAllowed : boolean
PartitionTableSize : uint32
LogicalDiskBasedOnExtent
0..1
LogicalDisk
StorageVolume
MediaPartition
Bootable : boolean
Allocatable : boolean
Signature : string
SignatureAlgorithm : string
SignatureState : string {enum}
Extendable : boolean
StorageElementCompositionCapabilities
MaxCompositeElements: uint64
MaxCompositeSize: uint64
SupportsCompositeNaming: boolean
SupportsComposites: boolean
SupportsRepresentativeElement: boolean
CompositeSourcesSupported: uint16[] {enum}
CompositeCharacteristics: uint16[] {enum}
CompositeMethodsSupported: uint16[] {enum}
SupportedAsynchronousActions: uint16[] {enum}
SupportedStorageElements: uint16[] {enum}
SupportedSynchronousActions: uint16[] {enum}
LogicalDisk BasedOn Volume
DiskPartition BasedOnVolume
TapePartition OnSurface
PhysicalMedia
(See Physical Model)
GenericDiskPartition
TapePartition
UnusedBlocks : uint64
PhysicalTape
(See Physical Model)
LogicalDisk BasedOnPartition
RealizesTapePartition
Realizes DiskPartition
GPTDiskPartition
PartitionType: string
EFIDiskPartition {E}
Service
(See Core model)
VTOCDiskParition
Flags : uint16 {enum}
Tag : uint16 {enum}
AsciiLabel : string
DiskPartitionConfigurationService
PartitioningSchemes : uint16 {enum}
SetPartitionStyle (
[IN] Extent : ref StorageExtent
[IN] PartitionStyle : ref DiskPartitionConfigurationCapabilities
) : uint32 {enum}
CreateOrModifyPartition (
[IN] Extent : ref StorageExtent
[IN] StartingAddress : uint64
[IN] EndingAddress : uint64
[IN] DeviceFileName : string
[IN] Partition: ref GenericDiskPartition
) : uint32 {enum}
DiskPartition
NameFormat: uint16 {enum}
NameNamespace: uint16 {enum}
PartitionSubtype: uint16 {enum}
PartitionType: uint16 {enum}
PrimaryPartition: boolean
Inheritance
Association
w
Association with WEAK reference
Aggregation
w
Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

# Page 22 of 70: SCC Extents

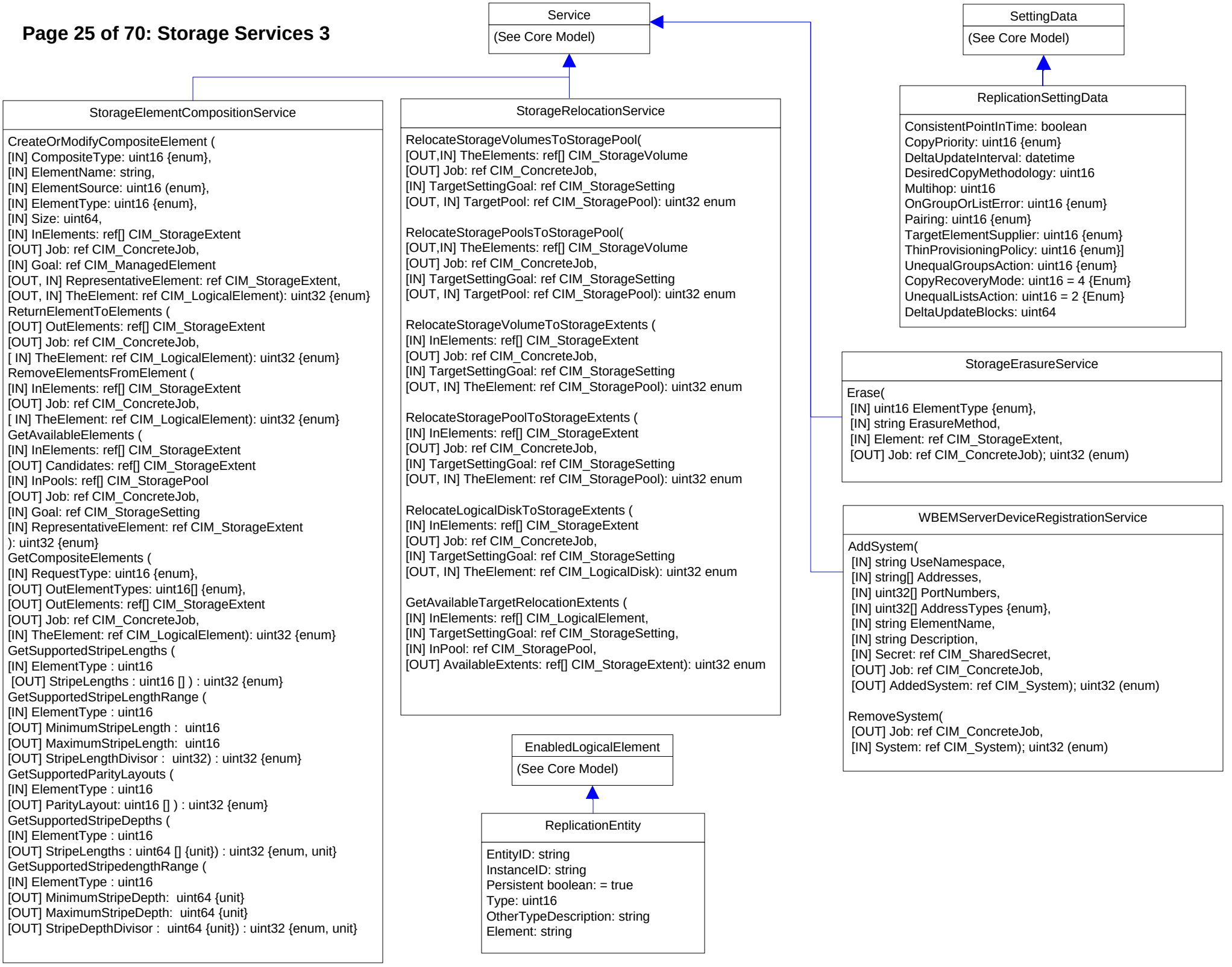


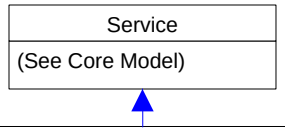

Service
(See Core Model)
ConfigurationReportingService
GetClassTypes ( [IN] InquiryType : uint16 {enum},
[IN] Recursive : boolean,
[IN] Target : ref ManagedElement,
[OUT] ClassTypes : string[ ]) : uint32 {enum}
GetUnitTypes ( [IN] InquiryType : uint16 {enum},
[IN] Recursive : boolean,
[IN] Target : ref ManagedElement,
[IN] ClassType : string,
[OUT] UnitTypes : uint16[ ] {enum} ) : uint32 {enum}
ReportCapacity ( [IN] InquireType : uint16 {enum},
[IN] Recursive : boolean,
[IN] Target : ref ManagedElement,
[IN] ClassType : string,
[IN] UnitTypes : uint16 {enum},
[OUT] NumberOfUnits : uint64 ) : uint32 {enum}
SpareConfigurationService
AssignSpares(
[IN] InExtents: ref CIM_StorageExtent[],
[IN] InPool: ref CIM_StoragePool,
[OUT] Job: ref CIM_ConcreteJob,
[IN] RedundancySet: ref CIM_StorageRedundancySet
): uint32 enum
UnassignSpares(
[IN] InExtents: ref CIM_StorageExtent[],
[IN] InPool: ref CIM_StoragePool,
[OUT] Job: ref CIM_ConcreteJob
): uint32 enum
RebuildStorageExtent(
[OUT] Job: ref CIM_ConcreteJob,
[IN] Target: ref CIM_StorageExtent
): uint32 enum
CheckParityConsistency(
[OUT] Job: ref CIM_ConcreteJob,
[IN] Target: ref CIM_StorageExtent
): uint32 enum
RepairParity(
[OUT] Job: ref CIM_ConcreteJob,
[IN] Target: ref CIM_StorageExtent
): uint32 enum
GetAvailableSpareExtents(
[OUT] AvailableExtents: ref CIM_StorageExtent[],
[IN] InPool: ref CIM_StoragePool,
[IN] RedundancySet: ref CIM_StorageRedundancySet
): uint32 enum
CheckStorageElement(
[IN] CheckMode: uint16 {enum},
[IN] CheckType: uint16 {enum},
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetElement: ref CIM_LogicalElement
): uint32 enum
StorageRelocationService
RelocateStorageVolumesToStoragePool(
[OUT,IN] TheElements: ref[] CIM_StorageVolume
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TargetPool: ref CIM_StoragePool
): uint32 enum
RelocateStoragePoolsToStoragePool(
[OUT,IN] TheElements: ref[] CIM_StorageVolume
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TargetPool: ref CIM_StoragePool
): uint32 enum
RelocateStorageVolumeToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_StoragePool
): uint32 enum
RelocateStoragePoolToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_StoragePool
): uint32 enum
RelocateLogicalDiskToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_LogicalDisk
): uint32 enum
GetAvailableTargetRelocationExtents (
[IN] InElements: ref[] CIM_LogicalElement,
[IN] TargetSettingGoal: ref CIM_StorageSetting,
[IN] InPool: ref CIM_StoragePool,
[OUT] AvailableExtents: ref[] CIM_StorageExtent
): uint32 enum




StorageConfigurationService

CreateOrModifyStoragePool{
[IN] string ElementName, [OUT] CIM_ConcreteJob ref Job, [IN] CIM_ManagedElement ref Goal, [IN] uint64 Size, [IN] string InPools[], [IN] string InExtents[], [OUT, IN] Pool: ref CIM_StoragePool ); uint32 (enum)
CreateOrModifyElementFromStoragePool(
[IN] string ElementName, [IN] uint16 ElementType, [IN] Job: ref CIM_ConcreteJob, [IN] Goal: ref CIM_ManagedElement, [IN] uint64 Size, [IN] InPool: refCIM_StoragePool, [OUT, IN] TheElement: ref CIM_LogicalElement ); uint32 (enum)
DeleteStoragePool(
[IN] Job: ref CIM_ConcreteJob, [IN] Pool: ref CIM_StoragePool ); uint32 (enum)
ReturnToStoragePool(
[IN] Job: ref CIM_ConcreteJob, [IN] TheElement: ref CIM_LogicalElement ); uint32 (enum)
CreateReplica(
[IN] string ElementName, [IN] Job: ref CIM_ConcreteJob, [IN] SourceElement: ref CIM_LogicalElement, [IN] TargetElement: ref CIM_LogicalElement, [IN] TargetSettingGoal" ref CIM_ManagedElement,
[IN] TargetPool: ref CIM_StoragePool, [IN] uint16 CopyType (enum)); uint32 (enum)
ModifySynchronization(
[IN] uint16 Operation, enum}, [IN] Job: ref CIM_ConcreteJob, [IN] Synchronization: ref CIM_StorageSynchronized ); uint32 (enum)
AttachReplica(
[IN] Job: ref CIM_ConcreteJob, [IN] SourceElement: ref CIM_ManagedElement, [IN] TargetElement: ref CIM_ManagedElement, [IN] uint16 CopyType {enum}); uint32 (enum)
AttachOrModifyReplica(
[IN] Job: ref CIM_ConcreteJob, [IN] SourceElement: ref CIM_ManagedElement, [IN] TargetElement: ref CIM_ManagedElement, [IN] uint16 CopyType, {enum} [IN] string Goal, [IN] ReplicationPipe: ref CIM_NetworkPipe ); uint32 (enum)
CreateOrModifyReplicationPipe(
[IN] string PipeElementName, [IN] SourceSystem: ref CIM_ComputerSystem, [IN] TargetSystem: ref CIM_ComputerSystem, [IN] SourceEndpoint: ref CIM_ProtocolEndpoint[],
[[IN] TargetEndpoint: ref CIM_ProtocolEndpoint[], [IN] string Goal, [OUT, IN] ReplicationPipe: ref CIM_NetworkPipe ); uint32 (enum)
CreateReplicationBuffer(
[IN] Job: ref CIM_ConcreteJob, [IN] Host: ref CIM_ManagedElement, [IN] TargetElement: ref CIM_StorageExtent, [IN] TargetPool: ref CIM_StoragePool, [IN] ReplicaBuffer: ref CIM_Memory ); uint32 (enum)
CreateOrModifyElementFromElements(
[IN] string ElementName, [IN] uint16 ElementType, {enum}, [IN] Job: ref CIM_ConcreteJob, [IN] Goal: ref CIM_ManagedElement, [IN] uint64 Size, [IN] InElements: ref CIM_StorageExtent[],
[OUT, IN] TheElement: ref CIM_LogicalElement ); uint32 (enum)
ScsiScan(
[OUT, IN] CIM_ConcreteJob ref Job, [IN] uint16 ConnectionType, {enum}, [IN] string OtherConnectionType, [IN] Initiators: ref CIM_SCSIProtocolEndpoint[], [IN] string Targets[], [IN] string LogicalUnits[]
); uint32 (enum)
RequestUsageChange(
[IN] uint16 Operation, {enum}, [IN] uint16 UsageValue, [IN] string OtherUsageDescription, [IN] Job: ref CIM_ConcreteJob, [IN] TheElement: ref CIM_LogicalElement ); uint32 (enum)
GetElementsBasedOnUsage(
[IN] uint16 ElementType, {enum}, [IN] uint16 Usage, [IN] uint16 Criteria, {enum}, [IN] ThePool: ref CIM_StoragePool, [IN] TheElements: ref CIM_ManagedSystemElement[]); uint32 (enum)
AssignStorageResourceAffinity(
[IN] uint16 ResourceType, [IN] Job: ref CIM_ConcreteJob, [IN] StorageProcessor: ref CIM_ComputerSystem, [IN] StorageResources: ref CIM_LogicalElement[]); uint32 (enum)
CreateElementsFromStoragePools(
[IN] string ElementNames[], [IN] uint16 ElementType, {enum}, [IN] uint64 ElementCount, [OUT] Job: ref CIM_ConcreteJob, [IN] Goal: ref CIM_SettingData, [IN] uint64 Size, [IN] InPools: ref CIM_StoragePool[],
[IN] Collections: ref CIM_Collection, [IN] TheElements: ref CIM_LogicalElement[]); uint32 (enum)
ReturnElementsToStoragePool(
[IN] uint16 Options, {enum}, [IN] Job: ref CIM_ConcreteJob, [IN] TheElements: ref CIM_LogicalElement[]); uint32 (enum)
GetAvailableTargetElements(
[IN] SourceElement: ref CIM_LogicalElement, [IN] TargetPool: ref CIM_StoragePool[]), [IN] uint16 CopyType, {enum}, [OUT] Candidates: ref CIM_LogicalElement[]); uint32 (enum)


Service
(See Core Model)
SettingData
(See Core Model)
StorageElementCompositionService
CreateOrModifyCompositeElement (
[IN] CompositeType: uint16 {enum},
[IN] ElementName: string,
[IN] ElementSource: uint16 (enum},
[IN] ElementType: uint16 {enum},
[IN] Size: uint64,
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] Goal: ref CIM_ManagedElement
[OUT, IN] RepresentativeElement: ref CIM_StorageExtent,
[OUT, IN] TheElement: ref CIM_LogicalElement): uint32 {enum}
ReturnElementToElements (
[OUT] OutElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[ IN] TheElement: ref CIM_LogicalElement): uint32 {enum}
RemoveElementsFromElement (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[ IN] TheElement: ref CIM_LogicalElement): uint32 {enum}
GetAvailableElements (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Candidates: ref[] CIM_StorageExtent
[IN] InPools: ref[] CIM_StoragePool
[OUT] Job: ref CIM_ConcreteJob,
[IN] Goal: ref CIM_StorageSetting
[IN] RepresentativeElement: ref CIM_StorageExtent
): uint32 {enum}
GetCompositeElements (
[IN] RequestType: uint16 {enum},
[OUT] OutElementTypes: uint16[] {enum},
[OUT] OutElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TheElement: ref CIM_LogicalElement): uint32 {enum}
GetSupportedStripeLengths (
[IN] ElementType : uint16
[OUT] StripeLengths : uint16 [] ) : uint32 {enum}
GetSupportedStripeLengthRange (
[IN] ElementType : uint16
[OUT] MinimumStripeLength : uint16
[OUT] MaximumStripeLength: uint16
[OUT] StripeLengthDivisor : uint32) : uint32 {enum}
GetSupportedParityLayouts (
[IN] ElementType : uint16
[OUT] ParityLayout: uint16 [] ) : uint32 {enum}
GetSupportedStripeDepths (
[IN] ElementType : uint16
[OUT] StripeLengths : uint64 [] {unit}) : uint32 {enum, unit}
GetSupportedStripedengthRange (
[IN] ElementType : uint16
[OUT] MinimumStripeDepth: uint64 {unit}
[OUT] MaximumStripeDepth: uint64 {unit}
[OUT] StripeDepthDivisor : uint64 {unit}) : uint32 {enum, unit}
StorageRelocationService
RelocateStorageVolumesToStoragePool(
[OUT,IN] TheElements: ref[] CIM_StorageVolume
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TargetPool: ref CIM_StoragePool): uint32 enum
RelocateStoragePoolsToStoragePool(
[OUT,IN] TheElements: ref[] CIM_StorageVolume
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TargetPool: ref CIM_StoragePool): uint32 enum
RelocateStorageVolumeToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_StoragePool): uint32 enum
RelocateStoragePoolToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_StoragePool): uint32 enum
RelocateLogicalDiskToStorageExtents (
[IN] InElements: ref[] CIM_StorageExtent
[OUT] Job: ref CIM_ConcreteJob,
[IN] TargetSettingGoal: ref CIM_StorageSetting
[OUT, IN] TheElement: ref CIM_LogicalDisk): uint32 enum
GetAvailableTargetRelocationExtents (
[IN] InElements: ref[] CIM_LogicalElement,
[IN] TargetSettingGoal: ref CIM_StorageSetting,
[IN] InPool: ref CIM_StoragePool,
[OUT] AvailableExtents: ref[] CIM_StorageExtent): uint32 enum
ReplicationSettingData
ConsistentPointInTime: boolean
CopyPriority: uint16 {enum}
DeltaUpdateInterval: datetime
DesiredCopyMethodology: uint16
Multihop: uint16
OnGroupOrListError: uint16 {enum}
Pairing: uint16 {enum}
TargetElementSupplier: uint16 {enum}
ThinProvisioningPolicy: uint16 {enum}]
UnequalGroupsAction: uint16 {enum}
CopyRecoveryMode: uint16 = 4 {Enum}
UnequalListsAction: uint16 = 2 {Enum}
DeltaUpdateBlocks: uint64
StorageErasureService
Erase(
[IN] uint16 ElementType {enum},
[IN] string ErasureMethod,
[IN] Element: ref CIM_StorageExtent,
[OUT] Job: ref CIM_ConcreteJob); uint32 (enum)
WBEMServerDeviceRegistrationService
AddSystem(
[IN] string UseNamespace,
[IN] string[] Addresses,
[IN] uint32[] PortNumbers,
[IN] uint32[] AddressTypes {enum},
[IN] string ElementName,
[IN] string Description,
[IN] Secret: ref CIM_SharedSecret,
[OUT] Job: ref CIM_ConcreteJob,
[OUT] AddedSystem: ref CIM_System); uint32 (enum)
RemoveSystem(
[OUT] Job: ref CIM_ConcreteJob,
[IN] System: ref CIM_System); uint32 (enum)
EnabledLogicalElement
(See Core Model)
ReplicationEntity
EntityID: string
InstanceID: string
Persistent boolean: = true
Type: uint16
OtherTypeDescription: string
Element: string




ReplicationService

CreateGroup([IN] GroupName: string,[IN] Members: ref[] CIM_LogicalElement,[IN] Persistent: boolean,[IN] DeleteOnEmptyElement: boolean,[IN] DeleteOnUnassociated: boolean,[OUT] ServiceAccessPoint: ref[] CIM_ReplicationGroup,[IN] ReplicationSettingData: string, [IN] ReservedAs uint16): uint32 enum

DeleteGroup([IN] ReplicationGroup: ref CIM_ReplicationGroup,[IN] ServiceAccessPoint: ref CIM_ServiceAccessPoint,[IN] RemoveElements: boolean,[IN] ReplicationSettingData: string): uint32 enum

AddMembers([IN] Members: ref[] CIM_LogicalElement,[IN] ReplicationGroup: ref CIM_ReplicationGroup,[IN] ServiceAccessPoint: ref CIM_ServiceAccessPoint,[IN] ReplicationSettingData: string): uint32 enum

RemoveMembers([IN] Members: ref[] CIM_LogicalElement,[IN] DeleteOnEmptyElement: boolean,[IN] ReplicationGroup: ref CIM_ReplicationGroup,[IN] ReplicationSettingData: string): uint32 enum

CreateElementReplica([IN] ElementName: string,[IN] SyncType: string {enum},[IN] Mode: string {enum},[IN] SourceElement: ref CIM_LogicalElement,[IN] SourceAccessPoint: ref CIM_ServiceAccessPoint,[OUT,IN] TargetElement: ref CIM_LogicalElement,[IN] ReplicationSettingData: string,[OUT,IN] Synchronization: ref CIM_Synchronized,[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool, [IN] WaitForCopyState: uint16,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection, [IN] Collections: ref[] CIM_Collection): uint32 enum

CreateGroupReplica(
[IN] RelationshipName: string,[IN] SyncType: uint16 {enum},[IN] Mode: uint16 {enum},[IN] SourceGroup: ref CIM_ReplicationGroup,[IN] SourceElement: ref CIM_LogicalElement,[IN] SourceAccessPoint: ref CIM_ServiceAccessPoint,[IN] TargetGroup: ref CIM_ReplicationGroup,[IN] TargetElementCount: uint64,[IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN] Consistency: uint16 {enum},[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronization: ref CIM_Synchronized,[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool, [IN] WaitForCopyState: uint16,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection, [IN] Collections: ref[] CIM_Collection): uint32 enum

CreateSynchronizationAspect([IN] Name: string,[IN] SyncType: uint16 {enum},[IN] Mode: uint16 {enum},[IN] SourceGroup: ref CIM_ReplicationGroup,[IN] SourceElement: ref CIM_ManagedElement, [IN] SourceAccessPoint: ref CIM_ServiceAccessPoint,[IN] Consistency: uint16 {enum},[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[OUT] SettingsState: ref CIM_SettingsDefineState ): uint32 enum

ModifyReplicaSynchronization([IN] Operation: uint16 {enum},[IN] Synchronization: ref CIM_Synchronized,[IN] ReplicationSettingData: string,[IN] SyncPair: ref[] CIM_StorageSynchronized,[IN] SyncPair: ref[] CIM_Synchronized,[OUT] Job: ref CIM_ConcreteJob,[OUT] SettingsState: ref CIM_SettingsDefineState[IN] Force: boolean,[IN] WaitForCopyState: uint16, [IN] UpdatedSynchronization: ref CIM_Synchronized): uint32 enum

ModifyListSynchronization([IN] Operation: uint16 {enum},[IN] Synchronization: ref[] CIM_Synchronized,[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[OUT] SettingsState: ref CIM_SettingsDefineState,[IN] Force: boolean,[IN] WaitForCopyState: uint16, [IN] UpdatedSynchronization: ref[] CIM_Synchronized): uint32 enum

ModifySettingsDefineState([IN] Operation: uint16 {enum},[IN] SettingsState: ref CIM_SettingsDefineState,[IN,OUT] TargetElement: ref CIM_LogicalElement,[IN,OUT] TargetGroup: ref CIM_ReplicationGroup,[IN] TargetElementCount: string,[IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN] Synchronization: ref[] CIM_Synchronized,[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool,[IN] WaitForCopyState: uint16, [IN] ElementName: string, [IN] Collection: ref[] CIM_Collection): uint32 enum

GetAvailableTargetElements([IN] SourceElement: ref CIM_LogicalElement,[IN] SyncType: uint16 {enum},[IN] Mode: uint16,[IN] ReplicationSettingData: string,[IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN] TargetSettingGoal: ref[] CIM_SettingData,[IN] TargetPools: ref[] CIM_ResourcePool,[OUT] Job: ref CIM_ConcreteJob,[IN] Candidates: ref[] CIM_LogicalElement, [IN] MaxElementCount: uint16): uint32 enum

GetPeerSystems([IN] Options: uint16,[OUT] Job: ref CIM_ConcreteJob,[OUT] Systems: ref[] CIM_ComputerSystem, [OUT] LocalAccessPoints: ref[] CIM_ServiceAccessPoint, [OUT] RemoteAccessPoints: ref[] CIM_ServiceAccessPoin): uint32 enum

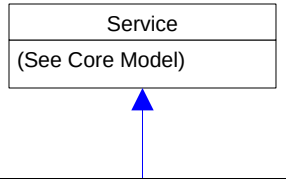
GetReplicationRelationships([IN] Type: uint16 (enum),[IN] SyncType: uint16 (enum),[IN] Mode: uint16 (enum),[IN] Locality: uint16 (enum),[IN] CopyState: uint16 (enum),[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronizations: ref[] CIM_Synchronized, [IN] ReplicationSettingData: string): uint32 enum

GetServiceAccessPoints([IN] System: ref CIM_ComputerSystem,[OUT] Job: ref CIM_ConcreteJob,[OUT] ComputerSystem: ref[] CIM_ServiceAccessPoint): uint32 enum

AddReplicationEntity([IN] ReplicationEntity: string,[IN] Persistent: boolean,[IN] InstanceNamespace: string,[OUT] ReplicationEntityPath: ref CIM_ReplicationEntity,): uint32 enum

AddServiceAccessPoint([IN] ServiceAccessPoint: string,[IN] InstanceNamespace: string,[OUT] ServiceAccessPointPath: ref CIM_ServiceAccessPoint): uint32 enum

AddSharedSecret([IN] SharedSecret: string,[IN] ServiceAccessPoint: ref CIM_ServiceAccessPoint,[IN] InstanceNamespace: string,[OUT] SharedSecretPath: ref CIM_SharedSecret): uint32 enum




ReplicationService (continued)

CreateListReplica([IN] ElementNames: string[],[IN] SyncType: uint16 {enum},[IN] Mode: uint16 {enum},[IN] SourceElements: ref[] CIM_LogicalElement,[IN] SourceAccessPoint: ref CIM_ServiceAccessPoint,[IN] TargetElements: ref[] CIM_LogicalElement,[IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronizations: ref[] CIM_Synchronized,[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool,[IN] WaitForCopyState: uint16,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection, [IN] Consistency: uint16, [IN] Collections: ref[] CIM_Collection ): uint32 enum

CreateGroupReplicaFromElements([IN] RelationshipName: string,[IN] SyncType: uint16 {enum},[IN] Mode: uint16 {enum}, [IN,OUT] SourceGroup: ref CIM_ReplicationGroupt [IN] SourceElements: ref[] CIM_LogicalElement,[IN] SourceGroupName: string,[IN] SourceAccessPoint: ref CIM_ServiceAccessPoint,[IN,OUT] TargetGroup: ref CIM_ReplicationGroup, [IN,OUT] TargetGroupName: string,[IN] TargetElements ref[] CIM_LogicalElement, [IN] TargetElements: string[], [IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN] Consistency: uint16 {enum},[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronization: ref CIM_Synchronized[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool,[IN] TargetPoosl: ref[] CIM_ResourcePool,[IN] WaitForCopyState: uint16,[IN] Collections: ref[] CIM_Collection ): uint32 enum

GetReplicationRelationshipInstances([IN] Type: uint16 {enum},[IN] SyncType: uint16 {enum},[IN] Mode: uint16 {enum},[IN] Locality: uint16 {enum},[IN] CopyState: uint16,[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronization: ref CIM_Synchronized[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool,[IN] Synchronizations: string[], [IN] ReplicationSettingData: string): uint32 enum

ModifyListSettingsDefineState([IN] Operation: uint16 {enum},[IN] SettingsState: ref CIM_SettingsDefineState,[IN] TargetElements: ref[] CIM_LogicalElement,[IN,OUT] TargetGroup: ref CIM_ReplicationGroup,[IN] TargetElementCount: uint64,[IN] TargetAccessPoint: ref CIM_ServiceAccessPoint,[IN,OUT] Synchronization: ref[] CIM_Synchronized[IN] ReplicationSettingData: string,[OUT] Job: ref CIM_ConcreteJob,[IN] TargetSettingGoal: ref CIM_SettingData,[IN] TargetPool: ref CIM_ResourcePool,[IN] WaitForCopyState: uint16, [IN] ElementNames: string[], [IN] Collections: ref[] CIM_Collection): uint32 enum

AddToRemoteReplicationCollection([IN] LocalAccessPoints: ref[] CIM_ServiceAccessPoint,[IN] RemoteAccessPoints: ref CIM_ServiceAccessPoint, [IN] RemoteComputerSystem: ref CIM_ComputerSystem,[OUT] Job: ref CIM_ConcreteJob,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection): uint32 enum

CreateRemoteReplicationCollection([IN] ElementName: string,[IN] LocalAccessPoints: ref CIM_ServiceAccessPoint,[IN] RemoteAccessPoints: ref CIM_ServiceAccessPoint,[IN] RemoteComputerSystem: ref CIM_ComputerSystem,[IN] Active: boolean,[IN] DeleteOnUnassociated: boolean,[OUT] Job: ref CIM_ConcreteJob,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection,[IN] ReplicationSettingData: string): uint32 enum

RemoveFromRemoteReplicationCollection([IN] LocalAccessPoints: ref CIM_ServiceAccessPoint,[IN] RemoteAccessPoints: ref CIM_ServiceAccessPoint,[IN] RemoteComputerSystem: ref CIM_ComputerSystem, [OUT] Job: ref CIM_ConcreteJob,[IN] ConnectivityCollection: ref CIM_ConnectivityCollection): uint32 enum

CreateGroupReplicaFromElementSynchronizations([IN] RelationshipNam: string, [IN] ElementSynchronizations ref[] CIM_Synchronized,[IN,OUT] SourceGroupName,string[] [IN,OUT] SourceGroup: ref CIM_ReplicationGroup, [IN] SourceAccessPoint: ref CIM_ServiceAccessPoint, ,[IN,OUT] TargetGroupName:string[] , [IN,OUT] string[] SourceGroupName, [IN,OUT] TargetGroup ref CIM_ReplicationGroup, [IN] TargetAccessPoint: ref CIM_ServiceAccessPoint, [IN] Consistency: uint16 , [IN] ReplicationSettingData: string , [OUT] Job: ref CIM_ConcreteJob, [OUT] GroupSynchronization ref CIM_Synchronized, [IN] WaitForCopyState: uint16 ): uint32 enum

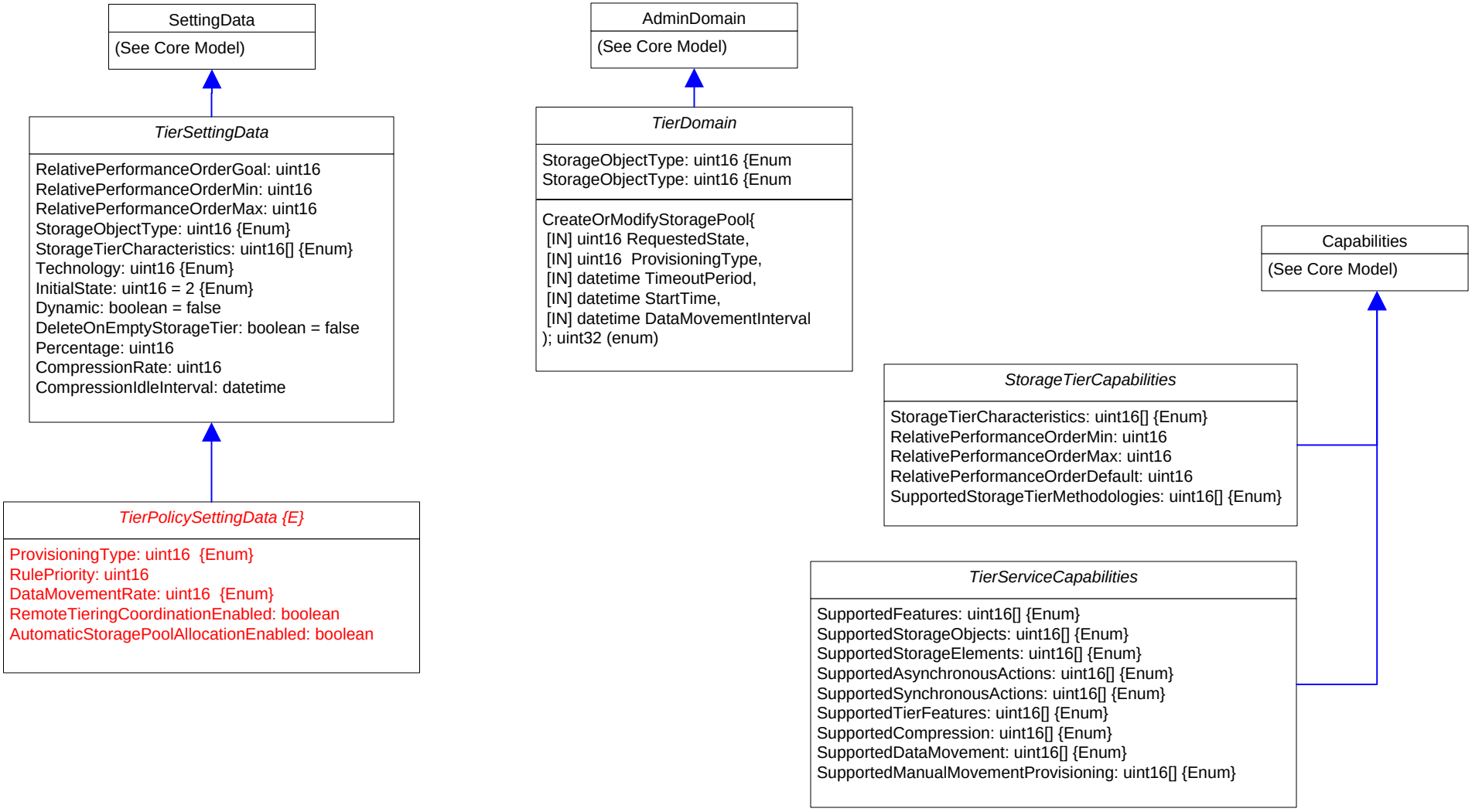
GetSynchronizationAspects([IN] SyncType: uint16, [IN] Mode: uint16, [IN] Locality: uint16, [IN] SyncState: uint16, [OUT] Job: ref CIM_ConcreteJob, [IN] CachedData: boolean, [IN] ReplicationSettingData: string, [OUT] SynchronizationAspects: ref[] CIM_SynchronizationAspect,): uint32 enum

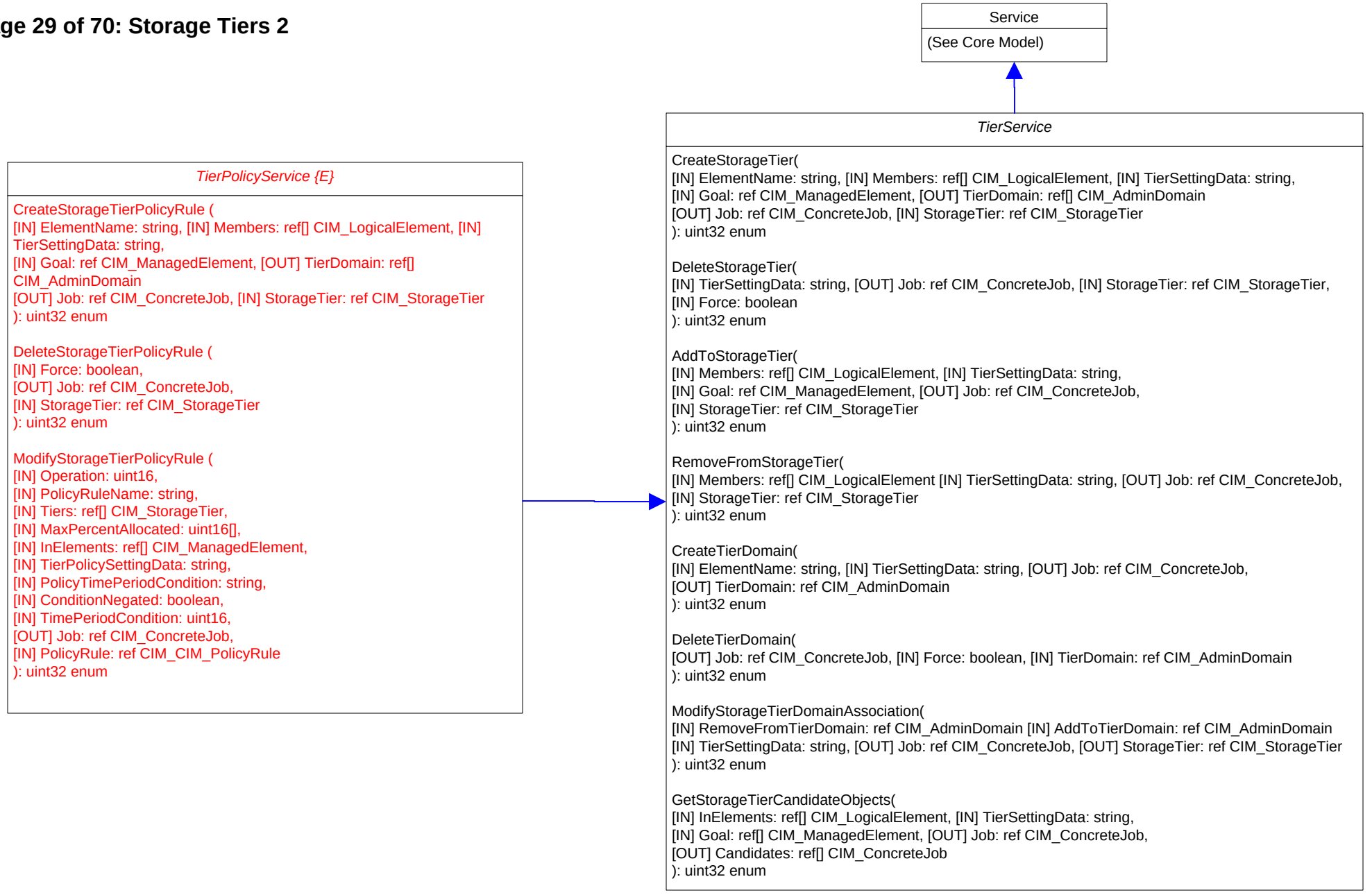
GetSynchronizationAspectInstances([IN] SyncType: uint16, [IN] Mode: uint16, [IN] Locality: uint16, [IN] SyncState: uint16, [OUT] Job: ref CIM_ConcreteJob, [IN] CachedData: boolean, [IN] ReplicationSettingData: string, [OUT] SynchronizationAspects: string,): uint32 enum

CreateGroupReplicaFromElementSynchronizations( [IN] Synchronized ref CIM_Synchronized, [IN] SourceElements ref[] CIM_LogicalElement, [IN] TargetElements ref[] CIM_LogicalElement, [IN] SourceAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetGroupName: uint16, [IN] ReplicationSettingData: string, [OUT] Job: ref CIM_ConcreteJob, [OUT] Synchronizations ref[] CIM_Synchronized, [IN] WaitForCopyState: uint16 ): uint32 enum

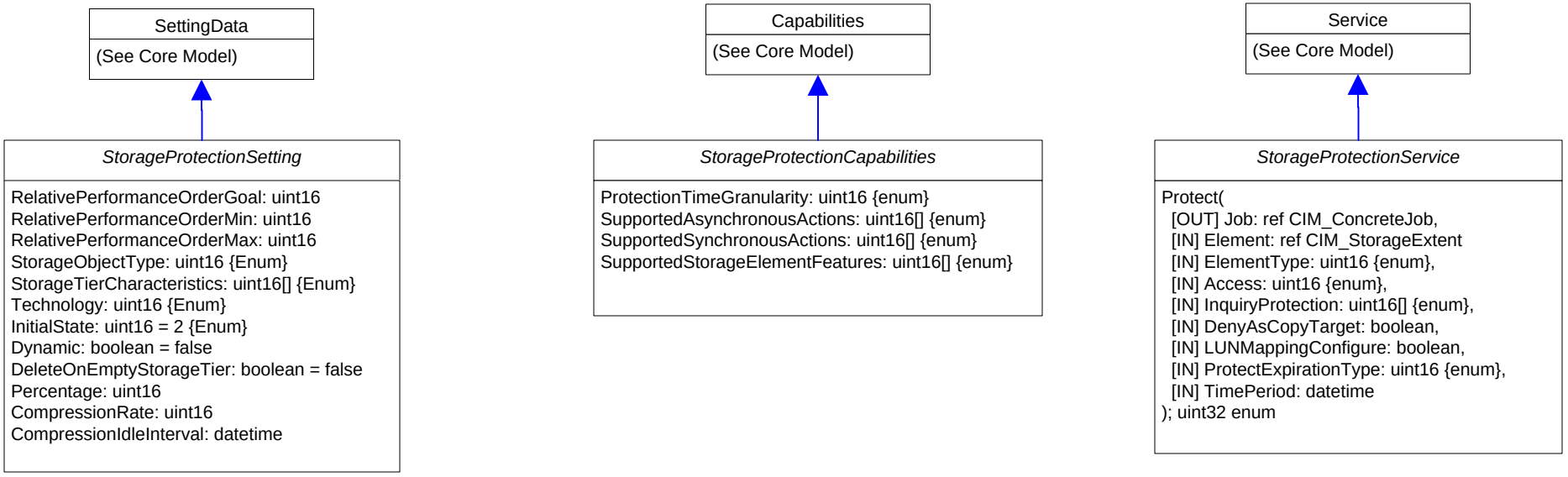
ConfirmTargetData( [IN] Synchronized ref CIM_Synchronized, [IN] SourceAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetGroupName: uint16, [IN] ReplicationSettingData: string, [OUT] Job: ref CIM_ConcreteJob, [IN] ConnectivityCollection ref CIM_ConnectivityCollection, [IN] WaitTime: datetime): uint32 enum

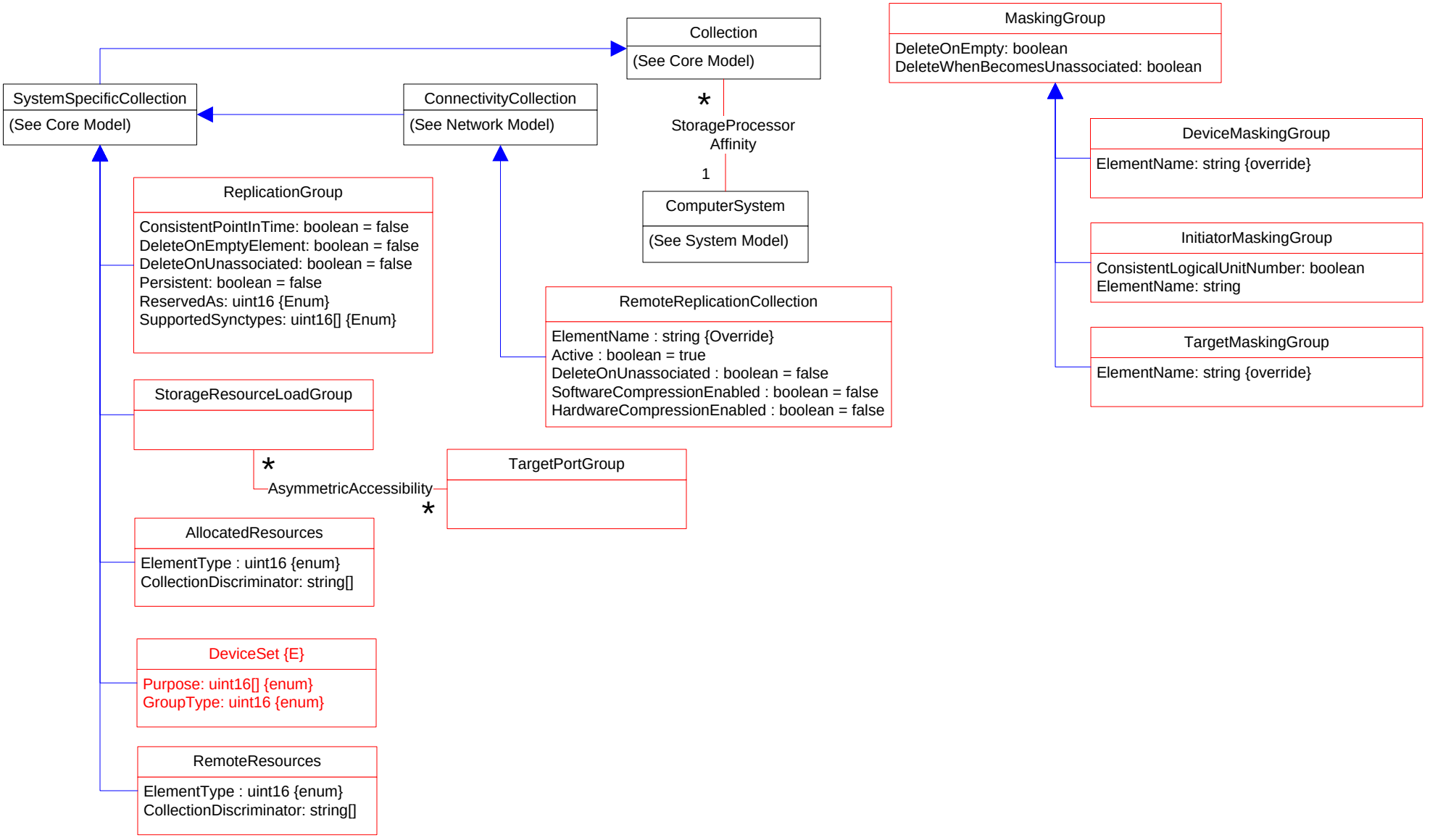
CreateListSynchronizationAspect([IN] Names: string[],[IN] SyncType:uint16,[IN] Mode:uint16,[IN] SourceElements ref[] ManagedElement,[IN] SourceAccessPoint ref ServiceAccessPoint,[IN] Consistency:uint16,[IN] ReplicationSettingData:string,[OUT] Job ref ConcreteJob,[OUT] SettingsStates ref[] SettingsDefineState) : uint32

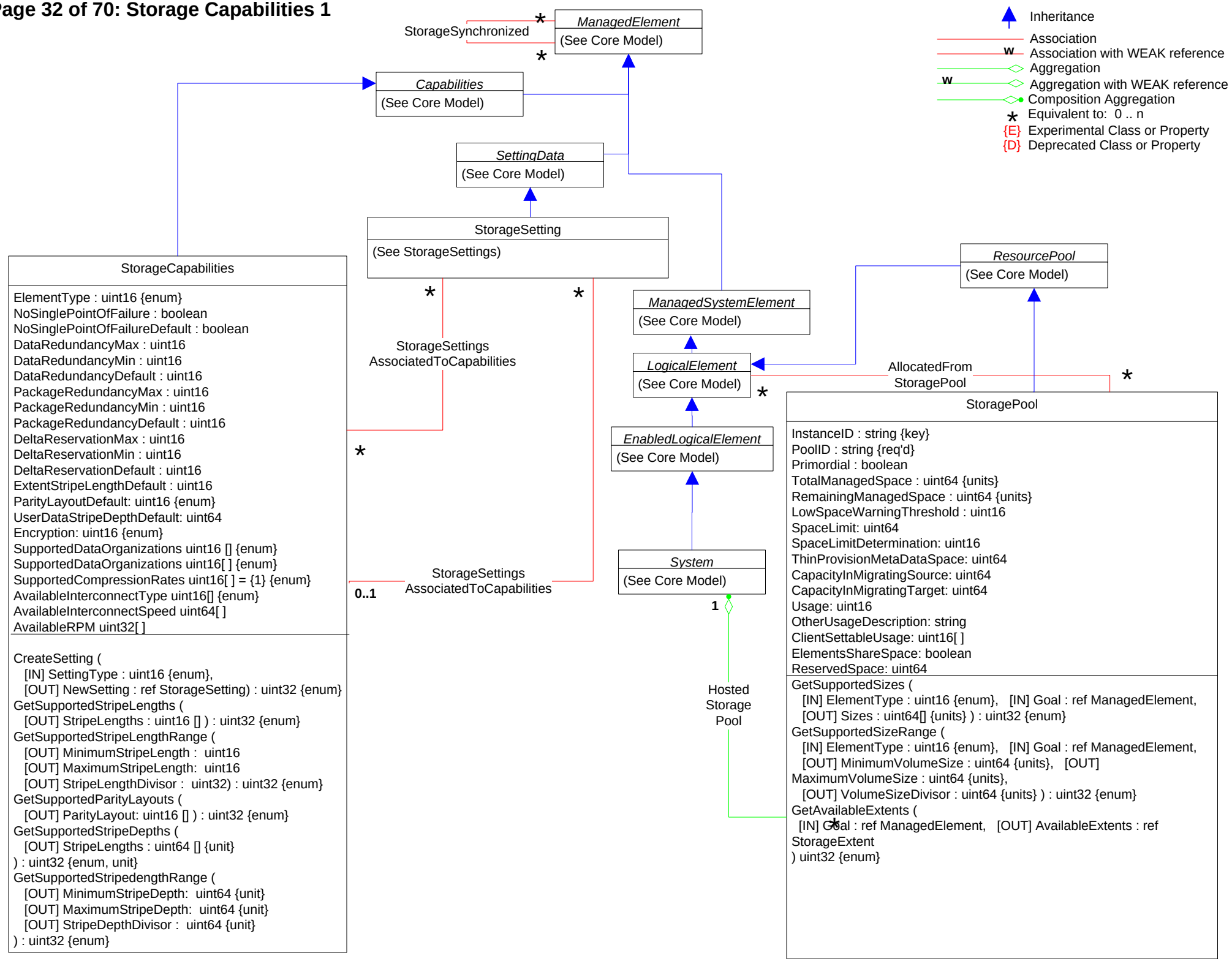

SettingData
(See Core Model)
AdminDomain
(See Core Model)
TierSettingData
RelativePerformanceOrderGoal: uint16
RelativePerformanceOrderMin: uint16
RelativePerformanceOrderMax: uint16
StorageObjectType: uint16 {Enum}
StorageTierCharacteristics: uint16[] {Enum}
Technology: uint16 {Enum}
InitialState: uint16 = 2 {Enum}
Dynamic: boolean = false
DeleteOnEmptyStorageTier: boolean = false
Percentage: uint16
CompressionRate: uint16
CompressionIdleInterval: datetime
TierDomain
StorageObjectType: uint16 {Enum
StorageObjectType: uint16 {Enum
CreateOrModifyStoragePool{
[IN] uint16 RequestedState,
[IN] uint16 ProvisioningType,
[IN] datetime TimeoutPeriod,
[IN] datetime StartTime,
[IN] datetime DataMovementInterval
); uint32 (enum)
Capabilities
(See Core Model)
StorageTierCapabilities
StorageTierCharacteristics: uint16[] {Enum}
RelativePerformanceOrderMin: uint16
RelativePerformanceOrderMax: uint16
RelativePerformanceOrderDefault: uint16
SupportedStorageTierMethodologies: uint16[] {Enum}
TierPolicySettingData {E}
ProvisioningType: uint16 {Enum}
RulePriority: uint16
DataMovementRate: uint16 {Enum}
RemoteTieringCoordinationEnabled: boolean
AutomaticStoragePoolAllocationEnabled: boolean
TierServiceCapabilities
SupportedFeatures: uint16[] {Enum}
SupportedStorageObjects: uint16[] {Enum}
SupportedStorageElements: uint16[] {Enum}
SupportedAsynchronousActions: uint16[] {Enum}
SupportedSynchronousActions: uint16[] {Enum}
SupportedTierFeatures: uint16[] {Enum}
SupportedCompression: uint16[] {Enum}
SupportedDataMovement: uint16[] {Enum}
SupportedManualMovementProvisioning: uint16[] {Enum}

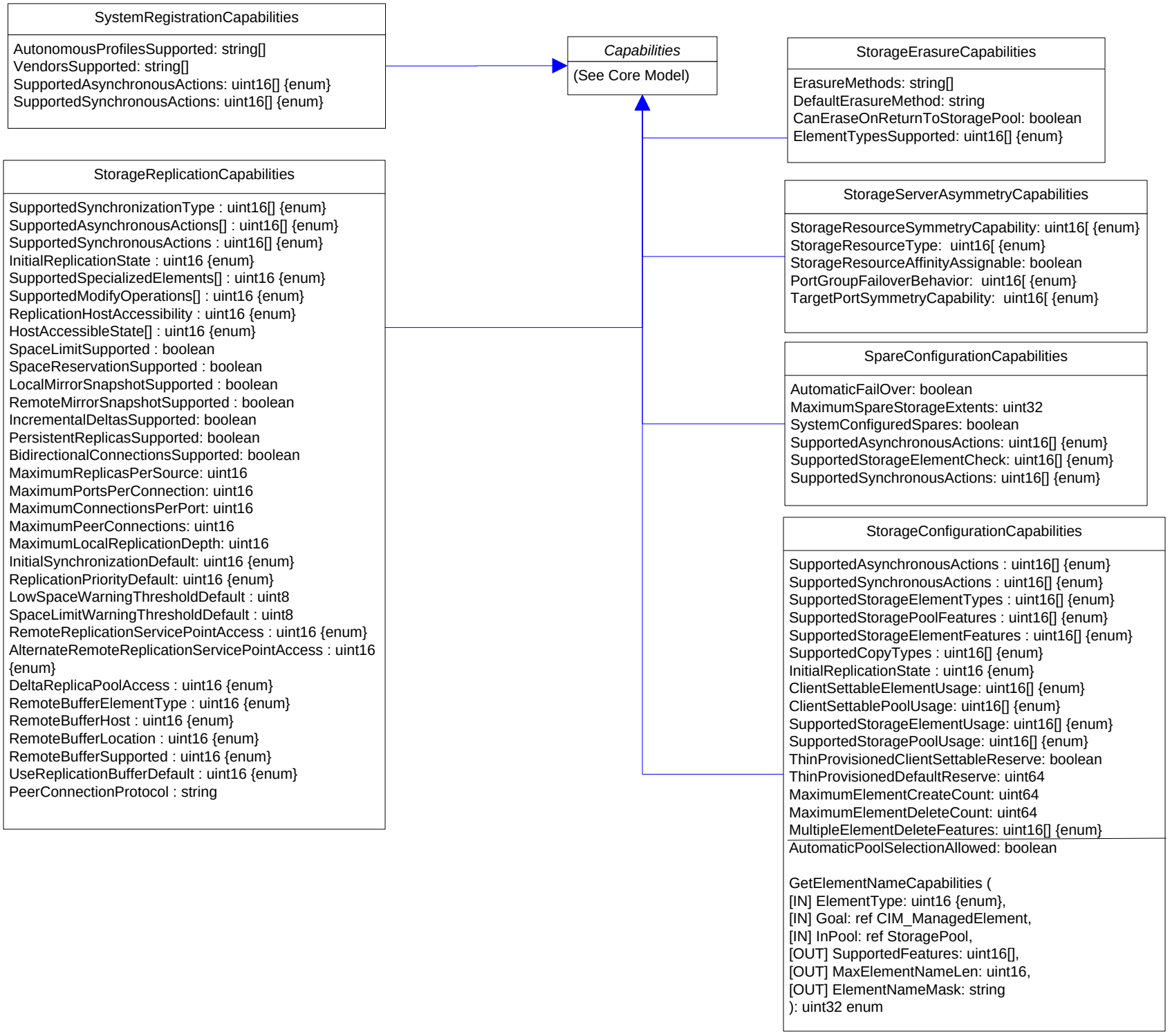

Service
(See Core Model)
TierService
CreateStorageTier(
[IN] ElementName: string, [IN] Members: ref[] CIM_LogicalElement, [IN] TierSettingData: string,
[IN] Goal: ref CIM_ManagedElement, [OUT] TierDomain: ref[] CIM_AdminDomain
[OUT] Job: ref CIM_ConcreteJob, [IN] StorageTier: ref CIM_StorageTier
): uint32 enum
DeleteStorageTier(
[IN] TierSettingData: string, [OUT] Job: ref CIM_ConcreteJob, [IN] StorageTier: ref CIM_StorageTier,
[IN] Force: boolean
): uint32 enum
AddToStorageTier(
[IN] Members: ref[] CIM_LogicalElement, [IN] TierSettingData: string,
[IN] Goal: ref CIM_ManagedElement, [OUT] Job: ref CIM_ConcreteJob,
[IN] StorageTier: ref CIM_StorageTier
): uint32 enum
RemoveFromStorageTier(
[IN] Members: ref[] CIM_LogicalElement [IN] TierSettingData: string, [OUT] Job: ref CIM_ConcreteJob,
[IN] StorageTier: ref CIM_StorageTier
): uint32 enum
CreateTierDomain(
[IN] ElementName: string, [IN] TierSettingData: string, [OUT] Job: ref CIM_ConcreteJob,
[OUT] TierDomain: ref CIM_AdminDomain
): uint32 enum
DeleteTierDomain(
[OUT] Job: ref CIM_ConcreteJob, [IN] Force: boolean, [IN] TierDomain: ref CIM_AdminDomain
): uint32 enum
ModifyStorageTierDomainAssociation(
[IN] RemoveFromTierDomain: ref CIM_AdminDomain [IN] AddToTierDomain: ref CIM_AdminDomain
[IN] TierSettingData: string, [OUT] Job: ref CIM_ConcreteJob, [OUT] StorageTier: ref CIM_StorageTier
): uint32 enum
GetStorageTierCandidateObjects(
[IN] InElements: ref[] CIM_LogicalElement, [IN] TierSettingData: string,
[IN] Goal: ref[] CIM_ManagedElement, [OUT] Job: ref CIM_ConcreteJob,
[OUT] Candidates: ref[] CIM_ConcreteJob
): uint32 enum
TierPolicyService {E}
CreateStorageTierPolicyRule (
[IN] ElementName: string, [IN] Members: ref[] CIM_LogicalElement, [IN] TierSettingData: string,
[IN] Goal: ref CIM_ManagedElement, [OUT] TierDomain: ref[] CIM_AdminDomain
[OUT] Job: ref CIM_ConcreteJob, [IN] StorageTier: ref CIM_StorageTier
): uint32 enum
DeleteStorageTierPolicyRule (
[IN] Force: boolean,
[OUT] Job: ref CIM_ConcreteJob,
[IN] StorageTier: ref CIM_StorageTier
): uint32 enum
ModifyStorageTierPolicyRule (
[IN] Operation: uint16,
[IN] PolicyRuleName: string,
[IN] Tiers: ref[] CIM_StorageTier,
[IN] MaxPercentAllocated: uint16[],
[IN] InElements: ref[] CIM_ManagedElement,
[IN] TierPolicySettingData: string,
[IN] PolicyTimePeriodCondition: string,
[IN] ConditionNegated: boolean,
[IN] TimePeriodCondition: uint16,
[OUT] Job: ref CIM_ConcreteJob,
[IN] PolicyRule: ref CIM_CIM_PolicyRule
): uint32 enum

## Page 30 of 70: Storage Protection

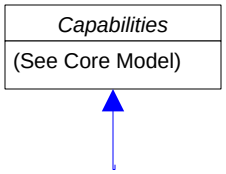



Collection
(See Core Model)
SystemSpecificCollection
(See Core Model)
ConnectivityCollection
(See Network Model)
*
StorageProcessor Affinity
1
ComputerSystem
(See System Model)
MaskingGroup
DeleteOnEmpty: boolean
DeleteWhenBecomesUnassociated: boolean
DeviceMaskingGroup
ElementName: string {override}
InitiatorMaskingGroup
ConsistentLogicalUnitNumber: boolean
ElementName: string
TargetMaskingGroup
ElementName: string {override}
ReplicationGroup
ConsistentPointInTime: boolean = false
DeleteOnEmptyElement: boolean = false
DeleteOnUnassociated: boolean = false
Persistent: boolean = false
ReservedAs: uint16 {Enum}
SupportedSynctypes: uint16[] {Enum}
RemoteReplicationCollection
ElementName : string {Override}
Active : boolean = true
DeleteOnUnassociated : boolean = false
SoftwareCompressionEnabled : boolean = false
HardwareCompressionEnabled : boolean = false
StorageResourceLoadGroup
*
AsymmetricAccessibility
*
TargetPortGroup
AllocatedResources
ElementType : uint16 {enum}
CollectionDiscriminator: string[]
DeviceSet {E}
Purpose: uint16[] {enum}
GroupType: uint16 {enum}
RemoteResources
ElementType : uint16 {enum}
CollectionDiscriminator: string[]


Inheritance
Association
Association with WEAK reference
Aggregation
Aggregation with WEAK reference
Composition Aggregation
Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
StorageSynchronized
ManagedElement
(See Core Model)
Capabilities
(See Core Model)
SettingData
(See Core Model)
StorageSetting
(See StorageSettings)
StorageCapabilities
ElementType : uint16 {enum}
NoSinglePointOfFailure : boolean
NoSinglePointOfFailureDefault : boolean
DataRedundancyMax : uint16
DataRedundancyMin : uint16
DataRedundancyDefault : uint16
PackageRedundancyMax : uint16
PackageRedundancyMin : uint16
PackageRedundancyDefault : uint16
DeltaReservationMax : uint16
DeltaReservationMin : uint16
DeltaReservationDefault : uint16
ExtentStripeLengthDefault : uint16
ParityLayoutDefault: uint16 {enum}
UserDataStripeDepthDefault: uint64
Encryption: uint16 {enum}
SupportedDataOrganizations uint16 [] {enum}
SupportedDataOrganizations uint16[ ] {enum}
SupportedCompressionRates uint16[ ] = {1} {enum}
AvailableInterconnectType uint16[] {enum}
AvailableInterconnectSpeed uint64[ ]
AvailableRPM uint32[ ]
CreateSetting (
[IN] SettingType : uint16 {enum},
[OUT] NewSetting : ref StorageSetting) : uint32 {enum}
GetSupportedStripeLengths (
[OUT] StripeLengths : uint16 [] ) : uint32 {enum}
GetSupportedStripeLengthRange (
[OUT] MinimumStripeLength : uint16
[OUT] MaximumStripeLength: uint16
[OUT] StripeLengthDivisor : uint32) : uint32 {enum}
GetSupportedParityLayouts (
[OUT] ParityLayout: uint16 [] ) : uint32 {enum}
GetSupportedStripeDepths (
[OUT] StripeLengths : uint64 [] {unit}
) : uint32 {enum, unit}
GetSupportedStripedengthRange (
[OUT] MinimumStripeDepth: uint64 {unit}
[OUT] MaximumStripeDepth: uint64 {unit}
[OUT] StripeDepthDivisor : uint64 {unit}
) : uint32 {enum}
StorageSettings
AssociatedToCapabilities
StorageSettings
AssociatedToCapabilities
0..1
ManagedSystemElement
(See Core Model)
LogicalElement
(See Core Model)
EnabledLogicalElement
(See Core Model)
System
(See Core Model)
1
Hosted
Storage
Pool
ResourcePool
(See Core Model)
AllocatedFrom
StoragePool
StoragePool
InstanceID : string {key}
PoolID : string {req'd}
Primordial : boolean
TotalManagedSpace : uint64 {units}
RemainingManagedSpace : uint64 {units}
LowSpaceWarningThreshold : uint16
SpaceLimit: uint64
SpaceLimitDetermination: uint16
ThinProvisionMetaDataSpace: uint64
CapacityInMigratingSource: uint64
CapacityInMigratingTarget: uint64
Usage: uint16
OtherUsageDescription: string
ClientSettableUsage: uint16[ ]
ElementsShareSpace: boolean
ReservedSpace: uint64
GetSupportedSizes (
[IN] ElementType : uint16 {enum}, [IN] Goal : ref ManagedElement,
[OUT] Sizes : uint64[] {units} ) : uint32 {enum}
GetSupportedSizeRange (
[IN] ElementType : uint16 {enum}, [IN] Goal : ref ManagedElement,
[OUT] MinimumVolumeSize : uint64 {units}, [OUT]
MaximumVolumeSize : uint64 {units},
[OUT] VolumeSizeDivisor : uint64 {units} ) : uint32 {enum}
GetAvailableExtents (
[IN] Goal : ref ManagedElement, [OUT] AvailableExtents : ref
StorageExtent
) uint32 {enum}

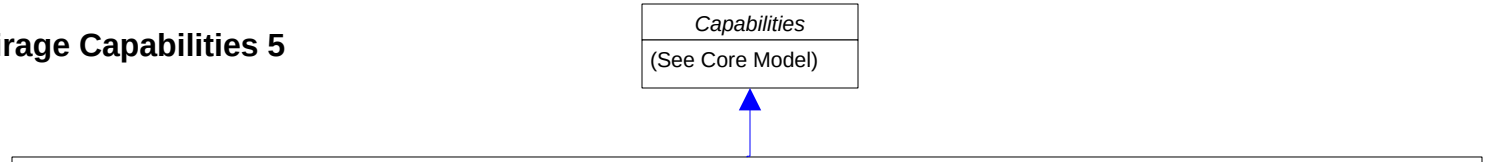

SystemRegistrationCapabilities
AutonomousProfilesSupported: string[]
VendorsSupported: string[]
SupportedAsynchronousActions: uint16[] {enum}
SupportedSynchronousActions: uint16[] {enum}
Capabilities
(See Core Model)
StorageErasureCapabilities
ErasureMethods: string[]
DefaultErasureMethod: string
CanEraseOnReturnToStoragePool: boolean
ElementTypesSupported: uint16[] {enum}
StorageReplicationCapabilities
SupportedSynchronizationType : uint16[] {enum}
SupportedAsynchronousActions[] : uint16[] {enum}
SupportedSynchronousActions : uint16[] {enum}
InitialReplicationState : uint16 {enum}
SupportedSpecializedElements[] : uint16 {enum}
SupportedModifyOperations[] : uint16 {enum}
ReplicationHostAccessibility : uint16 {enum}
HostAccessibleState[] : uint16 {enum}
SpaceLimitSupported : boolean
SpaceReservationSupported : boolean
LocalMirrorSnapshotSupported : boolean
RemoteMirrorSnapshotSupported : boolean
IncrementalDeltasSupported: boolean
PersistentReplicasSupported: boolean
BidirectionalConnectionsSupported: boolean
MaximumReplicasPerSource: uint16
MaximumPortsPerConnection: uint16
MaximumConnectionsPerPort: uint16
MaximumPeerConnections: uint16
MaximumLocalReplicationDepth: uint16
InitialSynchronizationDefault: uint16 {enum}
ReplicationPriorityDefault: uint16 {enum}
LowSpaceWarningThresholdDefault : uint8
SpaceLimitWarningThresholdDefault : uint8
RemoteReplicationServicePointAccess : uint16 {enum}
AlternateRemoteReplicationServicePointAccess : uint16 {enum}
DeltaReplicaPoolAccess : uint16 {enum}
RemoteBufferElementType : uint16 {enum}
RemoteBufferHost : uint16 {enum}
RemoteBufferLocation : uint16 {enum}
RemoteBufferSupported : uint16 {enum}
UseReplicationBufferDefault : uint16 {enum}
PeerConnectionProtocol : string
StorageServerAsymmetryCapabilities
StorageResourceSymmetryCapability: uint16[ {enum}
StorageResourceType: uint16[ {enum}
StorageResourceAffinityAssignable: boolean
PortGroupFailoverBehavior: uint16[ {enum}
TargetPortSymmetryCapability: uint16[ {enum}
SpareConfigurationCapabilities
AutomaticFailOver: boolean
MaximumSpareStorageExtents: uint32
SystemConfiguredSpares: boolean
SupportedAsynchronousActions: uint16[] {enum}
SupportedStorageElementCheck: uint16[] {enum}
SupportedSynchronousActions: uint16[] {enum}
StorageConfigurationCapabilities
SupportedAsynchronousActions : uint16[] {enum}
SupportedSynchronousActions : uint16[] {enum}
SupportedStorageElementTypes : uint16[] {enum}
SupportedStoragePoolFeatures : uint16[] {enum}
SupportedStorageElementFeatures : uint16[] {enum}
SupportedCopyTypes : uint16[] {enum}
InitialReplicationState : uint16 {enum}
ClientSettableElementUsage: uint16[] {enum}
ClientSettablePoolUsage: uint16[] {enum}
SupportedStorageElementUsage: uint16[] {enum}
SupportedStoragePoolUsage: uint16[] {enum}
ThinProvisionedClientSettableReserve: boolean
ThinProvisionedDefaultReserve: uint64
MaximumElementCreateCount: uint64
MaximumElementDeleteCount: uint64
MultipleElementDeleteFeatures: uint16[] {enum}
AutomaticPoolSelectionAllowed: boolean
GetElementNameCapabilities (
[IN] ElementType: uint16 {enum},
[IN] Goal: ref CIM_ManagedElement,
[IN] InPool: ref StoragePool,
[OUT] SupportedFeatures: uint16[],
[OUT] MaxElementNameLen: uint16,
[OUT] ElementNameMask: string
): uint32 enum


Capabilities
(See Core Model)
ReplicationServiceCapabilities
SupportedReplicationTypes uint16[ ] {enum}
SupportedStorageObjects uint16[ ] {enum}
SupportedAsynchronousActions uint16[ ] {enum}
SupportedSynchronousActions uint16[ ] {enum}
ConvertSyncTypeToReplicationType(
[IN] uint16 SyncType, [IN] uint16 Mode, [IN] uint16 Mode, [IN] uint16 LocalOrRemote, [OUT] uint16 SupportedReplicationTypes); uint32 (enum)
ConvertReplicationTypeToSyncType(
[IN] uint16 ReplicationType, [OUT] uint16 SyncType, [OUT] uint16 Mode, [OUT] uint16 LocalOrRemote ); uint32 (enum)
GetSupportedCopyStates(
[IN] uint16 ReplicationType[ ], [OUT] uint16 SupportedCopyStates[ ], [OUT] boolean HostAccessible[ ], [IN] string ReplicationSettingData, [IN] Operation:
uint16 ); uint32 (enum)
GetSupportedGroupCopyStates(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedCopyStates[ ], string ReplicationSettingData, [IN] uint16 Operation); uint32 (enum)
GetSupportedWaitForCopyStates(
[IN] uint16 ReplicationType, [IN] uint16 MethodName, [OUT] uint16 SupportedCopyStates[ ], [IN] string ReplicationSettingData, [IN] uint16 Operation);
uint32 (enum)
GetSupportedFeatures(
[IN] uint16 ReplicationType, [OUT] uint16 Features[ ], [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedGroupFeatures(
[IN] uint16 ReplicationType, [OUT] uint16 GroupFeatures[ ], [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedConsistency(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedConsistency[ ], [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedOperations(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedOperations[ ], [IN] string ReplicationSettingData, [IN] uint16 CopyState, [OUT] uint16[]
ServiceControlling, [OUT] boolean[] RequiresForce, [OUT] boolean[] UpdatesSynchronizedPath); uint32 (enum)
GetSupportedGroupOperations(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedGroupOperations[ ], [IN] string ReplicationSettingData, [IN] uint16 CopyState, [OUT] uint16[]
ServiceControlling, [OUT] boolean[] RequiresForce, [OUT] boolean[] UpdatesSynchronizedPath); uint32 (enum)
GetSupportedListOperations(
[IN] uint16 ReplicationType, [IN] uint16 SynchronizationType, [OUT] uint16[] SupportedListOperations, [IN] string ReplicationSettingData, [OUT] uint16[]
ServiceControlling, [OUT] boolean[] RequiresForce, [OUT] boolean[] UpdatesSynchronizedPath); uint32 (enum)
GetSupportedSettingsDefineStateOperations(
[IN] uint16 ReplicationType, [OUT] uint16[] SupportedOperations, [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedThinProvisioningFeatures(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedThinProvisioningFeatures[ ] ); uint32 (enum)
GetSupportedMaximum(
[IN] uint16 ReplicationType, [IN] uint16 Component, [OUT] uint64 MaxValue, [IN] string ReplicationSettingData ); uint32 (enum)
GetDefaultConsistency(
[IN] uint16 ReplicationType, [OUT] uint16 DefaultConsistency [IN] string ReplicationSettingData); uint32 (enum)
GetDefaultGroupPersistency(
[OUT] uint16 DefaultGroupPersistency ); uint32 (enum)
GetSupportedReplicationSettingData(
[IN] uint16 ReplicationType, [IN] uint16 PropertyName, [OUT] uint64[] SupportedValues, [IN] string ReplicationSettingData ); uint32 (enum)
GetDefaultReplicationSettingData(
[IN] uint16 ReplicationType, [OUT] string DefaultInstance ); uint32 (enum)
GetSupportedConnectionFeatures(
[IN] CIM_ServiceAccessPoint REF Connection, [OUT] uint16[] SupportedConnectionFeatures ); uint32 (enum)
uint32 GetSupportedReplicationSettingDataDateTime(
[IN] ReplicationType:uint16,[IN] PropertyName:uint16,[OUT] SupportedValues:datetime[],[OUT] SupportedValuesIndicator:uint16,
[IN] ReplicationSettingData:string {EmbeddedInstance}) : uint32 {enum}




ReplicationServiceCapabilities (continued)

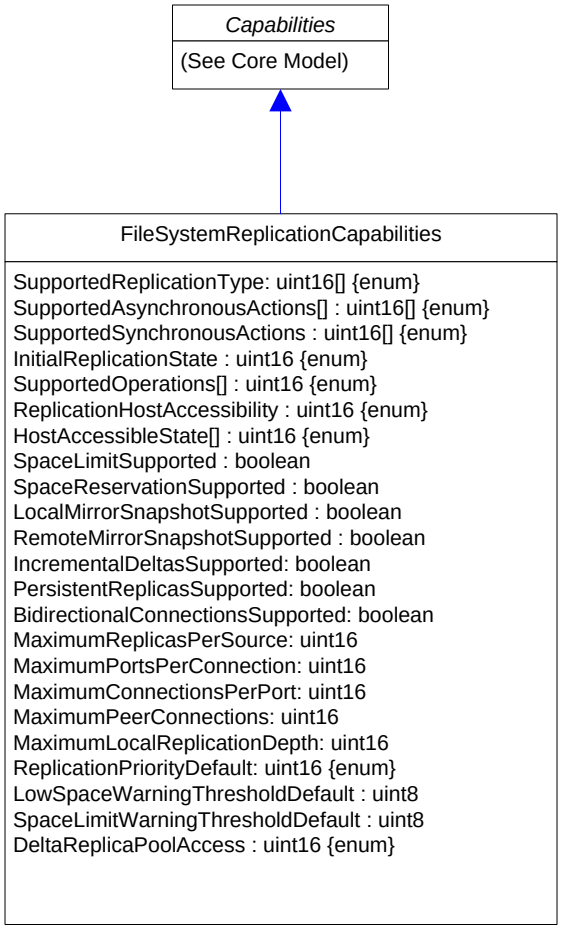
GetSynchronizationSupported(
[IN] CIM_LogicalElement REF LocalElement, [IN] CIM_LogicalElement REF OtherElement,
[IN] CIM_ServiceAccessPoint REF OtherElementAccessPoint, [IN] uint16 MethodName, [IN] string ReplicationSettingData, [OUT] uint16 SyncTypes[ ],
[OUT] uint16[] Modes, [OUT] uint16[] LocalElementRole); uint32 (enum)
GetSupportedStorageCompressionFeatures(
[IN] uint16 ReplicationType, [OUT] uint16[] SupportedStorageCompressionFeatures, [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedTokenizedReplicationType(
[IN] CIM_ManagedElement REF SourceElement,[IN] CIM_ManagedElement REF TargetElement,
[IN] CIM_ServiceAccessPoint REF ElementAccessPoint, [IN] string ReplicationSettingData, [OUT] uint16[] ReplicationTypes ); uint32 (enum)
GetSupportedListFeatures(
[IN] uint16 ReplicationType, [IN] string ReplicationSettingData); uint32 (enum)
GetSupportedOperationsForSynchronization(
[IN] CIM_Synchronized REF Synchronization, [IN] string ReplicationSettingData, [IN] uint16 SynchronizationType, [OUT] uint16[] SupportedOperations,
[OUT] uint16[] ServiceControlling, [OUT] boolean[] RequiresForce, [OUT] boolean[] UpdatesSynchronizedPath); uint32 (enum)
GetSupportedReplicationTypesForSystem(
[IN] CIM_ComputerSystem REF System, [IN] string ReplicationSettingData, [OUT] uint16[] SupportedReplicationTypes,); uint32 (enum)
GetElementNameCapabilities(
[IN] uint16 ElementType, [OUT] uint16[] SupportedFeatures, [OUT] uint16 MaxElementNameLen, [OUT] string ElementNameMask); uint32 (enum)

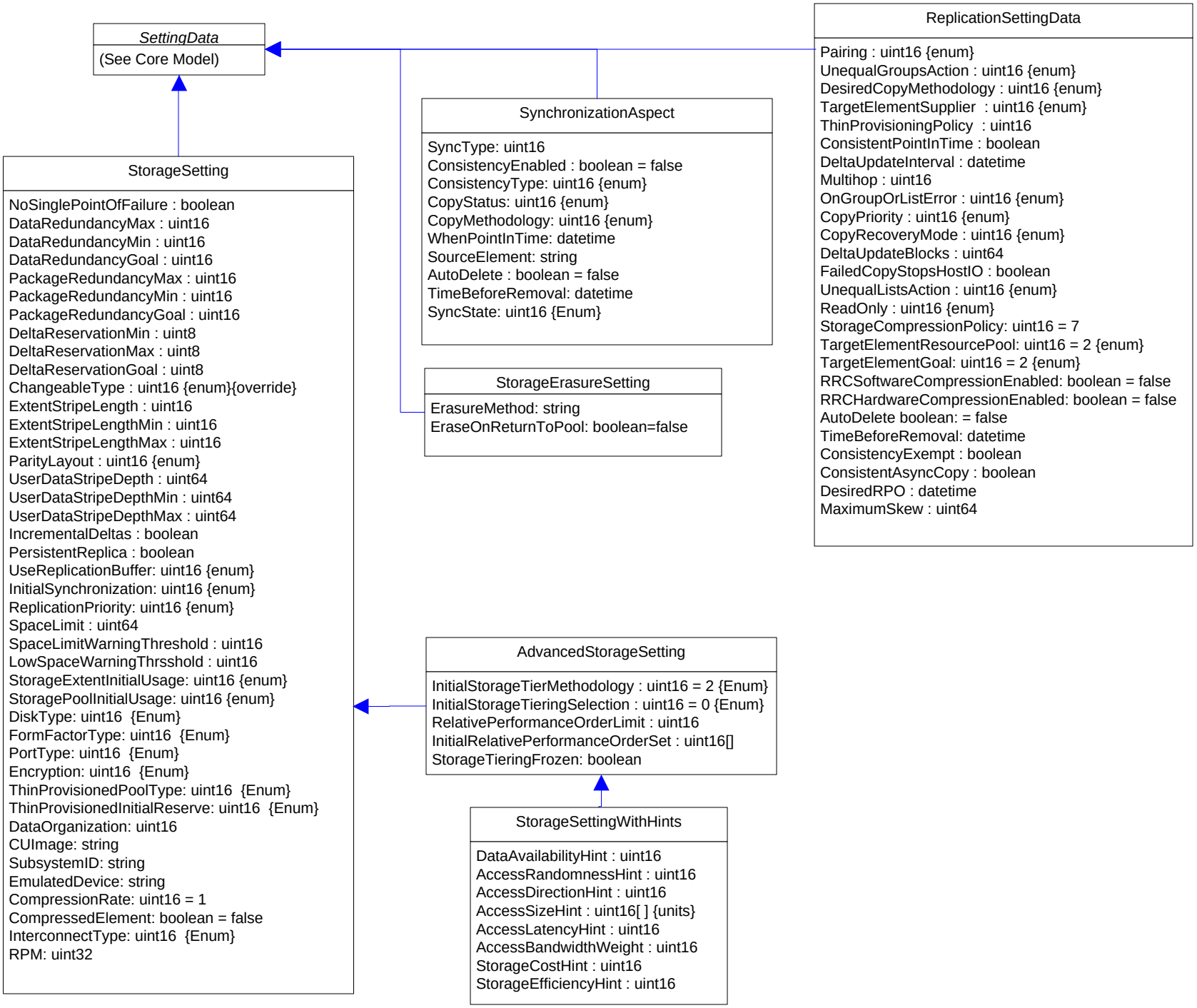



FileSystemReplicationServiceCapabilities

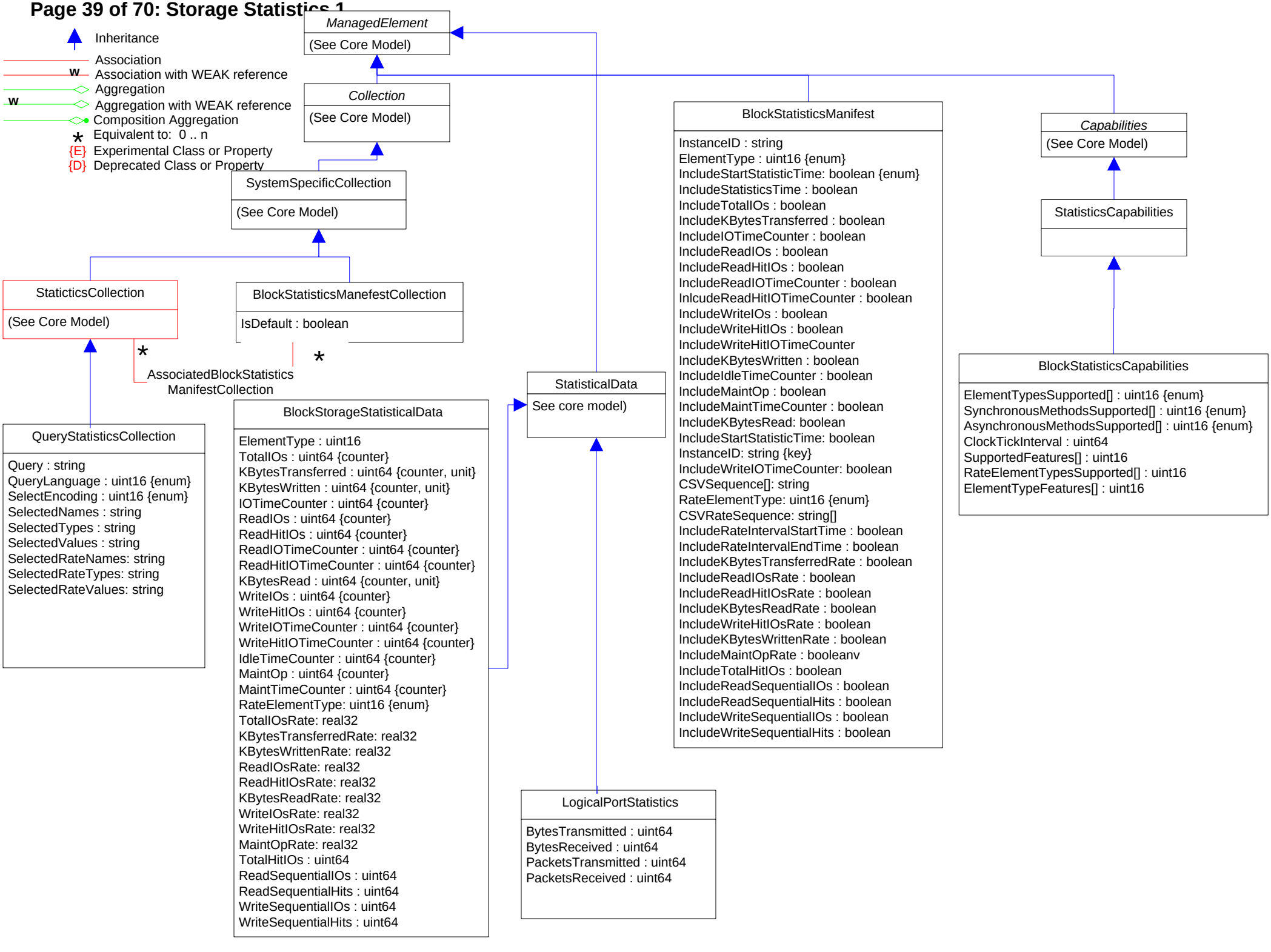
SupportedReplicationTypes uint16[ ] {enum}
SupportedStorageObjects uint16[ ] {enum}
SupportedAsynchronousActions uint16[ ] {enum}
SupportedSynchronousActions uint16[ ] {enum}

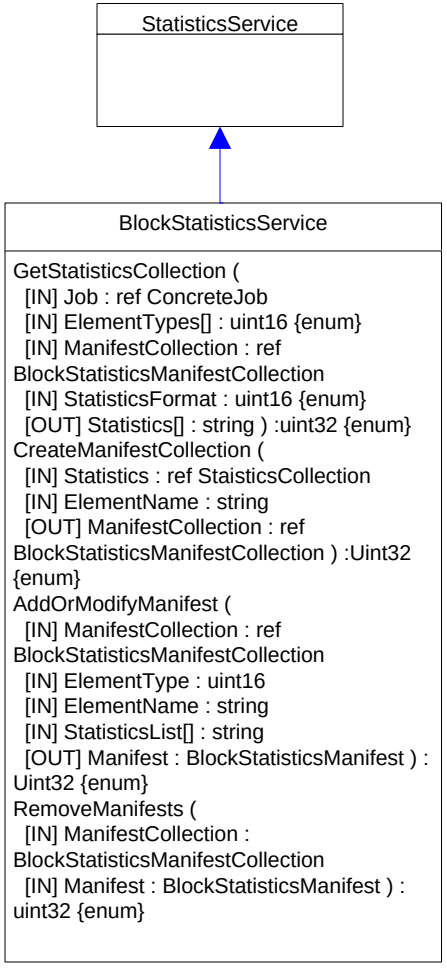
ConvertSyncTypeToReplicationType(
[IN] uint16 SyncType, [OUT] uint16 LocalOrRemote, [IN,OUT] uint16 SupportedReplicationTypes); uint32 (enum)
ConvertReplicationTypeToSyncType(
[IN] uint16 ReplicationType, [IN] uint16 SyncType, [IN,OUT] uint16 Mode, [OUT] uint16 LocalOrRemote ); uint32 (enum)GetSupportedCopyStates(
[IN] uint16 ReplicationType[ ], [IN] uint16 SupportedCopyStates[ ], [OUT] boolean HostAccessible[ ], [IN] string ReplicationSettingData ); uint32 (enum)
GetSupportedCopyStates(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedCopyStates[ ]); uint32 (enum)
GetSupportedGroupCopyStates(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedCopyStates[ ], [IN,OUT] boolean HostAccessible[]); uint32 (enum)
GetSupportedWaitForCopyStates(
[IN] uint16 ReplicationType, [IN] uint16 MethodName {enum}, [IN,OUT] uint16 SupportedCopyStates[ ] ); uint32 (enum)
GetSupportedFeatures(
[IN] uint16 ReplicationType, [IN,OUT] uint16 Features[ ] ); uint32 (enum)
GetSupportedGroupFeatures(
[IN] uint16 ReplicationType, [IN,OUT] uint16 GroupFeatures[ ] ); uint32 (enum)
GetSupportedConsistency(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedConsistency[ ] ); uint32 (enum)
GetSupportedOperations(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedOperations[ ] ); uint32 (enum)
GetSupportedGroupOperations(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedGroupOperations[ ] ); uint32 (enum)
GetSupportedListOperations(
[IN] uint16 ReplicationType, [IN] uint16 SynchronizationType, [IN,OUT] uint16 SupportedListOperations[ ] ); uint32 (enum)
GetSupportedSettingsDefineStateOperations(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedOperations[ ] {enum}); uint32 (enum)
GetSupportedThinProvisioningFeatures(
[IN] uint16 ReplicationType, [OUT] uint16 SupportedThinProvisioningFeatures[ ] {enum}); uint32 (enum)
GetSupportedMaximum(
[IN] uint16 ReplicationType, [IN,OUT] uint64 MaxValue ); uint32 (enum)
GetDefaultConsistency(
[IN] uint16 ReplicationType, [IN,OUT] uint16 DefaultConsistency {enum} ); uint32 (enum)
GetDefaultGroupPersistency(
[IN,OUT] uint16 DefaultGroupPersistency ); uint32 (enum)
GetSupportedReplicationSettingData(
[IN] uint16 ReplicationType, [IN] uint16 PropertyName {enum}, [OUT] uint64 SupportedValues[ ] ); uint32 (enum)
GetDefaultReplicationSettingData(
[IN] uint16 ReplicationType, [IN,OUT] string DefaultInstance ); uint32 (enum)
GetSupportedConnectionFeatures(
[IN] CIM_ServiceAccessPoint REF Connection, [IN,OUT] uint16 SupportedConnectionFeatures[ ] {enum} ); uint32 (enum)
GetSynchronizationSupported(
[IN] CIM_LogicalElement REF LocalElement, [IN] CIM_LogicalElement REF OtherElement,
[IN] CIM_ServiceAccessPoint REF OtherElementAccessPoint, [IN] uint16 MethodName {enum}, [IN] string ReplicationSettingData,
[IN,OUT] uint16 SyncTypes[ ] {enum}, [IN,OUT] uint16 Modes[ ], [OUT] uint16 LocalElementRole[ ] {enum} ); uint32 (enum)
GetSupportedStorageCompressionFeatures(
[IN] uint16 ReplicationType, [IN,OUT] uint16 SupportedStorageCompressionFeatures[ ] {enum} ); uint32 (enum)


Capabilities
(See Core Model)
FileSystemReplicationCapabilities
SupportedReplicationType: uint16[] {enum}
SupportedAsynchronousActions[] : uint16[] {enum}
SupportedSynchronousActions : uint16[] {enum}
InitialReplicationState : uint16 {enum}
SupportedOperations[] : uint16 {enum}
ReplicationHostAccessibility : uint16 {enum}
HostAccessibleState[] : uint16 {enum}
SpaceLimitSupported : boolean
SpaceReservationSupported : boolean
LocalMirrorSnapshotSupported : boolean
RemoteMirrorSnapshotSupported : boolean
IncrementalDeltasSupported: boolean
PersistentReplicasSupported: boolean
BidirectionalConnectionsSupported: boolean
MaximumReplicasPerSource: uint16
MaximumPortsPerConnection: uint16
MaximumConnectionsPerPort: uint16
MaximumPeerConnections: uint16
MaximumLocalReplicationDepth: uint16
ReplicationPriorityDefault: uint16 {enum}
LowSpaceWarningThresholdDefault : uint8
SpaceLimitWarningThresholdDefault : uint8
DeltaReplicaPoolAccess : uint16 {enum}


SettingData
(See Core Model)
ReplicationSettingData
Pairing : uint16 {enum}
UnequalGroupsAction : uint16 {enum}
DesiredCopyMethodology : uint16 {enum}
TargetElementSupplier : uint16 {enum}
ThinProvisioningPolicy : uint16
ConsistentPointInTime : boolean
DeltaUpdateInterval : datetime
Multihop : uint16
OnGroupOrListError : uint16 {enum}
CopyPriority : uint16 {enum}
CopyRecoveryMode : uint16 {enum}
DeltaUpdateBlocks : uint64
FailedCopyStopsHostIO : boolean
UnequalListsAction : uint16 {enum}
ReadOnly : uint16 {enum}
StorageCompressionPolicy: uint16 = 7
TargetElementResourcePool: uint16 = 2 {enum}
TargetElementGoal: uint16 = 2 {enum}
RRCSoftwareCompressionEnabled: boolean = false
RRCHardwareCompressionEnabled: boolean = false
AutoDelete boolean: = false
TimeBeforeRemoval: datetime
ConsistencyExempt : boolean
ConsistentAsyncCopy : boolean
DesiredRPO : datetime
MaximumSkew : uint64
SynchronizationAspect
SyncType: uint16
ConsistencyEnabled : boolean = false
ConsistencyType: uint16 {enum}
CopyStatus: uint16 {enum}
CopyMethodology: uint16 {enum}
WhenPointInTime: datetime
SourceElement: string
AutoDelete : boolean = false
TimeBeforeRemoval: datetime
SyncState: uint16 {Enum}
StorageSetting
NoSinglePointOfFailure : boolean
DataRedundancyMax : uint16
DataRedundancyMin : uint16
DataRedundancyGoal : uint16
PackageRedundancyMax : uint16
PackageRedundancyMin : uint16
PackageRedundancyGoal : uint16
DeltaReservationMin : uint8
DeltaReservationMax : uint8
DeltaReservationGoal : uint8
ChangeableType : uint16 {enum}{override}
ExtentStripeLength : uint16
ExtentStripeLengthMin : uint16
ExtentStripeLengthMax : uint16
ParityLayout : uint16 {enum}
UserDataStripeDepth : uint64
UserDataStripeDepthMin : uint64
UserDataStripeDepthMax : uint64
IncrementalDeltas : boolean
PersistentReplica : boolean
UseReplicationBuffer: uint16 {enum}
InitialSynchronization: uint16 {enum}
ReplicationPriority: uint16 {enum}
SpaceLimit : uint64
SpaceLimitWarningThreshold : uint16
LowSpaceWarningThrsshold : uint16
StorageExtentInitialUsage: uint16 {enum}
StoragePoolInitialUsage: uint16 {enum}
DiskType: uint16 {Enum}
FormFactorType: uint16 {Enum}
PortType: uint16 {Enum}
Encryption: uint16 {Enum}
ThinProvisionedPoolType: uint16 {Enum}
ThinProvisionedInitialReserve: uint16 {Enum}
DataOrganization: uint16
CUImage: string
SubsystemID: string
EmulatedDevice: string
CompressionRate: uint16 = 1
CompressedElement: boolean = false
InterconnectType: uint16 {Enum}
RPM: uint32
StorageErasureSetting
ErasureMethod: string
EraseOnReturnToPool: boolean=false
AdvancedStorageSetting
InitialStorageTierMethodology : uint16 = 2 {Enum}
InitialStorageTieringSelection : uint16 = 0 {Enum}
RelativePerformanceOrderLimit : uint16
InitialRelativePerformanceOrderSet : uint16[]
StorageTieringFrozen: boolean
StorageSettingWithHints
DataAvailabilityHint : uint16
AccessRandomnessHint : uint16
AccessDirectionHint : uint16
AccessSizeHint : uint16[ ] {units}
AccessLatencyHint : uint16
AccessBandwidthWeight : uint16
StorageCostHint : uint16
StorageEfficiencyHint : uint16

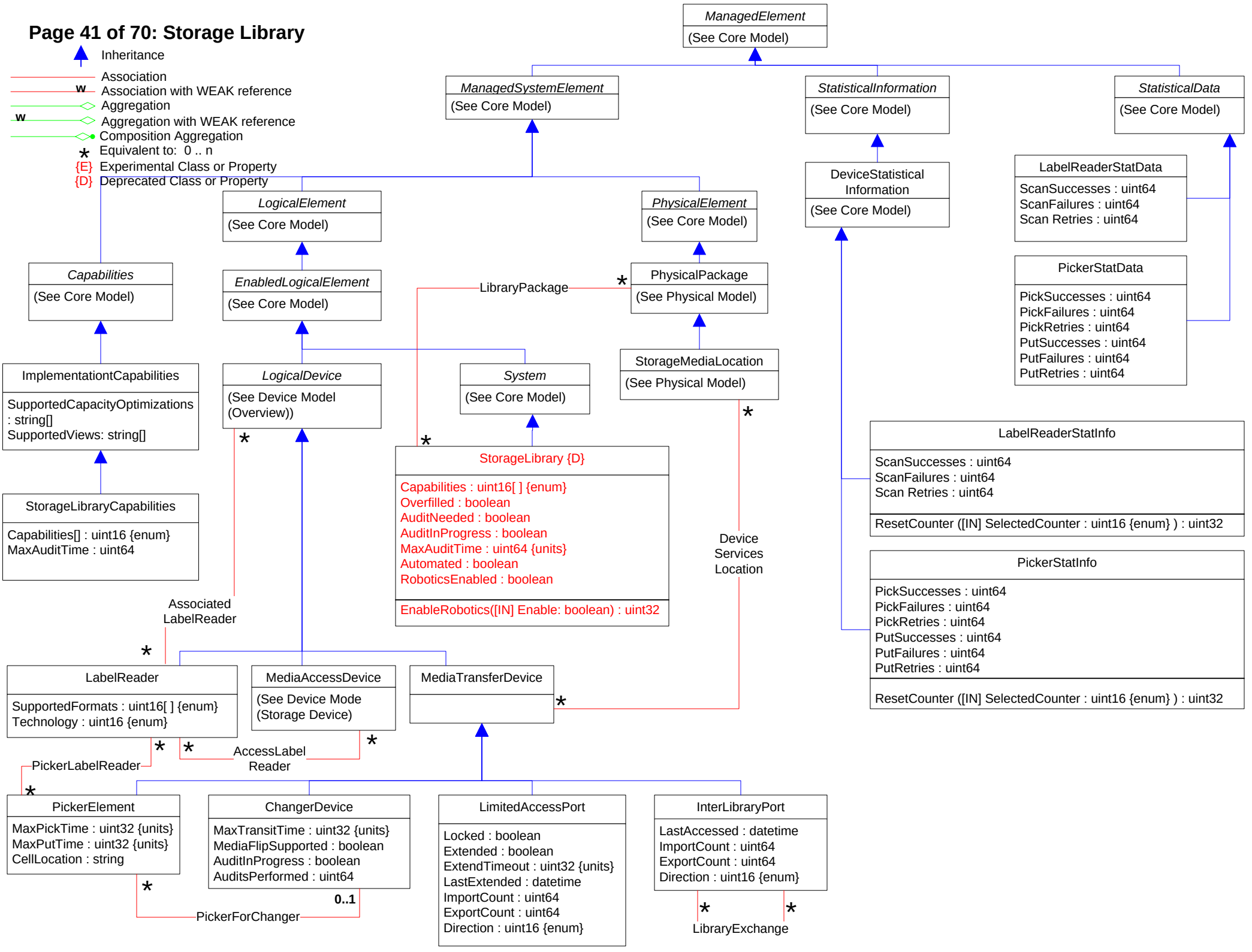
Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

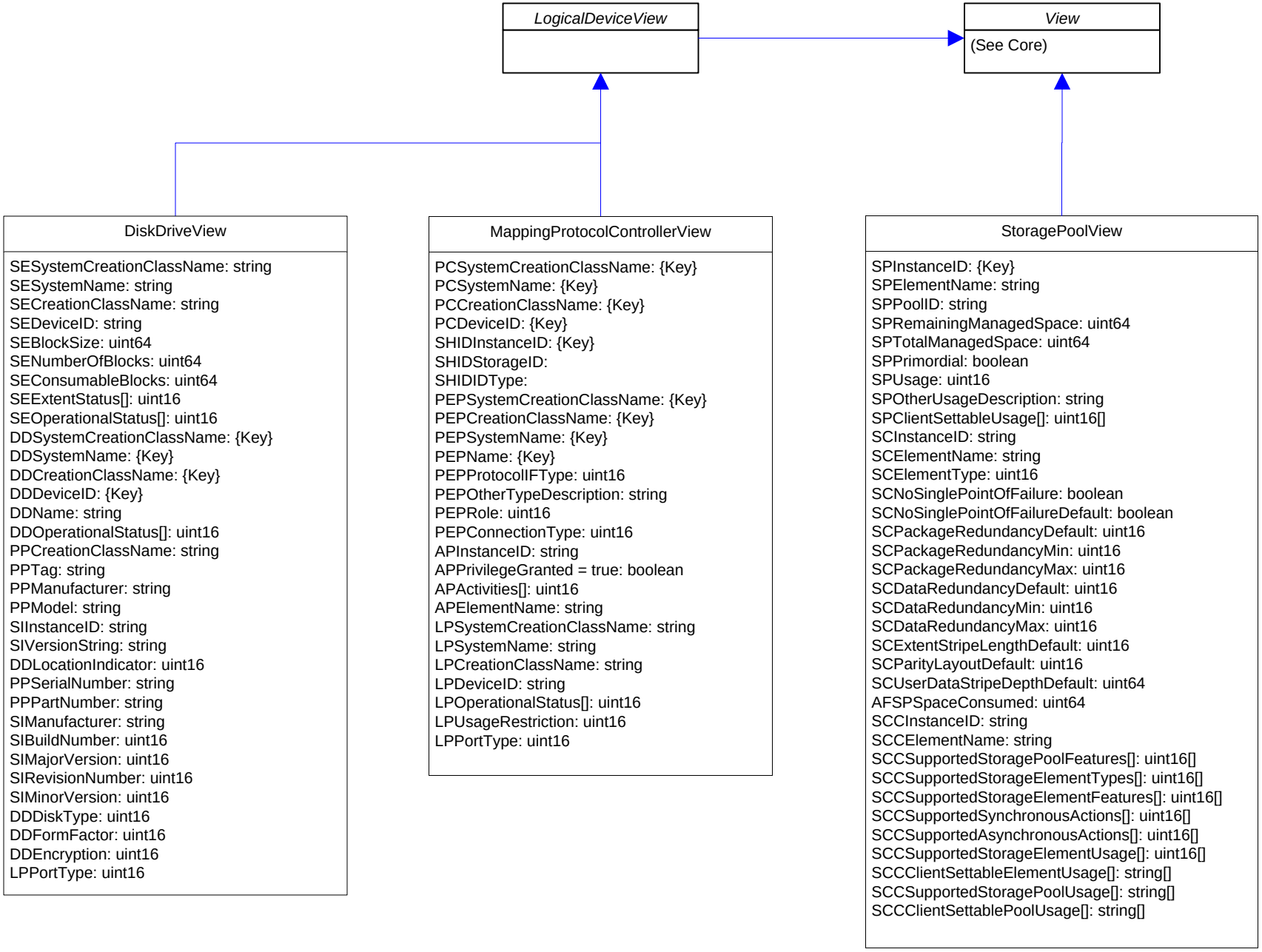



StatisticsService
BlockStatisticsService
GetStatisticsCollection (
[IN] Job : ref ConcreteJob
[IN] ElementTypes[] : uint16 {enum}
[IN] ManifestCollection : ref
BlockStatisticsManifestCollection
[IN] StatisticsFormat : uint16 {enum}
[OUT] Statistics[] : string ) :uint32 {enum}
CreateManifestCollection (
[IN] Statistics : ref StaisticsCollection
[IN] ElementName : string
[OUT] ManifestCollection : ref
BlockStatisticsManifestCollection ) :Uint32
{enum}
AddOrModifyManifest (
[IN] ManifestCollection : ref
BlockStatisticsManifestCollection
[IN] ElementType : uint16
[IN] ElementName : string
[IN] StatisticsList[] : string
[OUT] Manifest : BlockStatisticsManifest ) :
Uint32 {enum}
RemoveManifests (
[IN] ManifestCollection :
BlockStatisticsManifestCollection
[IN] Manifest : BlockStatisticsManifest ) :
uint32 {enum}

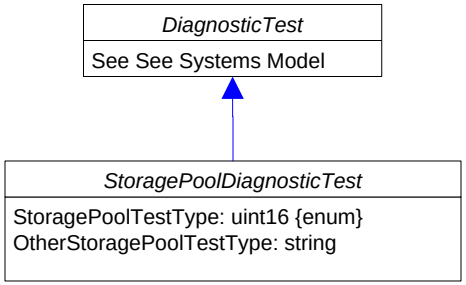
# Page 41 of 70: Storage Library

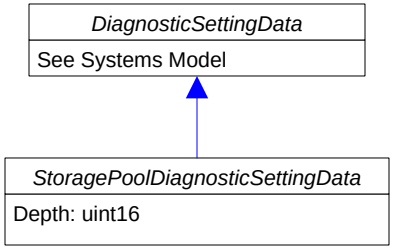
Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property

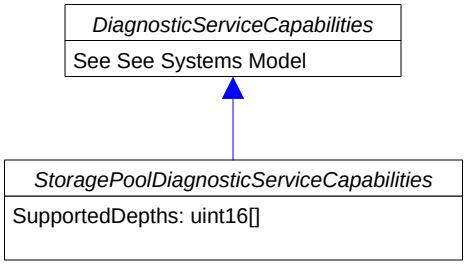


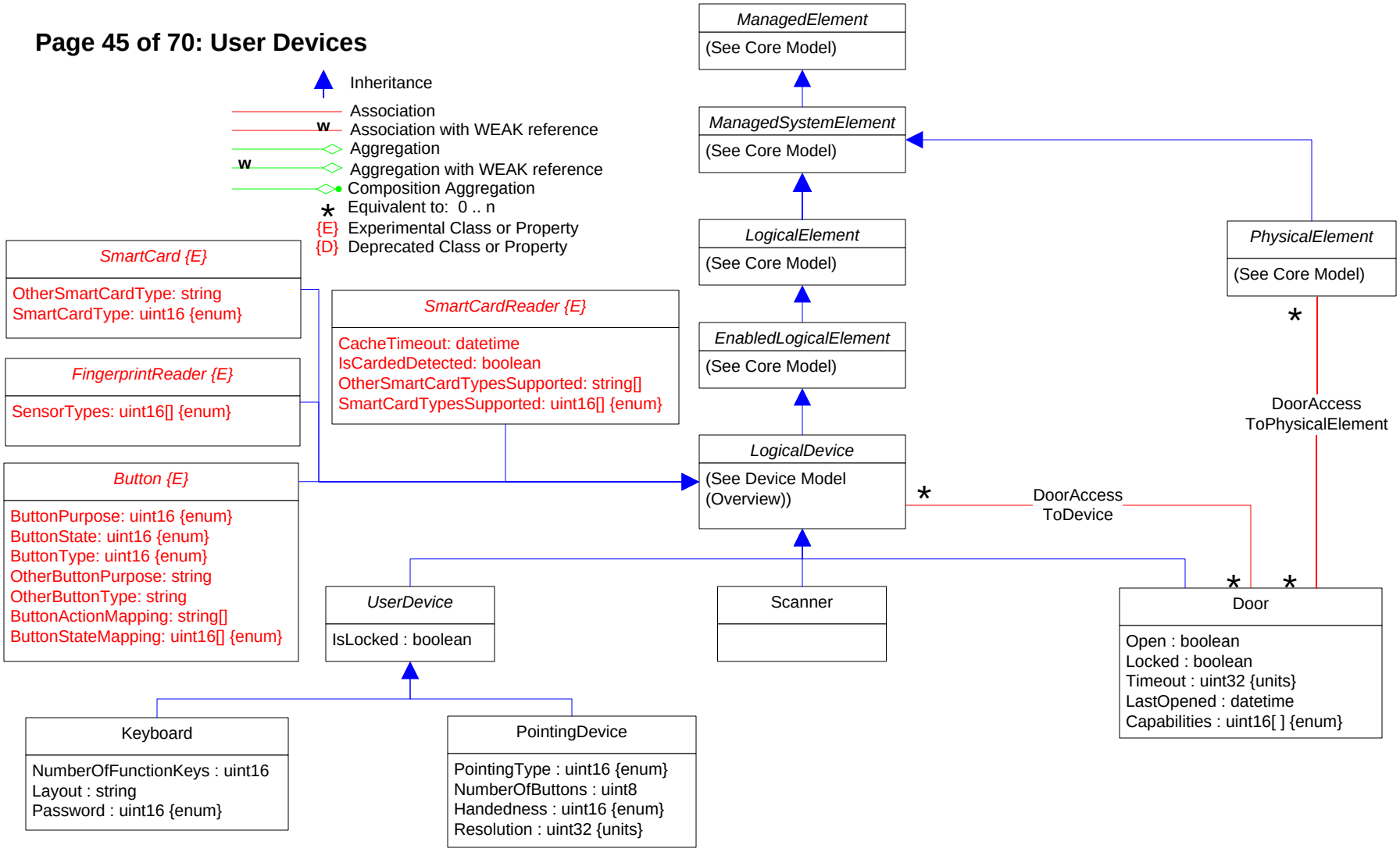

LogicalDeviceView
View
(See Core)
DiskDriveView
SESystemCreationClassName: string
SESystemName: string
SECreationClassName: string
SEDeviceID: string
SEBlockSize: uint64
SENumberOfBlocks: uint64
SEConsumableBlocks: uint64
SEExtentStatus[]: uint16
SEOperationalStatus[]: uint16
DDSystemCreationClassName: {Key}
DDSystemName: {Key}
DDCreationClassName: {Key}
DDDeviceID: {Key}
DDName: string
DDOperationalStatus[]: uint16
PPCreationClassName: string
PPTag: string
PPManufacturer: string
PPModel: string
SIInstanceID: string
SIVersionString: string
DDLocationIndicator: uint16
PPSerialNumber: string
PPPartNumber: string
SIManufacturer: string
SIBuildNumber: uint16
SIMajorVersion: uint16
SIRevisionNumber: uint16
SIMinorVersion: uint16
DDDiskType: uint16
DDFormFactor: uint16
DDEncryption: uint16
LPPortType: uint16
MappingProtocolControllerView
PCSystemCreationClassName: {Key}
PCSystemName: {Key}
PCCreationClassName: {Key}
PCDeviceID: {Key}
SHIDInstanceID: {Key}
SHIDStorageID:
SHIDIDType:
PEPSystemCreationClassName: {Key}
PEPCreationClassName: {Key}
PEPSystemName: {Key}
PEPName: {Key}
PEPProtocolIFType: uint16
PEPOtherTypeDescription: string
PEPRole: uint16
PEPConnectionType: uint16
APInstanceID: string
APPrivilegeGranted = true: boolean
APActivities[]: uint16
APElementName: string
LPSystemCreationClassName: string
LPSystemName: string
LPCreationClassName: string
LPDeviceID: string
LPOperationalStatus[]: uint16
LPUsageRestriction: uint16
LPPortType: uint16
StoragePoolView
SPInstanceID: {Key}
SPElementName: string
SPPoolID: string
SPRemainingManagedSpace: uint64
SPTotalManagedSpace: uint64
SPPrimordial: boolean
SPUsage: uint16
SPOtherUsageDescription: string
SPClientSettableUsage[]: uint16[]
SCInstanceID: string
SCElementName: string
SCElementType: uint16
SCNoSinglePointOfFailure: boolean
SCNoSinglePointOfFailureDefault: boolean
SCPackageRedundancyDefault: uint16
SCPackageRedundancyMin: uint16
SCPackageRedundancyMax: uint16
SCDataRedundancyDefault: uint16
SCDataRedundancyMin: uint16
SCDataRedundancyMax: uint16
SCExtentStripeLengthDefault: uint16
SCParityLayoutDefault: uint16
SCUserDataStripeDepthDefault: uint64
AFSPSpaceConsumed: uint64
SCCInstanceID: string
SCCElementName: string
SCCSupportedStoragePoolFeatures[]: uint16[]
SCCSupportedStorageElementTypes[]: uint16[]
SCCSupportedStorageElementFeatures[]: uint16[]
SCCSupportedSynchronousActions[]: uint16[]
SCCSupportedAsynchronousActions[]: uint16[]
SCCSupportedStorageElementUsage[]: uint16[]
SCCClientSettableElementUsage[]: string[]
SCCSupportedStoragePoolUsage[]: string[]
SCCClientSettablePoolUsage[]: string[]

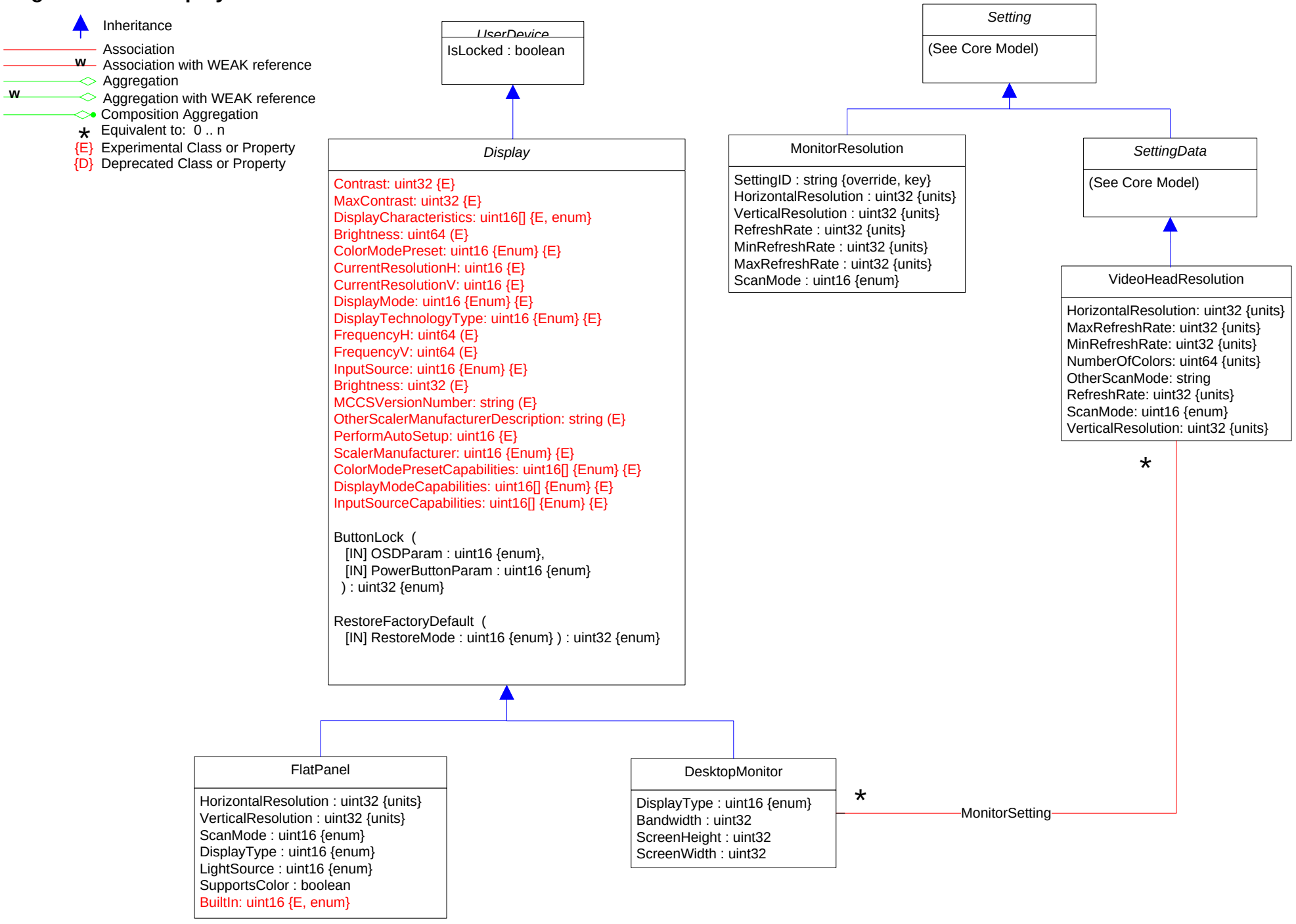

View
(See Core)
LogicalDeviceView
ReplicaPairView
SVSourceSystemCreationClassName: string
SVSourceSystemName: string
SVSourceCreationClassName: string
SVSourceDeviceID: string
SVSourceName: string
SVSourceNameFormat: uint16
SVSourceNameNamespace: uint16
SVSourceExtentStatus: uint16[]
SVSourceOperationalStatus: uint16[]
SVSourceBlockSize: uint64
SVSourceNumberOfBlocks: uint64
SVSourceConsumableBlocks: uint64
SVSourcePrimordial: boolean
SVSourceIsBasedOnUnderlyingRedundancy: boolean
SVSourceNoSinglePointOfFailure: boolean
SVSourceDataRedundancy: uint16
SVSourcePackageRedundancy: uint16
SVSourceDeltaReservation: uint8
SVSourceExtentDiscriminator: string[]
SVSourceOtherIdentifyingInfo: string[]
SVSourceIdentifyingDescriptions: string[]
SVSourceElementName: string
SVSourceUsage: uint16
SVSourceOtherUsageDescription: string
SVSourceClientSettableUsage: uint16[]
SSWhenSynced: datetime
SSSyncMaintained: boolean
SSCopyType: uint16
SSSyncState: uint16
SSCopyPriority: uint16
SSSyncType: uint16
SSMode: uint16
SSProgressStatus:
SVTargetSystemCreationClassName: {Key}
SVTargetSystemName: {Key}
SVTargetCreationClassName: {Key}
SVTargetDeviceID: {Key}
SVTargetName: string
SVTargetNameFormat: uint16
SVTargetNameNamespace: uint16
SVTargetExtentStatus: uint16
SVTargetOperationalStatus: uint16[]
SVTargetBlockSize: uint64
SVTargetNumberOfBlocks: uint64
SVTargetConsumableBlocks: uint64
SVTargetPrimordial: boolean
SVTargetIsBasedOnUnderlyingRedundancy: boolean
SVTargetNoSinglePointOfFailure: boolean
SVTargetDataRedundancy: uint16
SVTargetPackageRedundancy: uint16
SVTargetDeltaReservation: uint8
SVTargetExtentDiscriminator: string
SVTargetOtherIdentifyingInfo: string
SVTargetIdentifyingDescriptions: string[]
SVTargetElementName: string
SVTargetUsage: uint16
SVTargetOtherUsageDescription: string
SVTargetClientSettableUsage: uint16[]
VolumeView
SVSystemCreationClassName: {Key}
SVSystemName: {Key}
SVCreationClassName: {Key}
SVDeviceID: {Key}
SVName: string
SVNameFormat: uint16
SVNameNamespace: uint16
SVExtentStatus[]: uint16
SVOperationalStatus[]: uint16
SVBlockSize: uint64
SVNumberOfBlocks: uint64
SVConsumableBlocks: uint64
SVIsBasedOnUnderlyingRedundancy: boolean
SVNoSinglePointOfFailure: boolean
SVDataRedundancy: uint16
SVPackageRedundancy:
uint8 SVDeltaReservation: uint8
SVUsage: uint16
SVOtherUsageDescription: string
SVClientSettableUsage[]: uint16
SSInstanceID: string
SSElementName: string
SSNoSinglePointOfFailure: boolean
SSDataRedundancyMin: uint16
SSDataRedundancyMax: uint16
SSDataRedundancyGoal: uint16
SSPackageRedundancyMin: uint16
SSPackageRedundancyMax: uint16
SSPackageRedundancyGoal: uint16
SSChangeableType: uint16
AFSPSpaceConsumed: uint64
SPInstanceID: {Key}
SPPoolID: string
SVOtherIdentifyingInfo[]: string
SVIdentifyingDescriptions[]: string
SVElementName: string
SVPrimordial: boolean
SVExtentDiscriminator[]: string
SSExtentStripeLength: uint16
SSExtentStripeLengthMin: uint16
SSExtentStripeLengthMax: uint16
SSParityLayout: uint16
SSUserDataStripeDepth: uint64
SSUserDataStripeDepthMin: uint64
SSUserDataStripeDepthMax: uint64
SSStoragePoolInitialUsage: uint16
SSStorageExtentInitialUsage: uint16
SVIsComposite: boolean
FCSwitchView {E}
InstanceID: string
SwitchWWN: string
DomainID: string
ElementName: string
SwitchOperationalStatus: uint16[]
SwitchEnabledState: uint16 = 5
SwitchNPIVSupported: boolean
FCPortWWN: string
FCPortElementName: string
FCPortType: uint16
FCPortOperationalStatus: uint16[]
PortEnabledState: uint16 = 5
PortNumber: uint16
DomainPortNumber: uint16
PortNPIVSupported: boolean
MaxPortNPIVLogins: uint16
ModuleNumber: uint16
LogicalModulePortNumber: uint16
VersionString: string
Vendor: string
ProductName: string
Model: string
SerialNumber: string
PartNumber: string
OEM: string
OEMProductName: string
OEMIdentifyingNumber: string
AccessInfo: string
LocationName: string
LocationPhysicalPosition: string
PortDiscriminator: uint16[]
FCTopologyView
InstanceID: string
AntecedentFCPort: string {Reference}
AntecedentSystem: string {Reference}
AntecedentFCPortWWN: string
AntecedentFCPortElementName: string
AntecedentElementWWN: string
AntecedentFCPortType: string
DependentFCPort: string {Reference}
DependentSystem: string {Reference
DependentFCPortWWN: string
DependentFCPortElementName: string
DependentElementWWN: string
DependentFCPortType: string


DiagnosticTest
See See Systems Model
StoragePoolDiagnosticTest
StoragePoolTestType: uint16 {enum}
OtherStoragePoolTestType: string

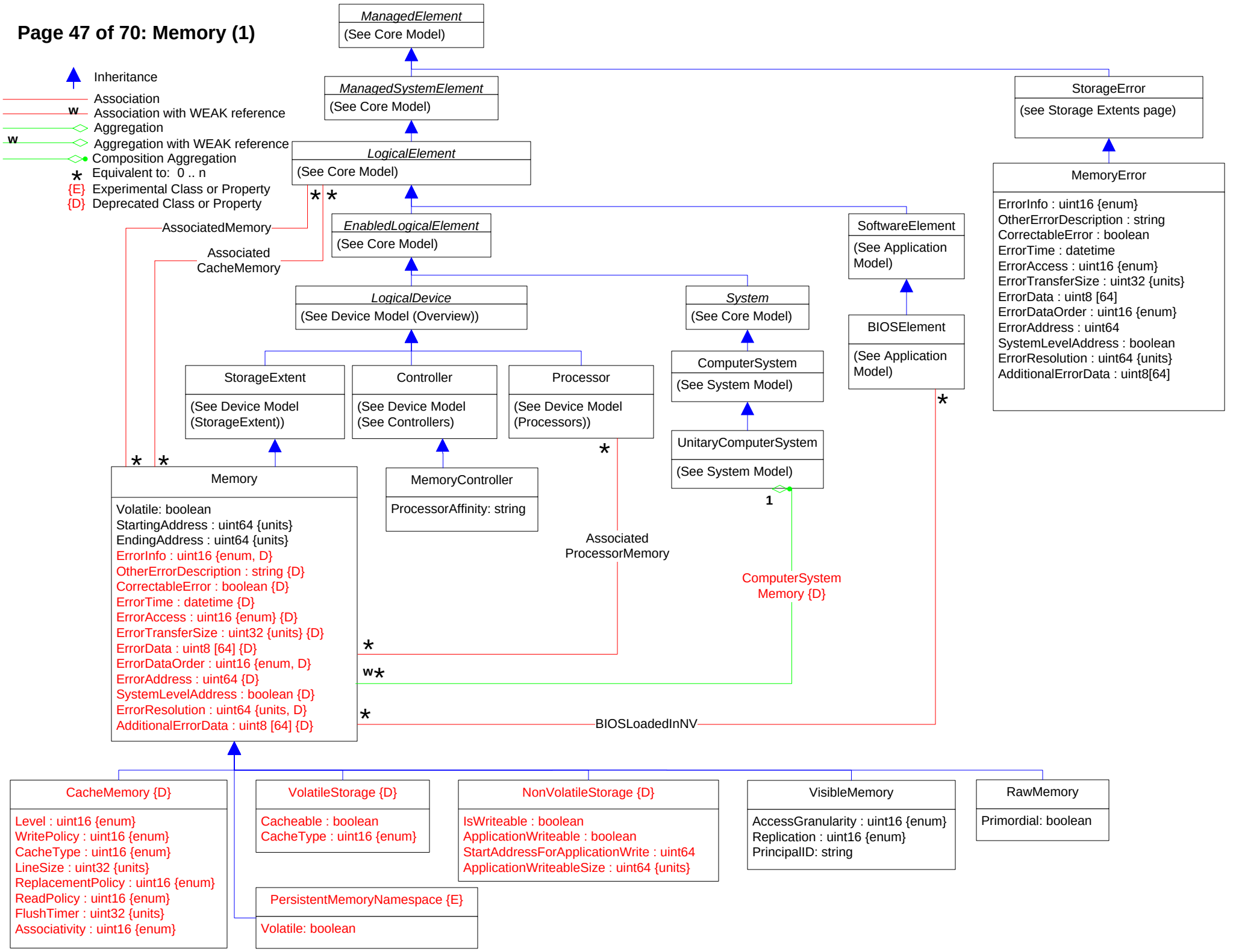

DiagnosticSettingData
See Systems Model
StoragePoolDiagnosticSettingData
Depth: uint16

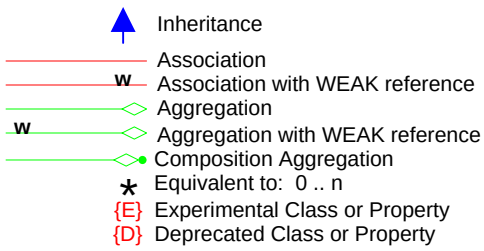

DiagnosticServiceCapabilities
See See Systems Model
StoragePoolDiagnosticServiceCapabilities
SupportedDepths: uint16[]


Inheritance
Association
W
Association with WEAK reference
Aggregation
W
Aggregation with WEAK reference
Composition Aggregation
*
Equivalent to: 0 .. n
{E}
Experimental Class or Property
{D}
Deprecated Class or Property
ManagedElement
(See Core Model)
ManagedSystemElement
(See Core Model)
LogicalElement
(See Core Model)
EnabledLogicalElement
(See Core Model)
LogicalDevice
(See Device Model (Overview))
PhysicalElement
(See Core Model)
SmartCard {E}
OtherSmartCardType: string
SmartCardType: uint16 {enum}
SmartCardReader {E}
CacheTimeout: datetime
IsCardedDetected: boolean
OtherSmartCardTypesSupported: string[]
SmartCardTypesSupported: uint16[] {enum}
FingerprintReader {E}
SensorTypes: uint16[] {enum}
Button {E}
ButtonPurpose: uint16 {enum}
ButtonState: uint16 {enum}
ButtonType: uint16 {enum}
OtherButtonPurpose: string
OtherButtonType: string
ButtonActionMapping: string[]
ButtonStateMapping: uint16[] {enum}
DoorAccess ToDevice
DoorAccess ToPhysicalElement
UserDevice
IsLocked : boolean
Scanner
Door
Open : boolean
Locked : boolean
Timeout : uint32 {units}
LastOpened : datetime
Capabilities : uint16[ ] {enum}
Keyboard
NumberOfFunctionKeys : uint16
Layout : string
Password : uint16 {enum}
PointingDevice
PointingType : uint16 {enum}
NumberOfButtons : uint8
Handedness : uint16 {enum}
Resolution : uint32 {units}


Inheritance
Association
w
Association with WEAK reference
Aggregation
w
Aggregation with WEAK reference
Composition Aggregation
*
Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
UserDevice
IsLocked : boolean
Setting
(See Core Model)
Display
Contrast: uint32 {E}
MaxContrast: uint32 {E}
DisplayCharacteristics: uint16[] {E, enum}
Brightness: uint64 (E}
ColorModePreset: uint16 {Enum} {E}
CurrentResolutionH: uint16 {E}
CurrentResolutionV: uint16 {E}
DisplayMode: uint16 {Enum} {E}
DisplayTechnologyType: uint16 {Enum} {E}
FrequencyH: uint64 (E}
FrequencyV: uint64 (E}
InputSource: uint16 {Enum} {E}
Brightness: uint32 (E}
MCCSVersionNumber: string (E}
OtherScalerManufacturerDescription: string (E}
PerformAutoSetup: uint16 {E}
ScalerManufacturer: uint16 {Enum} {E}
ColorModePresetCapabilities: uint16[] {Enum} {E}
DisplayModeCapabilities: uint16[] {Enum} {E}
InputSourceCapabilities: uint16[] {Enum} {E}
ButtonLock (
[IN] OSDParam : uint16 {enum},
[IN] PowerButtonParam : uint16 {enum}
) : uint32 {enum}
RestoreFactoryDefault (
[IN] RestoreMode : uint16 {enum} ) : uint32 {enum}
MonitorResolution
SettingID : string {override, key}
HorizontalResolution : uint32 {units}
VerticalResolution : uint32 {units}
RefreshRate : uint32 {units}
MinRefreshRate : uint32 {units}
MaxRefreshRate : uint32 {units}
ScanMode : uint16 {enum}
SettingData
(See Core Model)
VideoHeadResolution
HorizontalResolution: uint32 {units}
MaxRefreshRate: uint32 {units}
MinRefreshRate: uint32 {units}
NumberOfColors: uint64 {units}
OtherScanMode: string
RefreshRate: uint32 {units}
ScanMode: uint16 {enum}
VerticalResolution: uint32 {units}
*
FlatPanel
HorizontalResolution : uint32 {units}
VerticalResolution : uint32 {units}
ScanMode : uint16 {enum}
DisplayType : uint16 {enum}
LightSource : uint16 {enum}
SupportsColor : boolean
BuiltIn: uint16 {E, enum}
DesktopMonitor
DisplayType : uint16 {enum}
Bandwidth : uint32
ScreenHeight : uint32
ScreenWidth : uint32
*
MonitorSetting

# Page 47 of 70: Memory (1)






*ResourceAllocationSettingData*

(See Core Model)

MemoryAllocationSettingData {E}

ResourceType: uint16 {enum}
ChannelInterleaveSize: uint16
ChannelCount: uint16
ControllerInterleaveSize: uint16
Replication: uint16 {enum}

PersistentMemoryNamespaceSettingData{E}

ResourceType: uint16
AccessType: uint16 {enum}
Optimize: uint16 {enum}

*Capabilities*

(See Core Model)

MemoryCapabilities {E}

MemoryModes: uint16[] {enum}
ReplicationSupport: uint16[] {enum}
ReliabilitySupport: uint16[] {enum}
Alignment: uint16
ChannelInterleaveSupport: uint16[]
ChannelInterleaveWaySupport: uint16[]
MemoryControllerInterleaveSupport: uint16[]
MemoryAffinitySupport: uint16[] {enum}

MemoryConfigurationCapabilities {E}

SupportedSynchronousOperations: uint16[] {enum}
SupportedAsynchronousOperations: uint16[] {enum}

PersistentMemoryCapabilities {E}

SecurityFeatures: uint16[] {enum}
AccessGranularity: uint16[] {enum}
Replication: uint16[] {enum}
MemoryArchitecture: uint16[] {enum}

PersistentConfigurationCapabilities {E}

SupportedSynchronousOperations: uint16[] {enum}
SupportedAsynchronousOperations: uint16[] {enum}

*Service*

(See Core Model)

MemoryConfigurationService {E}

CreateManifestCollection (
  [IN] Pool: ref ResourcePool
  [IN] Goal: string[]
  [OUT] MemoryExtents: ref VisibleMemory
) uint32 {enum}

ReturnToPool (
  [IN] MemoryExtents: ref VisibleMemory
) uint32 {enum}

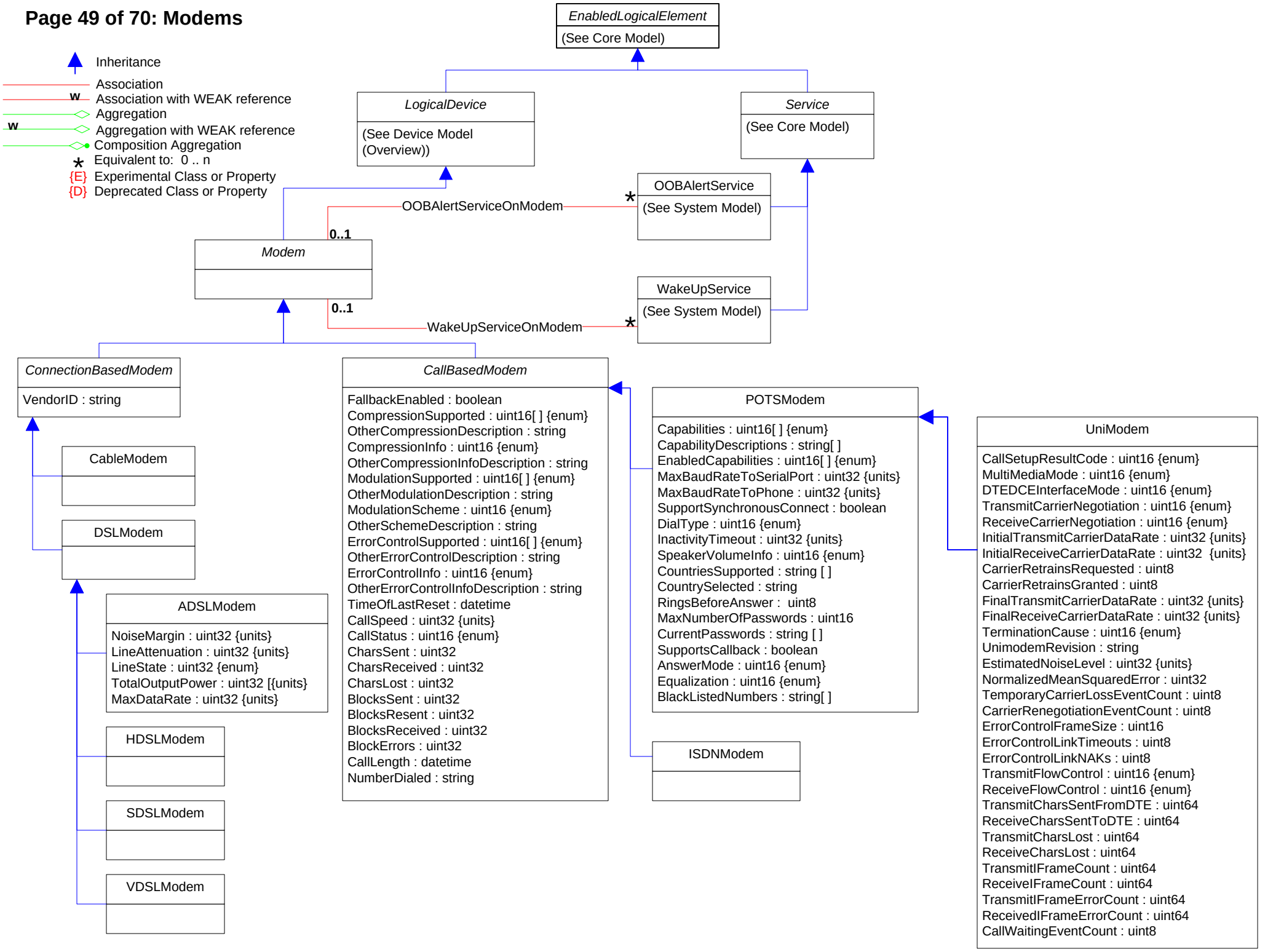
PersistentMemoryService {E}

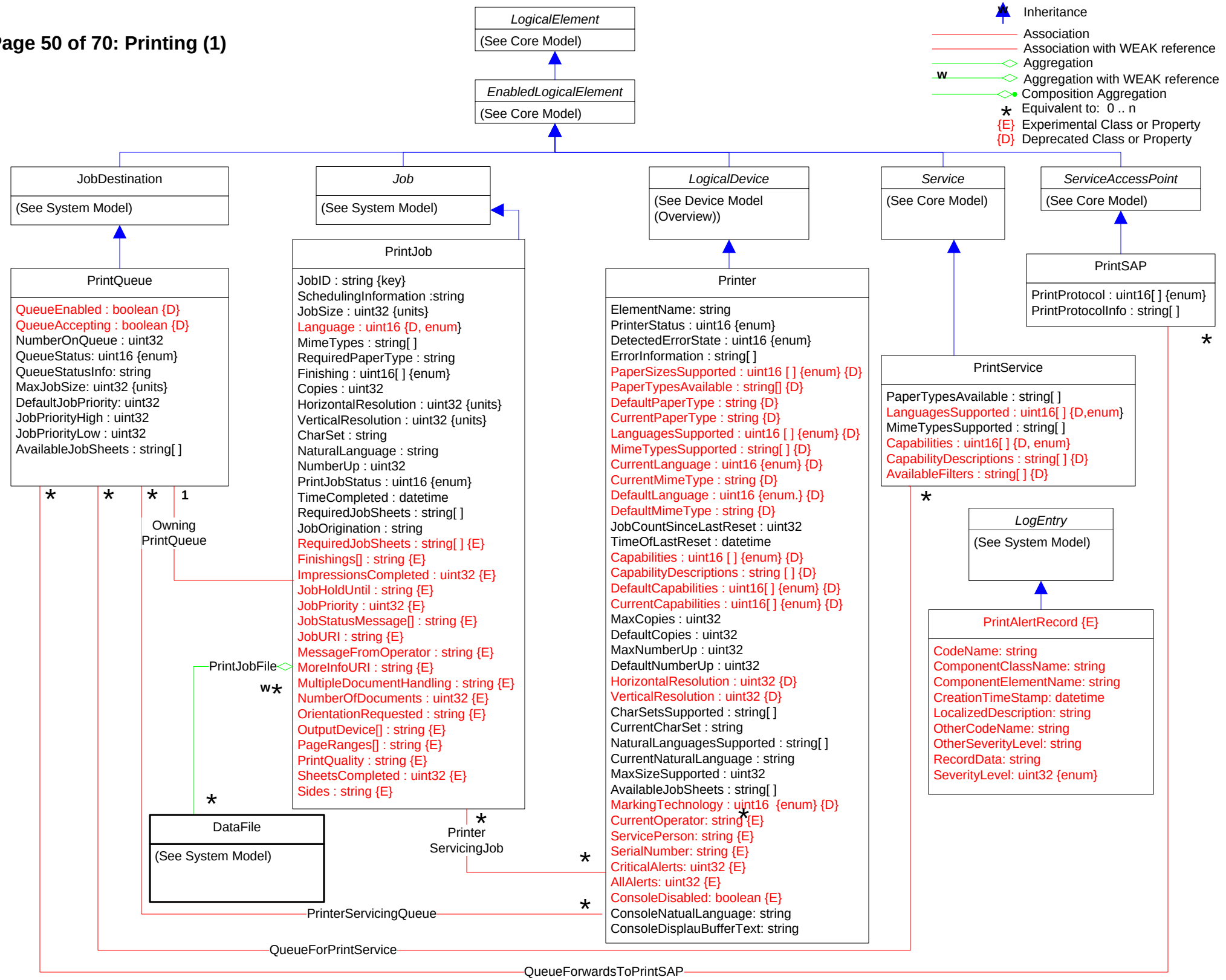
AllocateFromPool (
  [IN] Pool: ref ResourcePool
  [IN] Goal: string[]
  [OUT] Namespace: ref PersistentMemoryNamespace
) uint32 {enum}

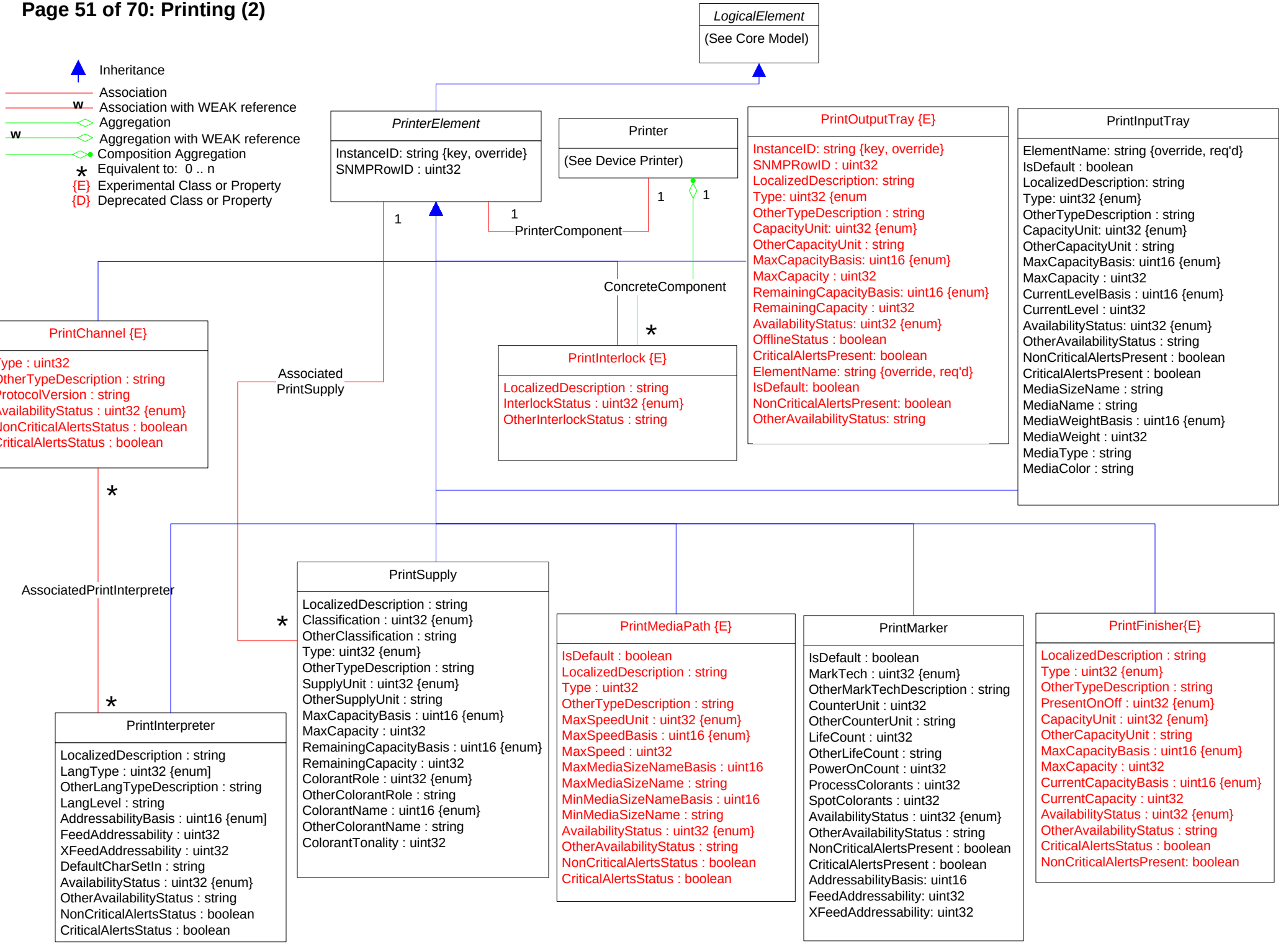
ReturnToPool (
  [IN] Namespace: ref PersistentMemoryNamespace
) uint32 {enum}

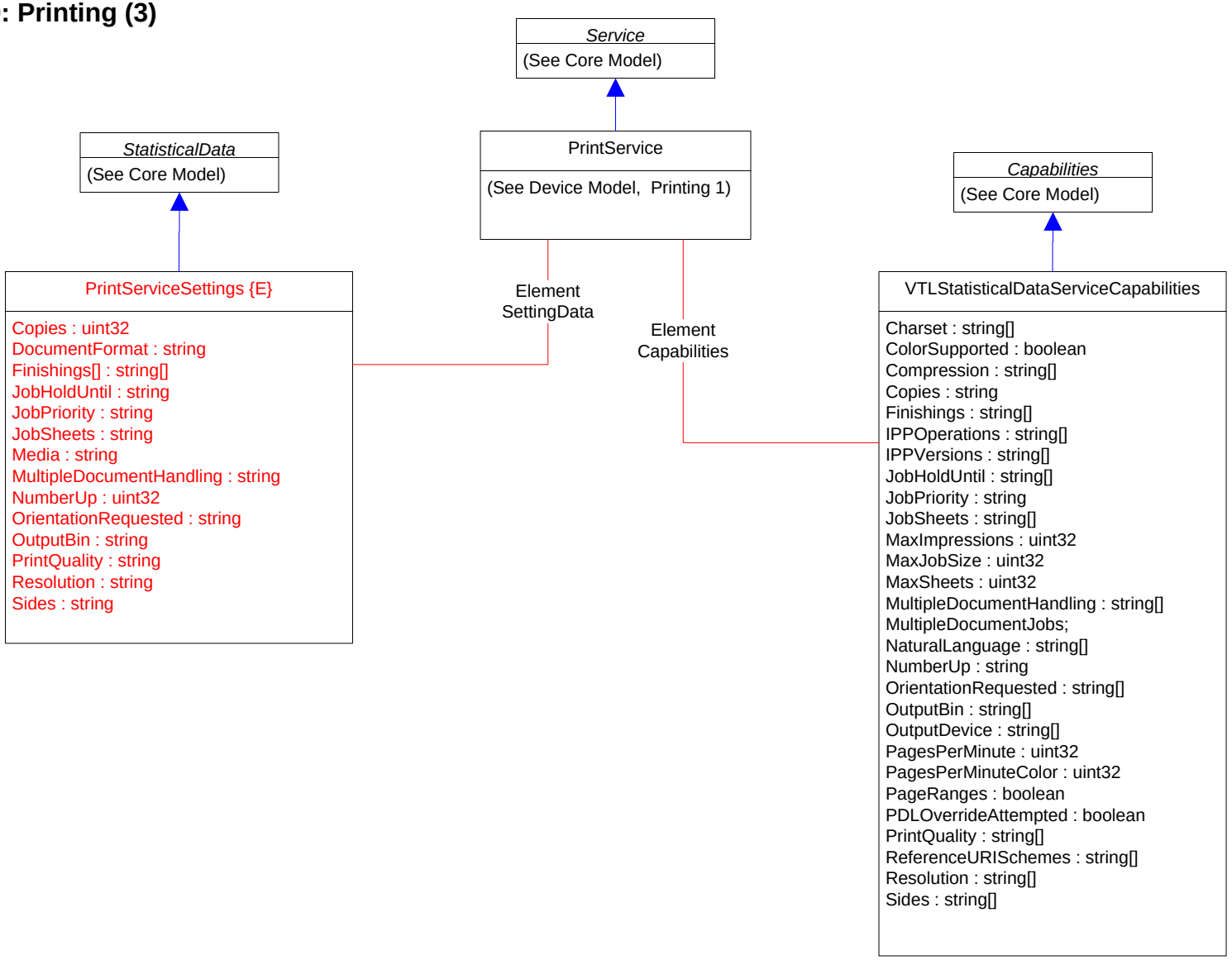
ModifyNamespace (
  [IN] Namespace: ref PersistentMemoryNamespace
  [IN] Goal: string
) uint32 {enum}

# Page 49 of 70: Modems

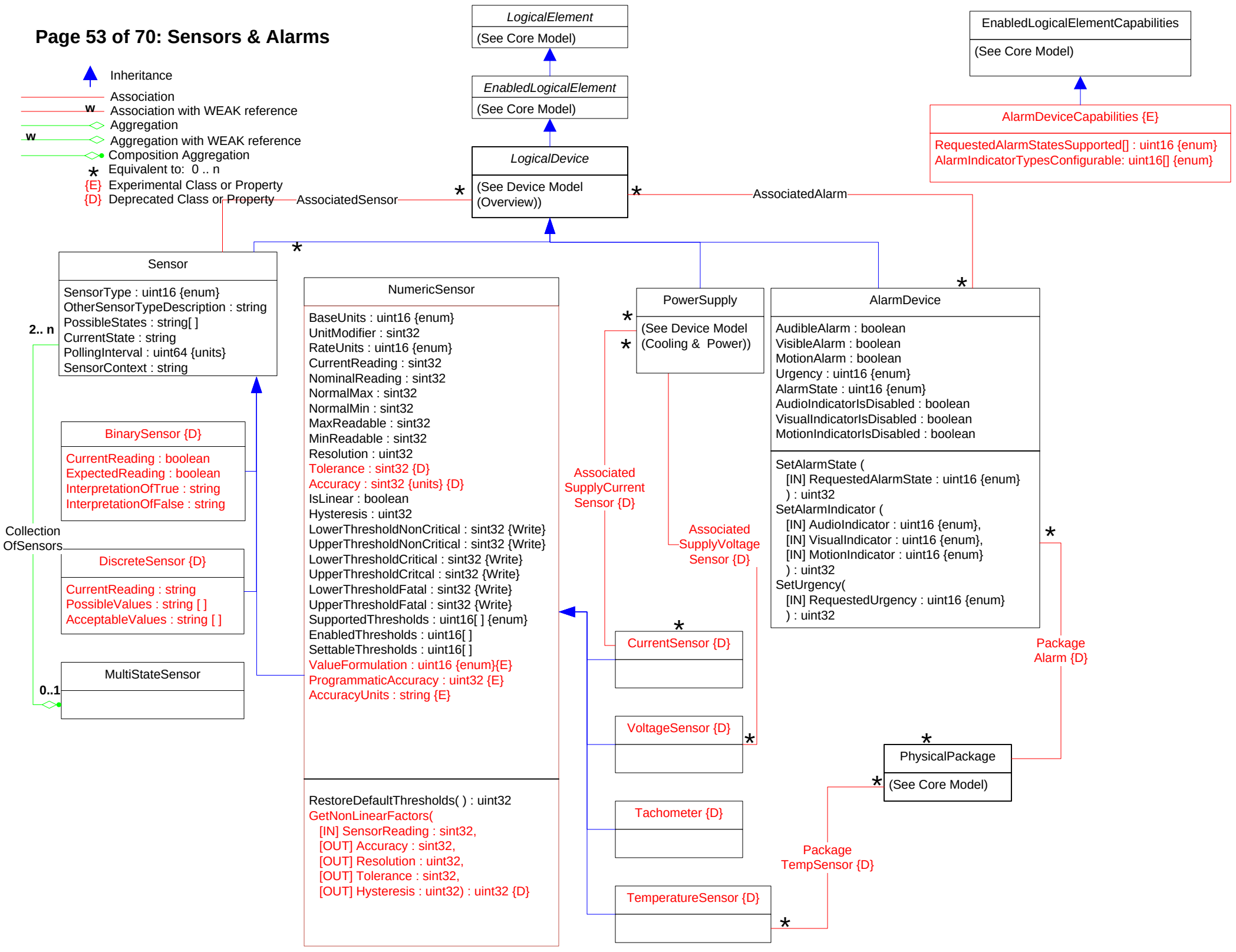


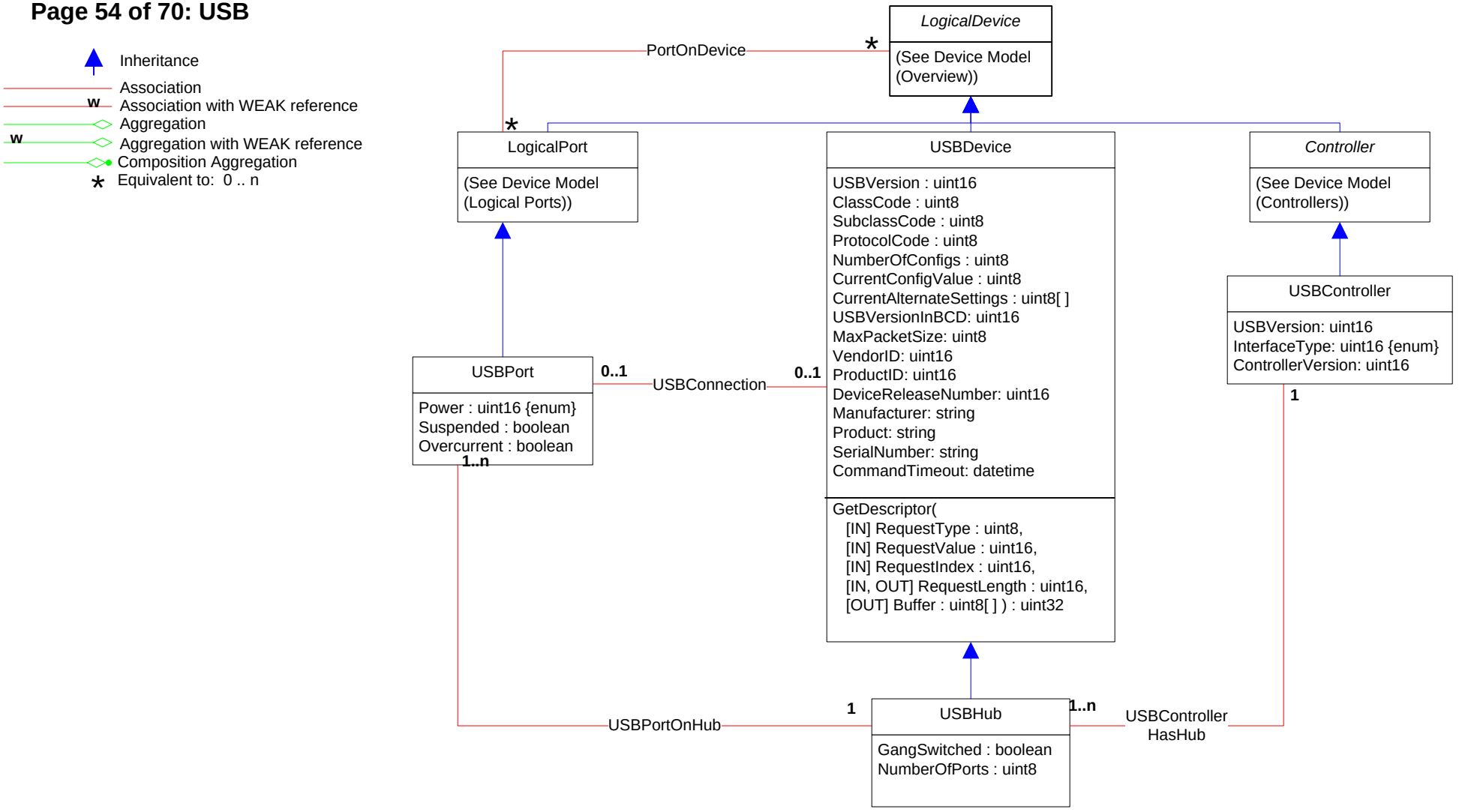

LogicalElement
(See Core Model)
EnabledLogicalElement
(See Core Model)
Inheritance
Association
Association with WEAK reference
Aggregation
w
Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
JobDestination
(See System Model)
Job
(See System Model)
LogicalDevice
(See Device Model (Overview))
Service
(See Core Model)
ServiceAccessPoint
(See Core Model)
PrintQueue
QueueEnabled : boolean {D}
QueueAccepting : boolean {D}
NumberOnQueue : uint32
QueueStatus: uint16 {enum}
QueueStatusInfo: string
MaxJobSize: uint32 {units}
DefaultJobPriority: uint32
JobPriorityHigh : uint32
JobPriorityLow : uint32
AvailableJobSheets : string[ ]
PrintJob
JobID : string {key}
SchedulingInformation :string
JobSize : uint32 {units}
Language : uint16 {D, enum}
MimeTypes : string[ ]
RequiredPaperType : string
Finishing : uint16[ ] {enum}
Copies : uint32
HorizontalResolution : uint32 {units}
VerticalResolution : uint32 {units}
CharSet : string
NaturalLanguage : string
NumberUp : uint32
PrintJobStatus : uint16 {enum}
TimeCompleted : datetime
RequiredJobSheets : string[ ]
JobOrigination : string
RequiredJobSheets : string[ ] {E}
Finishings[] : string {E}
ImpressionsCompleted : uint32 {E}
JobHoldUntil : string {E}
JobPriority : uint32 {E}
JobStatusMessage[] : string {E}
JobURI : string {E}
MessageFromOperator : string {E}
MoreInfoURI : string {E}
MultipleDocumentHandling : string {E}
NumberOfDocuments : uint32 {E}
OrientationRequested : string {E}
OutputDevice[] : string {E}
PageRanges[] : string {E}
PrintQuality : string {E}
SheetsCompleted : uint32 {E}
Sides : string {E}
Printer
ElementName: string
PrinterStatus : uint16 {enum}
DetectedErrorState : uint16 {enum}
ErrorInformation : string[ ]
PaperSizesSupported : uint16 [ ] {enum} {D}
PaperTypesAvailable : string[] {D}
DefaultPaperType : string {D}
CurrentPaperType : string {D}
LanguagesSupported : uint16 [ ] {enum} {D}
MimeTypesSupported : string[ ] {D}
CurrentLanguage : uint16 {enum} {D}
CurrentMimeType : string {D}
DefaultLanguage : uint16 {enum.} {D}
DefaultMimeType : string {D}
JobCountSinceLastReset : uint32
TimeOfLastReset : datetime
Capabilities : uint16 [ ] {enum} {D}
CapabilityDescriptions : string [ ] {D}
DefaultCapabilities : uint16[ ] {enum} {D}
CurrentCapabilities : uint16[ ] {enum} {D}
MaxCopies : uint32
DefaultCopies : uint32
MaxNumberUp : uint32
DefaultNumberUp : uint32
HorizontalResolution : uint32 {D}
VerticalResolution : uint32 {D}
CharSetsSupported : string[ ]
CurrentCharSet : string
NaturalLanguagesSupported : string[ ]
CurrentNaturalLanguage : string
MaxSizeSupported : uint32
AvailableJobSheets : string[ ]
MarkingTechnology : uint16 {enum} {D}
CurrentOperator: string {E}
ServicePerson: string {E}
SerialNumber: string {E}
CriticalAlerts: uint32 {E}
AllAlerts: uint32 {E}
ConsoleDisabled: boolean {E}
ConsoleNatualLanguage: string
ConsoleDisplauBufferText: string
PrintSAP
PrintProtocol : uint16[ ] {enum}
PrintProtocolInfo : string[ ]
PrintService
PaperTypesAvailable : string[ ]
LanguagesSupported : uint16[ ] {D,enum}
MimeTypesSupported : string[ ]
Capabilities : uint16[ ] {D, enum}
CapabilityDescriptions : string[ ] {D}
AvailableFilters : string[ ] {D}
LogEntry
(See System Model)
PrintAlertRecord {E}
CodeName: string
ComponentClassName: string
ComponentElementName: string
CreationTimeStamp: datetime
LocalizedDescription: string
OtherCodeName: string
OtherSeverityLevel: string
RecordData: string
SeverityLevel: uint32 {enum}
DataFile
(See System Model)
Owning PrintQueue
PrintJobFile
Printer ServicingJob
PrinterServicingQueue
QueueForPrintService
QueueForwardsToPrintSAP


Inheritance
Association
w Association with WEAK reference
Aggregation
w Aggregation with WEAK reference
Composition Aggregation
* Equivalent to: 0 .. n
{E} Experimental Class or Property
{D} Deprecated Class or Property
LogicalElement
(See Core Model)
PrinterElement
InstanceID: string {key, override}
SNMPRowID : uint32
Printer
(See Device Printer)
PrintOutputTray {E}
InstanceID: string {key, override}
SNMPRowID : uint32
LocalizedDescription: string
Type: uint32 {enum
OtherTypeDescription : string
CapacityUnit: uint32 {enum}
OtherCapacityUnit : string
MaxCapacityBasis: uint16 {enum}
MaxCapacity : uint32
RemainingCapacityBasis: uint16 {enum}
RemainingCapacity : uint32
AvailabilityStatus: uint32 {enum}
OfflineStatus : boolean
CriticalAlertsPresent: boolean
ElementName: string {override, req'd}
IsDefault: boolean
NonCriticalAlertsPresent: boolean
OtherAvailabilityStatus: string
PrintInputTray
ElementName: string {override, req'd}
IsDefault : boolean
LocalizedDescription: string
Type: uint32 {enum}
OtherTypeDescription : string
CapacityUnit: uint32 {enum}
OtherCapacityUnit : string
MaxCapacityBasis: uint16 {enum}
MaxCapacity : uint32
CurrentLevelBasis : uint16 {enum}
CurrentLevel : uint32
AvailabilityStatus: uint32 {enum}
OtherAvailabilityStatus : string
NonCriticalAlertsPresent : boolean
CriticalAlertsPresent : boolean
MediaSizeName : string
MediaName : string
MediaWeightBasis : uint16 {enum}
MediaWeight : uint32
MediaType : string
MediaColor : string
1
1
PrinterComponent
1
1
ConcreteComponent
*
PrintChannel {E}
Type : uint32
OtherTypeDescription : string
ProtocolVersion : string
AvailabilityStatus : uint32 {enum}
NonCriticalAlertsStatus : boolean
CriticalAlertsStatus : boolean
Associated
PrintSupply
PrintInterlock {E}
LocalizedDescription : string
InterlockStatus : uint32 {enum}
OtherInterlockStatus : string
*
AssociatedPrintInterpreter
*
*
PrintSupply
LocalizedDescription : string
Classification : uint32 {enum}
OtherClassification : string
Type: uint32 {enum}
OtherTypeDescription : string
SupplyUnit : uint32 {enum}
OtherSupplyUnit : string
MaxCapacityBasis : uint16 {enum}
MaxCapacity : uint32
RemainingCapacityBasis : uint16 {enum}
RemainingCapacity : uint32
ColorantRole : uint32 {enum}
OtherColorantRole : string
ColorantName : uint16 {enum}
OtherColorantName : string
ColorantTonality : uint32
PrintMediaPath {E}
IsDefault : boolean
LocalizedDescription : string
Type : uint32
OtherTypeDescription : string
MaxSpeedUnit : uint32 {enum}
MaxSpeedBasis : uint16 {enum}
MaxSpeed : uint32
MaxMediaSizeNameBasis : uint16
MaxMediaSizeName : string
MinMediaSizeNameBasis : uint16
MinMediaSizeName : string
AvailabilityStatus : uint32 {enum}
OtherAvailabilityStatus : string
NonCriticalAlertsStatus : boolean
CriticalAlertsStatus : boolean
PrintMarker
IsDefault : boolean
MarkTech : uint32 {enum}
OtherMarkTechDescription : string
CounterUnit : uint32
OtherCounterUnit : string
LifeCount : uint32
OtherLifeCount : string
PowerOnCount : uint32
ProcessColorants : uint32
SpotColorants : uint32
AvailabilityStatus : uint32 {enum}
OtherAvailabilityStatus : string
NonCriticalAlertsPresent : boolean
CriticalAlertsPresent : boolean
AddressabilityBasis: uint16
FeedAddressability: uint32
XFeedAddressability: uint32
PrintFinisher{E}
LocalizedDescription : string
Type : uint32 {enum}
OtherTypeDescription : string
PresentOnOff : uint32 {enum}
CapacityUnit : uint32 {enum}
OtherCapacityUnit : string
MaxCapacityBasis : uint16 {enum}
MaxCapacity : uint32
CurrentCapacityBasis : uint16 {enum}
CurrentCapacity : uint32
AvailabilityStatus : uint32 {enum}
OtherAvailabilityStatus : string
CriticalAlertsStatus : boolean
NonCriticalAlertsPresent: boolean
PrintInterpreter
LocalizedDescription : string
LangType : uint32 {enum]
OtherLangTypeDescription : string
LangLevel : string
AddressabilityBasis : uint16 {enum]
FeedAddressability : uint32
XFeedAddressability : uint32
DefaultCharSetIn : string
AvailabilityStatus : uint32 {enum}
OtherAvailabilityStatus : string
NonCriticalAlertsStatus : boolean
CriticalAlertsStatus : boolean

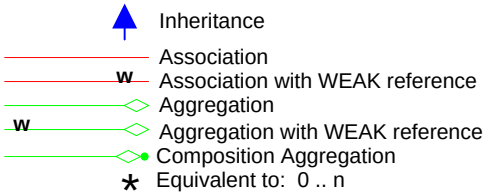

Service
(See Core Model)
StatisticalData
(See Core Model)
PrintService
(See Device Model, Printing 1)
Capabilities
(See Core Model)
PrintServiceSettings {E}
Copies : uint32
DocumentFormat : string
Finishings[] : string[]
JobHoldUntil : string
JobPriority : string
JobSheets : string
Media : string
MultipleDocumentHandling : string
NumberUp : uint32
OrientationRequested : string
OutputBin : string
PrintQuality : string
Resolution : string
Sides : string
Element SettingData
Element Capabilities
VTLStatisticalDataServiceCapabilities
Charset : string[]
ColorSupported : boolean
Compression : string[]
Copies : string
Finishings : string[]
IPPOperations : string[]
IPPVersions : string[]
JobHoldUntil : string[]
JobPriority : string
JobSheets : string[]
MaxImpressions : uint32
MaxJobSize : uint32
MaxSheets : uint32
MultipleDocumentHandling : string[]
MultipleDocumentJobs;
NaturalLanguage : string[]
NumberUp : string
OrientationRequested : string[]
OutputBin : string[]
OutputDevice : string[]
PagesPerMinute : uint32
PagesPerMinuteColor : uint32
PageRanges : boolean
PDLOverrideAttempted : boolean
PrintQuality : string[]
ReferenceURISchemes : string[]
Resolution : string[]
Sides : string[]

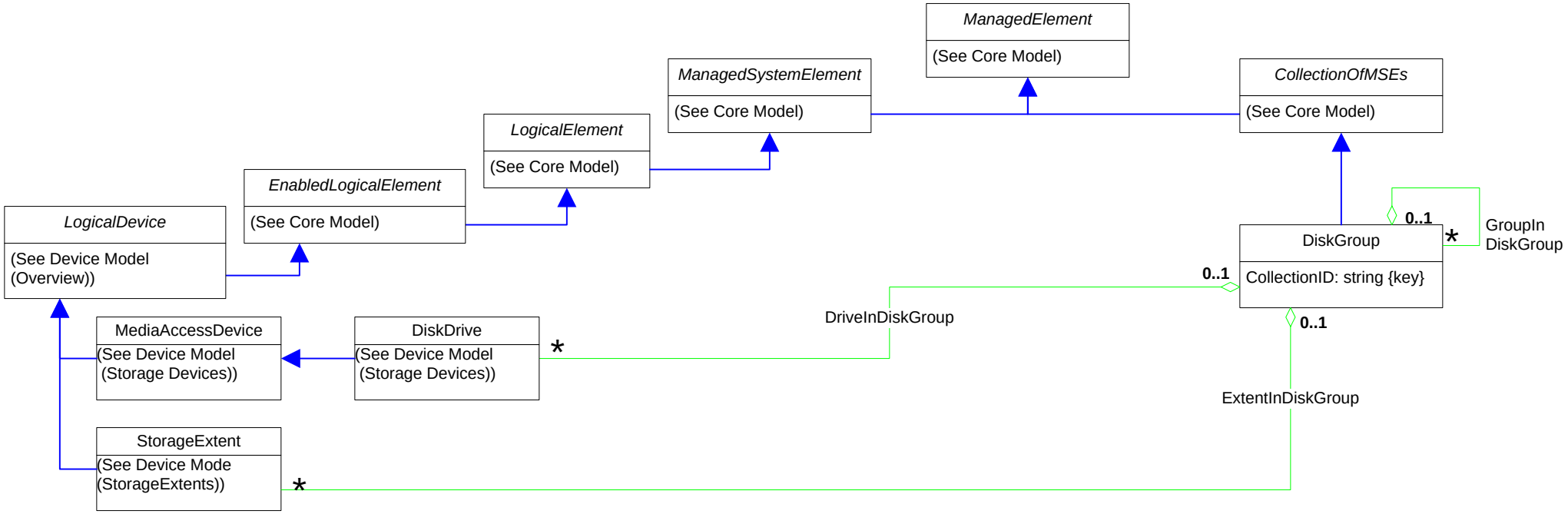
# Page 53 of 70: Sensors & Alarms



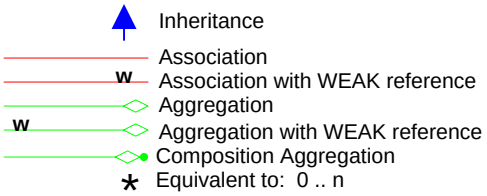

Inheritance
Association
w
Association with WEAK reference
Aggregation
w
Aggregation with WEAK reference
Composition Aggregation
*
Equivalent to: 0 .. n
LogicalDevice
(See Device Model (Overview))
PortOnDevice
*
*
LogicalPort
(See Device Model (Logical Ports))
USBDevice
USBVersion : uint16
ClassCode : uint8
SubclassCode : uint8
ProtocolCode : uint8
NumberOfConfigs : uint8
CurrentConfigValue : uint8
CurrentAlternateSettings : uint8[ ]
USBVersionInBCD: uint16
MaxPacketSize: uint8
VendorID: uint16
ProductID: uint16
DeviceReleaseNumber: uint16
Manufacturer: string
Product: string
SerialNumber: string
CommandTimeout: datetime
GetDescriptor(
[IN] RequestType : uint8,
[IN] RequestValue : uint16,
[IN] RequestIndex : uint16,
[IN, OUT] RequestLength : uint16,
[OUT] Buffer : uint8[ ] ) : uint32
Controller
(See Device Model (Controllers))
USBController
USBVersion: uint16
InterfaceType: uint16 {enum}
ControllerVersion: uint16
1
USBPort
Power : uint16 {enum}
Suspended : boolean
Overcurrent : boolean
0..1
USBConnection
0..1
1..n
1
USBPortOnHub
USBHub
GangSwitched : boolean
NumberOfPorts : uint8
1..n
USBController HasHub

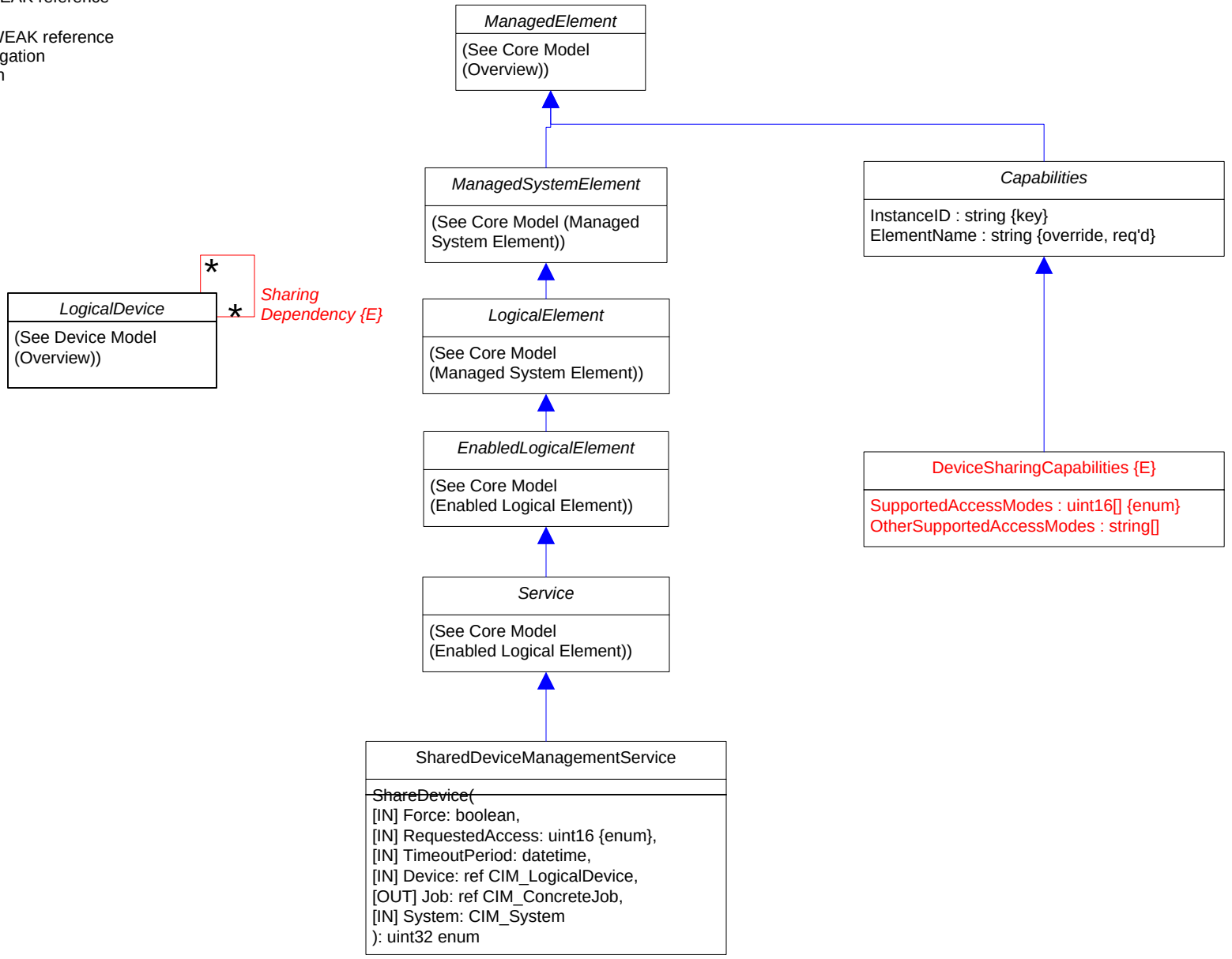
# Page 55 of 70: Disk Group

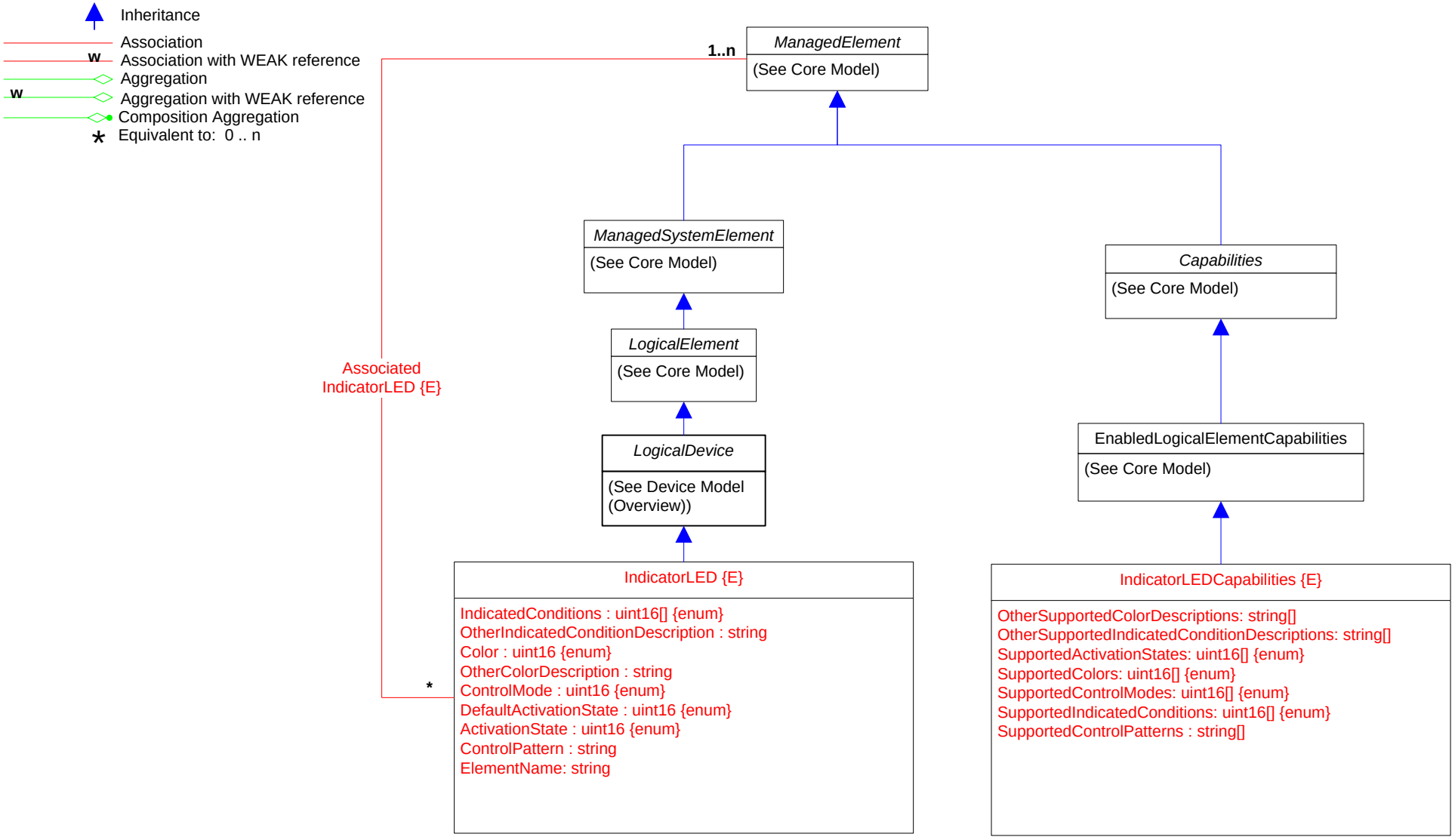


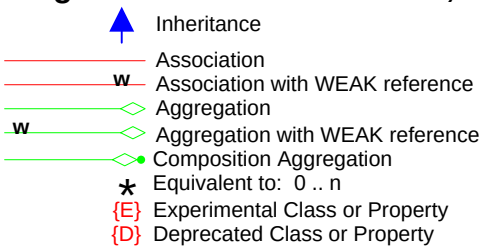
# Page 56 of 70: Device Sharing

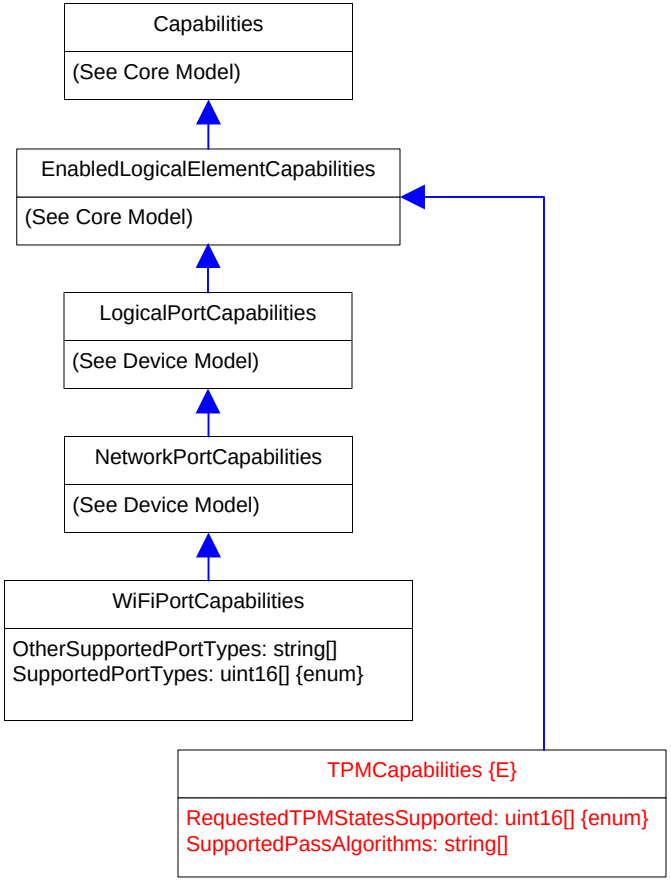


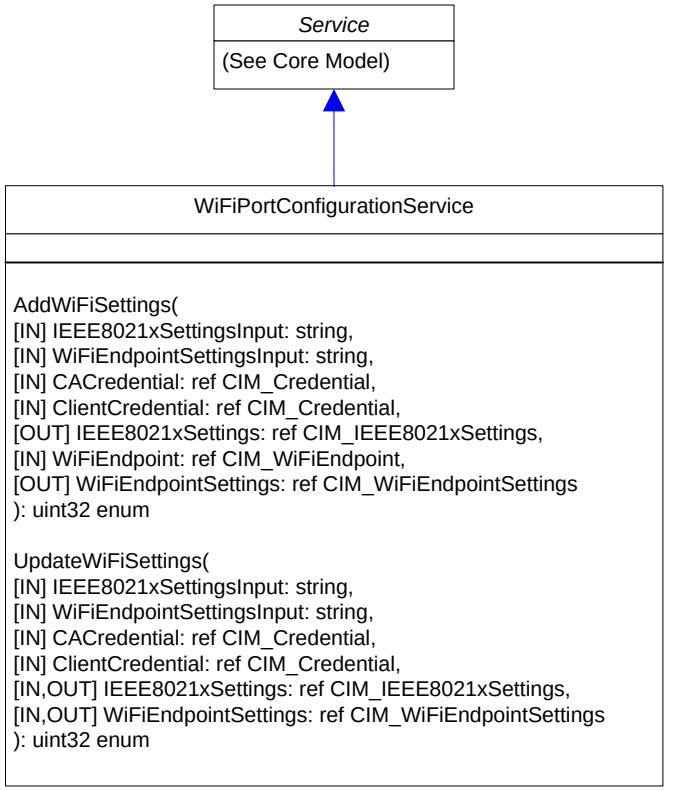



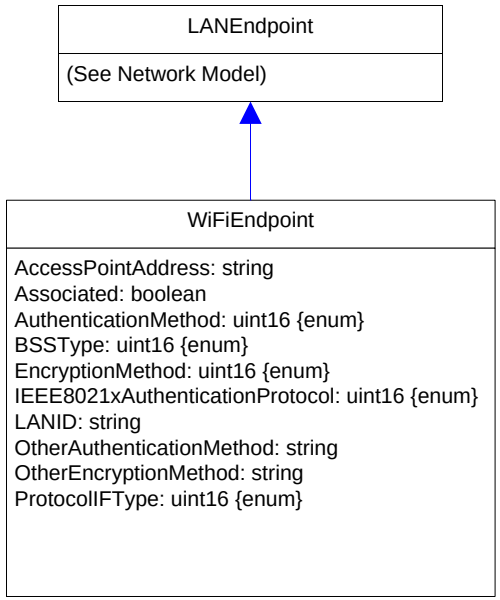

Inheritance
Association
w
Association with WEAK reference
Aggregation
w
Aggregation with WEAK reference
Composition Aggregation
*
Equivalent to: 0 .. n
1..n
ManagedElement
(See Core Model)
ManagedSystemElement
(See Core Model)
LogicalElement
(See Core Model)
LogicalDevice
(See Device Model (Overview))
Capabilities
(See Core Model)
EnabledLogicalElementCapabilities
(See Core Model)
Associated IndicatorLED {E}
*
IndicatorLED {E}
IndicatedConditions : uint16[] {enum}
OtherIndicatedConditionDescription : string
Color : uint16 {enum}
OtherColorDescription : string
ControlMode : uint16 {enum}
DefaultActivationState : uint16 {enum}
ActivationState : uint16 {enum}
ControlPattern : string
ElementName: string
IndicatorLEDCapabilities {E}
OtherSupportedColorDescriptions: string[]
OtherSupportedIndicatedConditionDescriptions: string[]
SupportedActivationStates: uint16[] {enum}
SupportedColors: uint16[] {enum}
SupportedControlModes: uint16[] {enum}
SupportedIndicatedConditions: uint16[] {enum}
SupportedControlPatterns : string[]

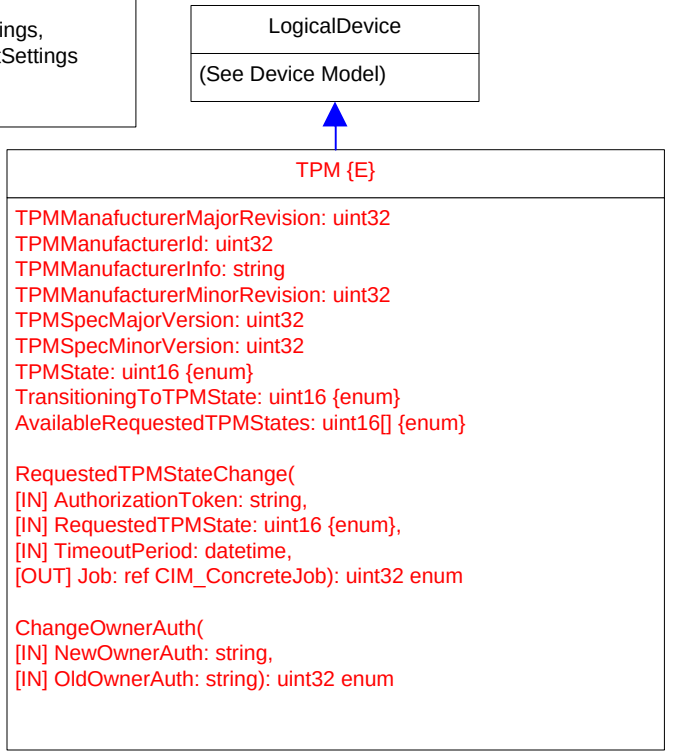
# Page 58 of 70: WiFi Services, TPM

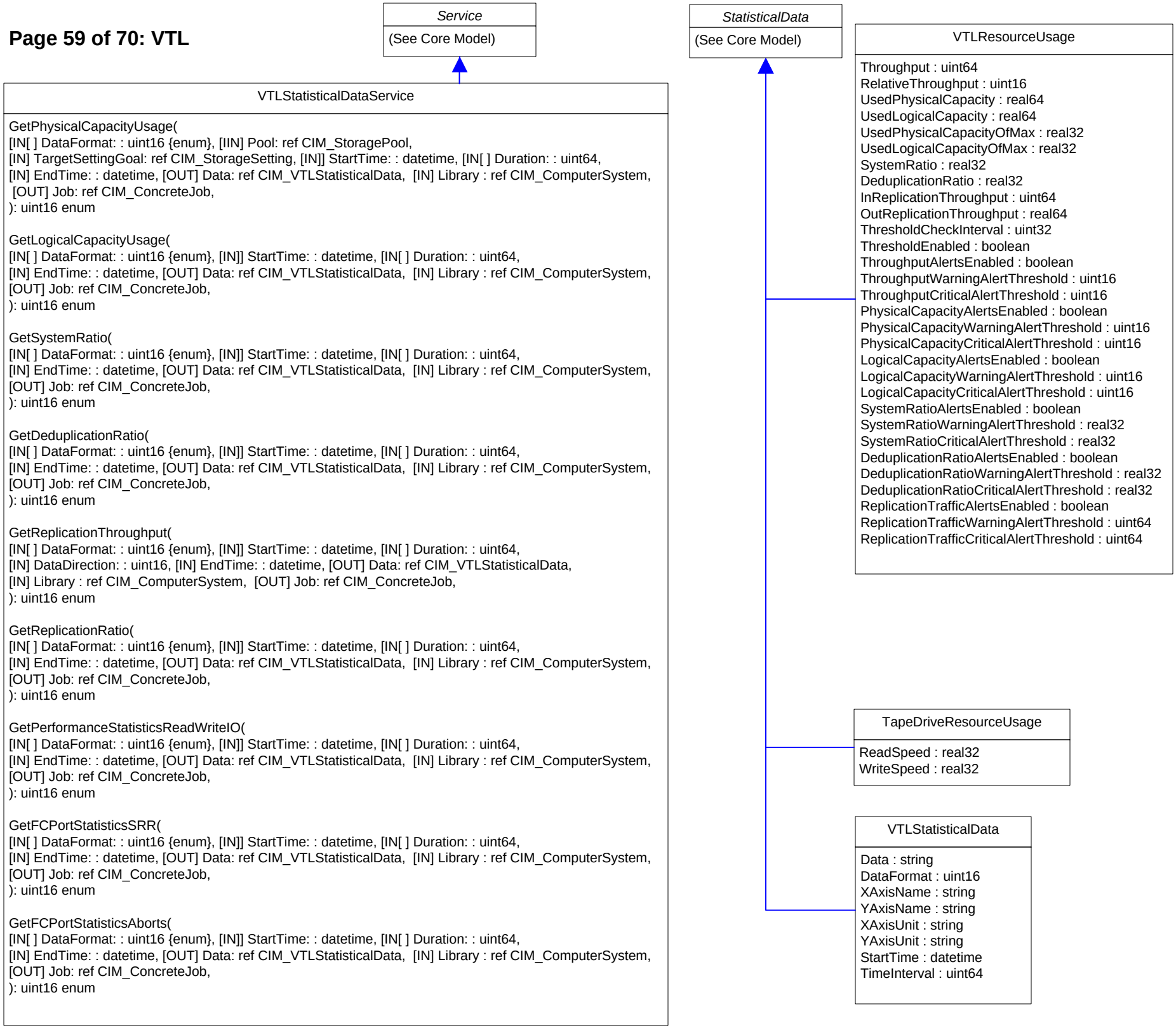


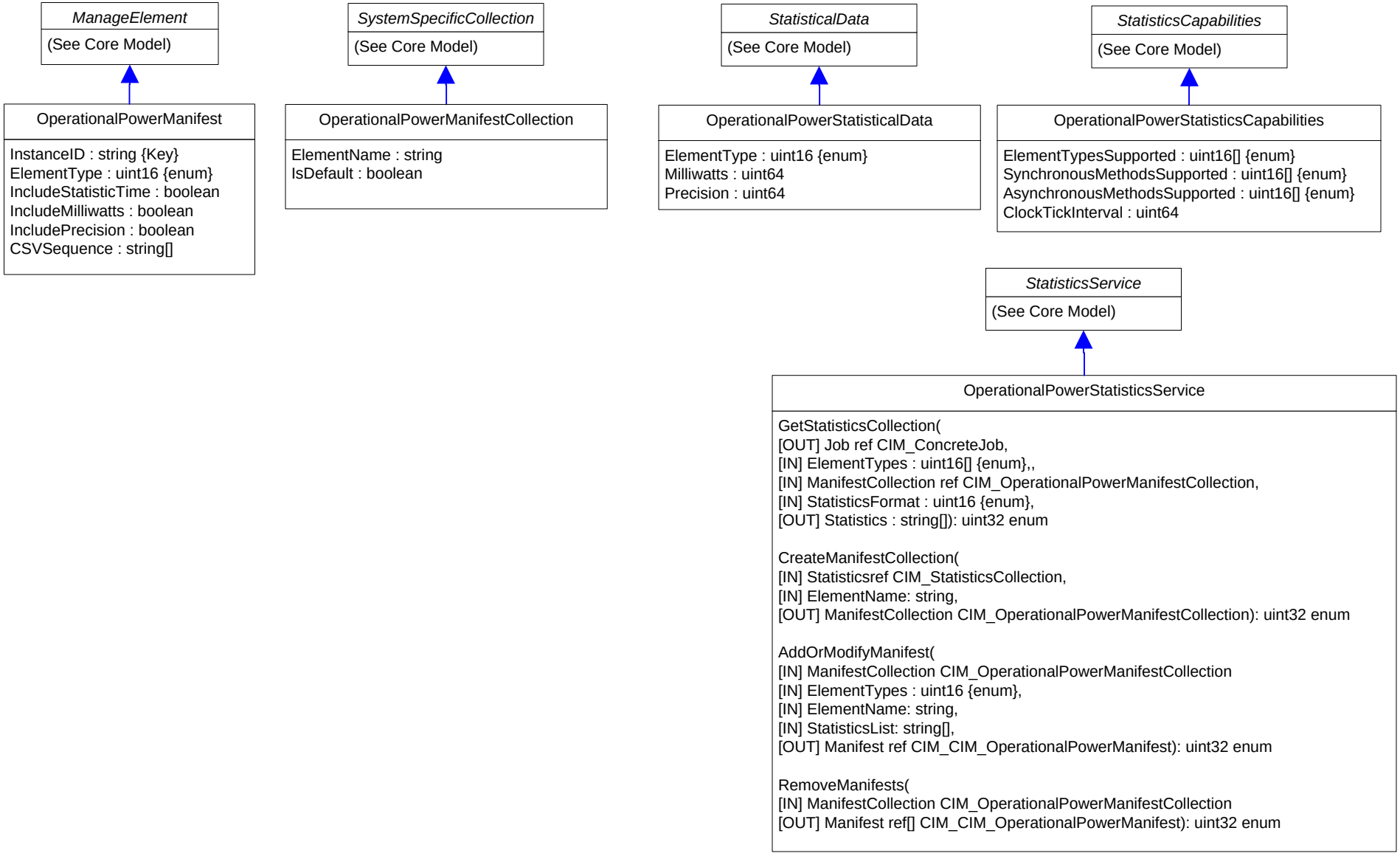



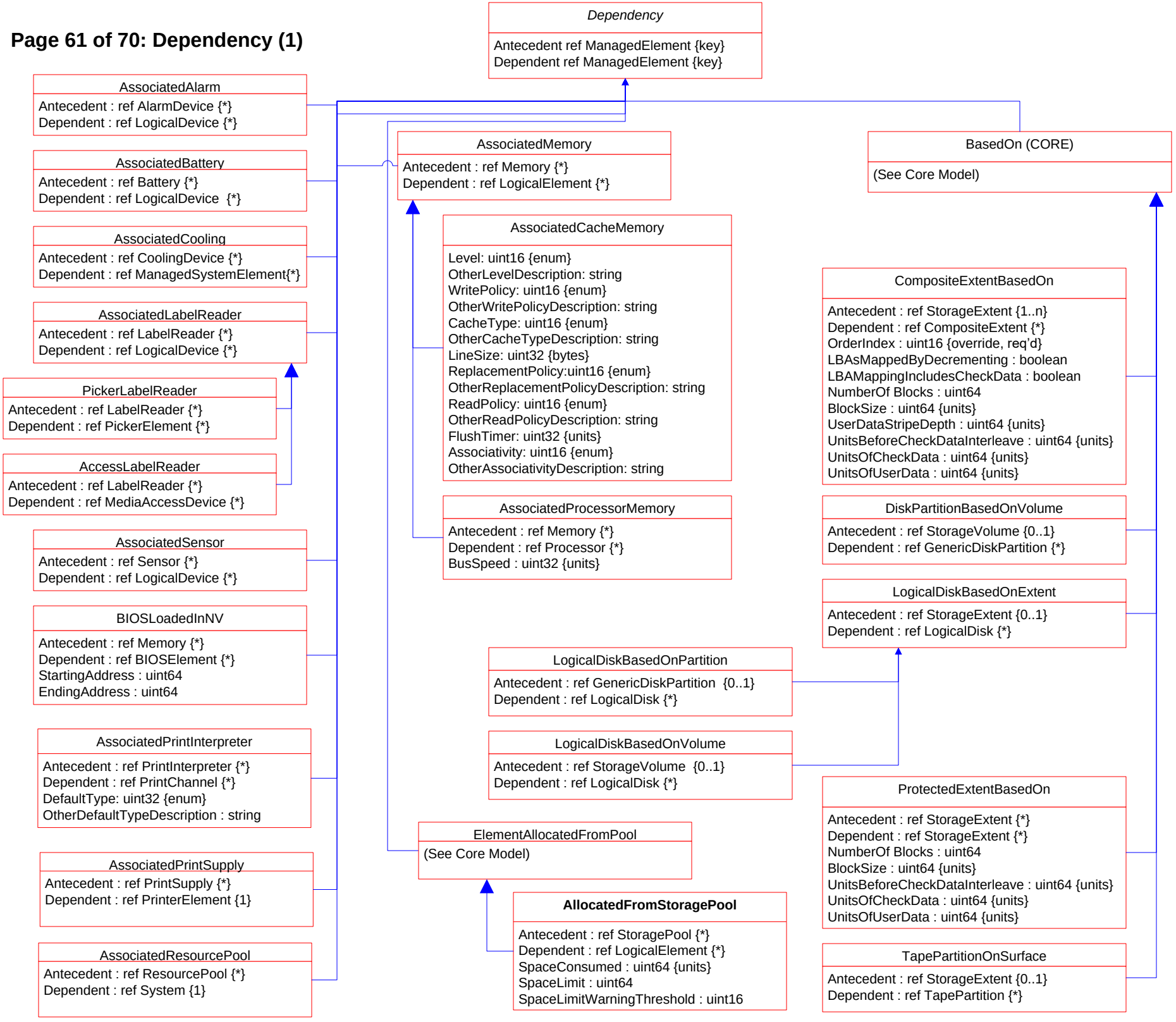



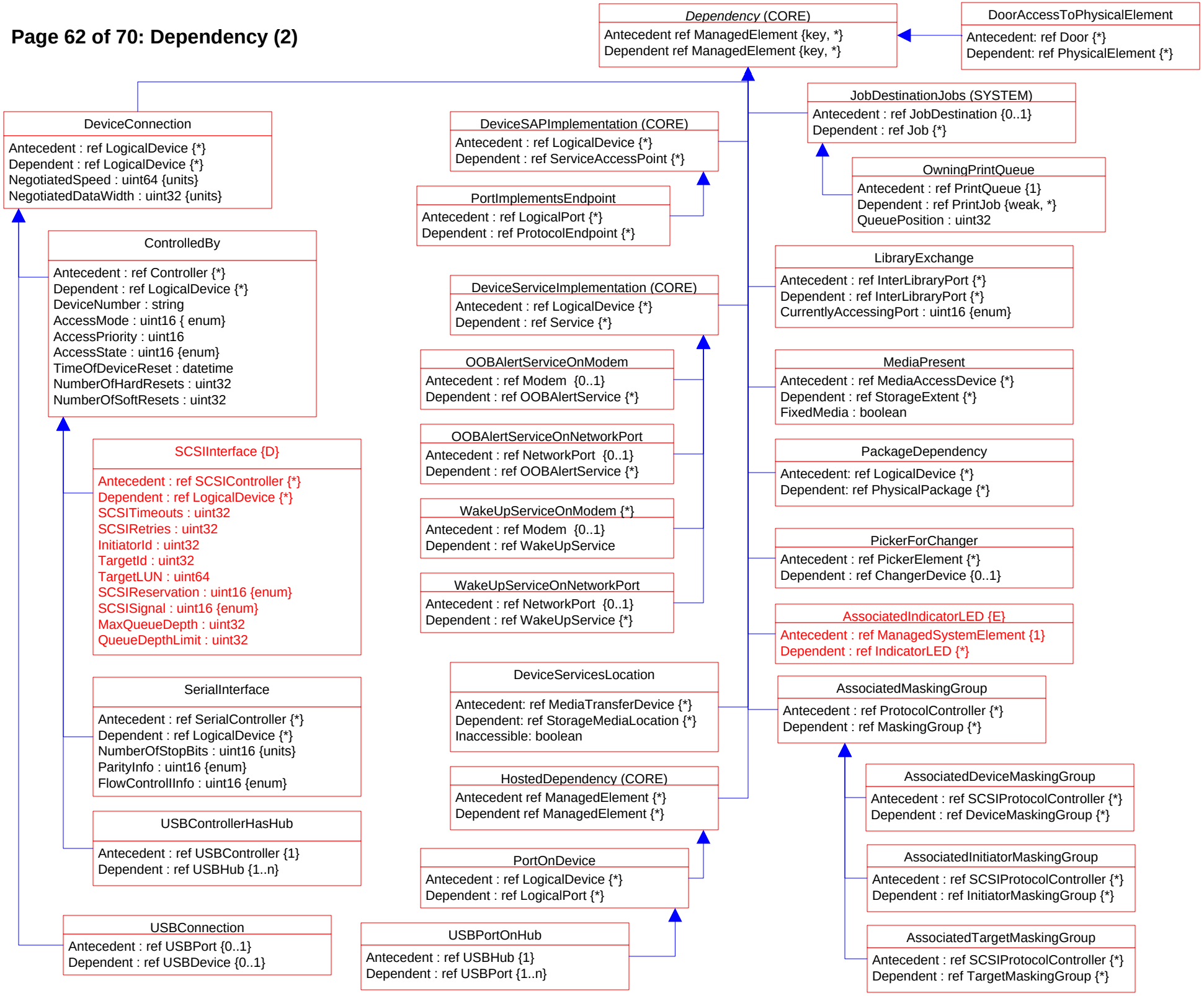



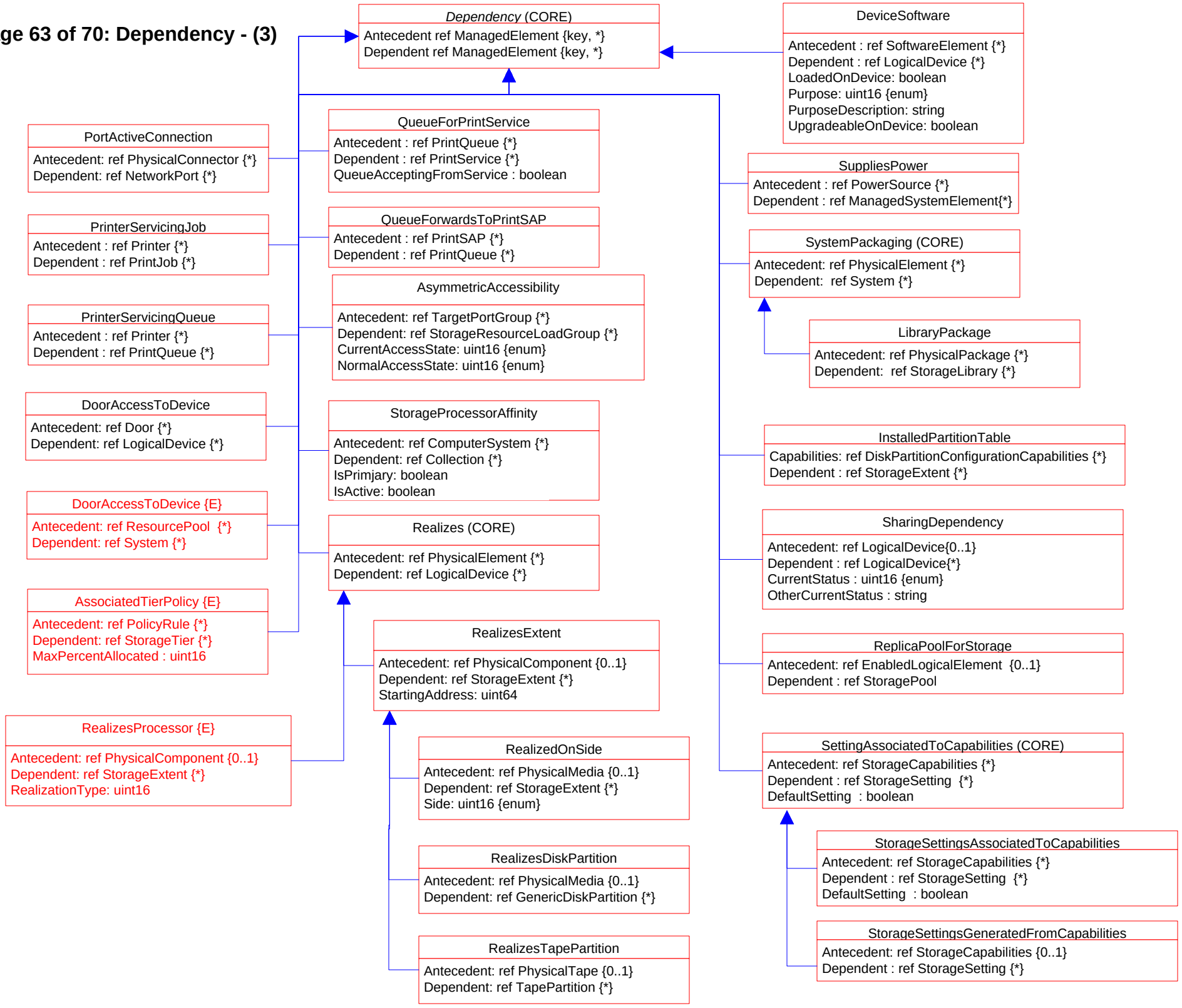




Service
(See Core Model)
StatisticalData
(See Core Model)
VTLResourceUsage
Throughput : uint64
RelativeThroughput : uint16
UsedPhysicalCapacity : real64
UsedLogicalCapacity : real64
UsedPhysicalCapacityOfMax : real32
UsedLogicalCapacityOfMax : real32
SystemRatio : real32
DeduplicationRatio : real32
InReplicationThroughput : uint64
OutReplicationThroughput : real64
ThresholdCheckInterval : uint32
ThresholdEnabled : boolean
ThroughputAlertsEnabled : boolean
ThroughputWarningAlertThreshold : uint16
ThroughputCriticalAlertThreshold : uint16
PhysicalCapacityAlertsEnabled : boolean
PhysicalCapacityWarningAlertThreshold : uint16
PhysicalCapacityCriticalAlertThreshold : uint16
LogicalCapacityAlertsEnabled : boolean
LogicalCapacityWarningAlertThreshold : uint16
LogicalCapacityCriticalAlertThreshold : uint16
SystemRatioAlertsEnabled : boolean
SystemRatioWarningAlertThreshold : real32
SystemRatioCriticalAlertThreshold : real32
DeduplicationRatioAlertsEnabled : boolean
DeduplicationRatioWarningAlertThreshold : real32
DeduplicationRatioCriticalAlertThreshold : real32
ReplicationTrafficAlertsEnabled : boolean
ReplicationTrafficWarningAlertThreshold : uint64
ReplicationTrafficCriticalAlertThreshold : uint64
VTLStatisticalDataService
GetPhysicalCapacityUsage(
[IN[ ] DataFormat: : uint16 {enum}, [IIN] Pool: ref CIM_StoragePool,
[IN] TargetSettingGoal: ref CIM_StorageSetting, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetLogicalCapacityUsage(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetSystemRatio(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetDeduplicationRatio(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetReplicationThroughput(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] DataDirection: : uint16, [IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData,
[IN] Library : ref CIM_ComputerSystem, [OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetReplicationRatio(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetPerformanceStatisticsReadWriteIO(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetFCPortStatisticsSRR(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
GetFCPortStatisticsAborts(
[IN[ ] DataFormat: : uint16 {enum}, [IN]] StartTime: : datetime, [IN[ ] Duration: : uint64,
[IN] EndTime: : datetime, [OUT] Data: ref CIM_VTLStatisticalData, [IN] Library : ref CIM_ComputerSystem,
[OUT] Job: ref CIM_ConcreteJob,
): uint16 enum
TapeDriveResourceUsage
ReadSpeed : real32
WriteSpeed : real32
VTLStatisticalData
Data : string
DataFormat : uint16
XAxisName : string
YAxisName : string
XAxisUnit : string
YAxisUnit : string
StartTime : datetime
TimeInterval : uint64

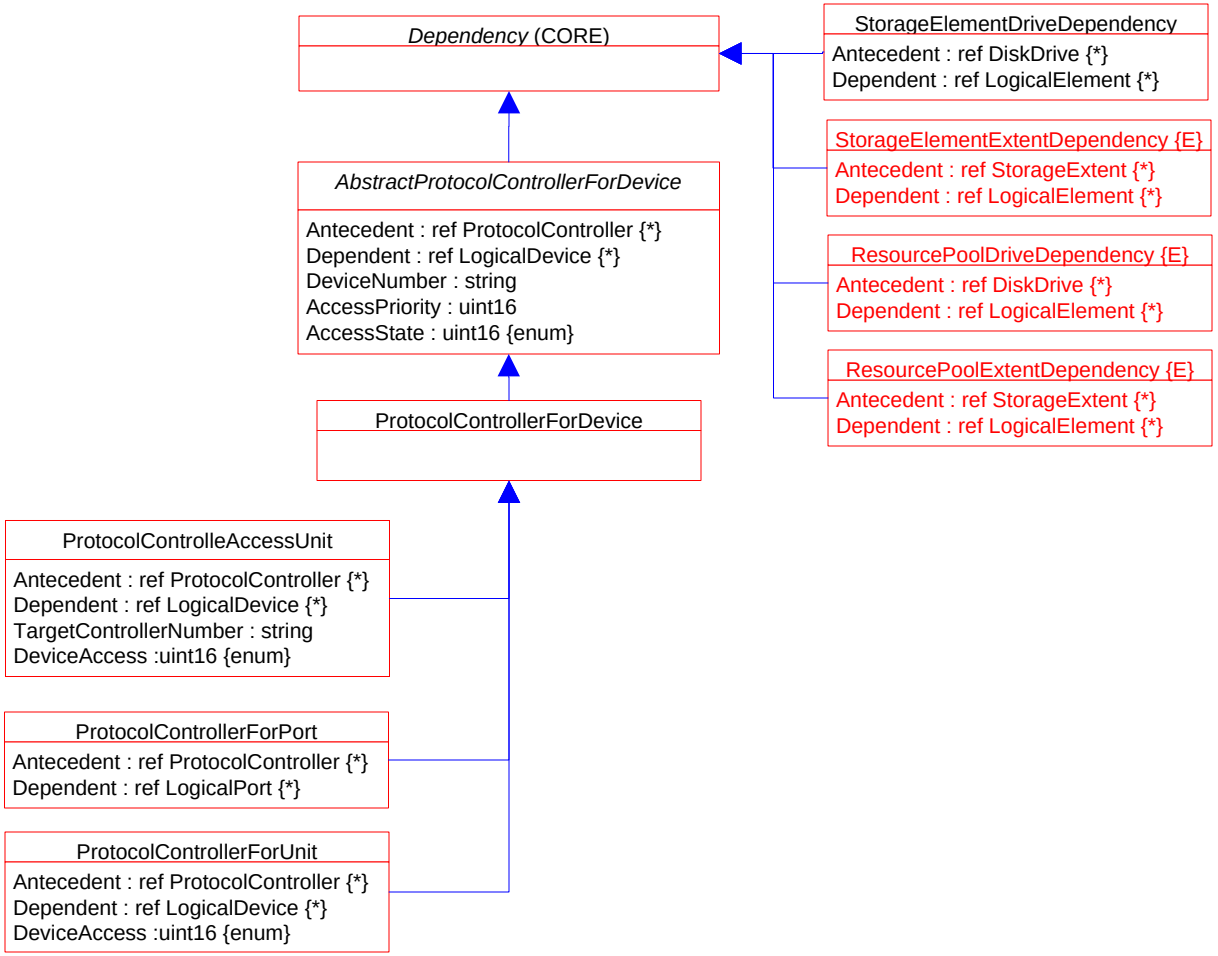

ManageElement
(See Core Model)
OperationalPowerManifest
InstanceID : string {Key}
ElementType : uint16 {enum}
IncludeStatisticTime : boolean
IncludeMilliwatts : boolean
IncludePrecision : boolean
CSVSequence : string[]
SystemSpecificCollection
(See Core Model)
OperationalPowerManifestCollection
ElementName : string
IsDefault : boolean
StatisticalData
(See Core Model)
OperationalPowerStatisticalData
ElementType : uint16 {enum}
Milliwatts : uint64
Precision : uint64
StatisticsCapabilities
(See Core Model)
OperationalPowerStatisticsCapabilities
ElementTypesSupported : uint16[] {enum}
SynchronousMethodsSupported : uint16[] {enum}
AsynchronousMethodsSupported : uint16[] {enum}
ClockTickInterval : uint64
StatisticsService
(See Core Model)
OperationalPowerStatisticsService
GetStatisticsCollection(
[OUT] Job ref CIM_ConcreteJob,
[IN] ElementTypes : uint16[] {enum},,
[IN] ManifestCollection ref CIM_OperationalPowerManifestCollection,
[IN] StatisticsFormat : uint16 {enum},
[OUT] Statistics : string[]): uint32 enum
CreateManifestCollection(
[IN] Statisticsref CIM_StatisticsCollection,
[IN] ElementName: string,
[OUT] ManifestCollection CIM_OperationalPowerManifestCollection): uint32 enum
AddOrModifyManifest(
[IN] ManifestCollection CIM_OperationalPowerManifestCollection
[IN] ElementTypes : uint16 {enum},
[IN] ElementName: string,
[IN] StatisticsList: string[],
[OUT] Manifest ref CIM_CIM_OperationalPowerManifest): uint32 enum
RemoveManifests(
[IN] ManifestCollection CIM_OperationalPowerManifestCollection
[OUT] Manifest ref[] CIM_CIM_OperationalPowerManifest): uint32 enum


Dependency
Antecedent ref ManagedElement {key}
Dependent ref ManagedElement {key}
AssociatedAlarm
Antecedent : ref AlarmDevice {*}
Dependent : ref LogicalDevice {*}
AssociatedBattery
Antecedent : ref Battery {*}
Dependent : ref LogicalDevice {*}
AssociatedCooling
Antecedent : ref CoolingDevice {*}
Dependent : ref ManagedSystemElement{*}
AssociatedLabelReader
Antecedent : ref LabelReader {*}
Dependent : ref LogicalDevice {*}
PickerLabelReader
Antecedent : ref LabelReader {*}
Dependent : ref PickerElement {*}
AccessLabelReader
Antecedent : ref LabelReader {*}
Dependent : ref MediaAccessDevice {*}
AssociatedSensor
Antecedent : ref Sensor {*}
Dependent : ref LogicalDevice {*}
BIOSLoadedInNV
Antecedent : ref Memory {*}
Dependent : ref BIOSElement {*}
StartingAddress : uint64
EndingAddress : uint64
AssociatedPrintInterpreter
Antecedent : ref PrintInterpreter {*}
Dependent : ref PrintChannel {*}
DefaultType: uint32 {enum}
OtherDefaultTypeDescription : string
AssociatedPrintSupply
Antecedent : ref PrintSupply {*}
Dependent : ref PrinterElement {1}
AssociatedResourcePool
Antecedent : ref ResourcePool {*}
Dependent : ref System {1}
AssociatedMemory
Antecedent : ref Memory {*}
Dependent : ref LogicalElement {*}
AssociatedCacheMemory
Level: uint16 {enum}
OtherLevelDescription: string
WritePolicy: uint16 {enum}
OtherWritePolicyDescription: string
CacheType: uint16 {enum}
OtherCacheTypeDescription: string
LineSize: uint32 {bytes}
ReplacementPolicy:uint16 {enum}
OtherReplacementPolicyDescription: string
ReadPolicy: uint16 {enum}
OtherReadPolicyDescription: string
FlushTimer: uint32 {units}
Associativity: uint16 {enum}
OtherAssociativityDescription: string
AssociatedProcessorMemory
Antecedent : ref Memory {*}
Dependent : ref Processor {*}
BusSpeed : uint32 {units}
LogicalDiskBasedOnPartition
Antecedent : ref GenericDiskPartition {0..1}
Dependent : ref LogicalDisk {*}
LogicalDiskBasedOnVolume
Antecedent : ref StorageVolume {0..1}
Dependent : ref LogicalDisk {*}
ElementAllocatedFromPool
(See Core Model)
AllocatedFromStoragePool
Antecedent : ref StoragePool {*}
Dependent : ref LogicalElement {*}
SpaceConsumed : uint64 {units}
SpaceLimit : uint64
SpaceLimitWarningThreshold : uint16
BasedOn (CORE)
(See Core Model)
CompositeExtentBasedOn
Antecedent : ref StorageExtent {1..n}
Dependent : ref CompositeExtent {*}
OrderIndex : uint16 {override, req'd}
LBAsMappedByDecrementing : boolean
LBAMappingIncludesCheckData : boolean
NumberOf Blocks : uint64
BlockSize : uint64 {units}
UserDataStripeDepth : uint64 {units}
UnitsBeforeCheckDataInterleave : uint64 {units}
UnitsOfCheckData : uint64 {units}
UnitsOfUserData : uint64 {units}
DiskPartitionBasedOnVolume
Antecedent : ref StorageVolume {0..1}
Dependent : ref GenericDiskPartition {*}
LogicalDiskBasedOnExtent
Antecedent : ref StorageExtent {0..1}
Dependent : ref LogicalDisk {*}
ProtectedExtentBasedOn
Antecedent : ref StorageExtent {*}
Dependent : ref StorageExtent {*}
NumberOf Blocks : uint64
BlockSize : uint64 {units}
UnitsBeforeCheckDataInterleave : uint64 {units}
UnitsOfCheckData : uint64 {units}
UnitsOfUserData : uint64 {units}
TapePartitionOnSurface
Antecedent : ref StorageExtent {0..1}
Dependent : ref TapePartition {*}

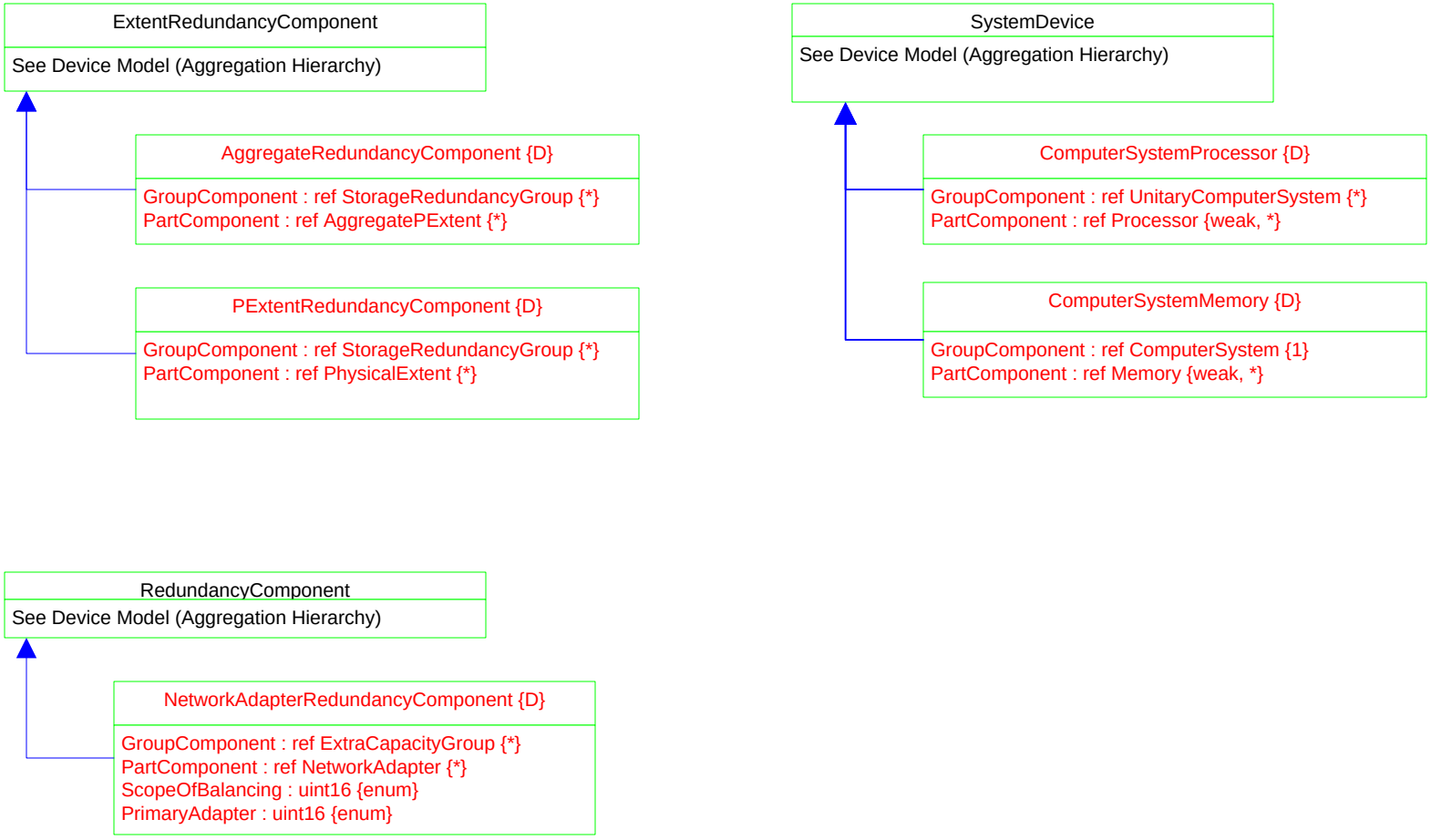

*Dependency* (CORE)
Antecedent ref ManagedElement {key, *}
Dependent ref ManagedElement {key, *}
DoorAccessToPhysicalElement
Antecedent: ref Door {*}
Dependent: ref PhysicalElement {*}
DeviceConnection
Antecedent : ref LogicalDevice {*}
Dependent : ref LogicalDevice {*}
NegotiatedSpeed : uint64 {units}
NegotiatedDataWidth : uint32 {units}
DeviceSAPImplementation (CORE)
Antecedent : ref LogicalDevice {*}
Dependent : ref ServiceAccessPoint {*}
JobDestinationJobs (SYSTEM)
Antecedent : ref JobDestination {0..1}
Dependent : ref Job {*}
OwningPrintQueue
Antecedent : ref PrintQueue {1}
Dependent : ref PrintJob {weak, *}
QueuePosition : uint32
PortImplementsEndpoint
Antecedent : ref LogicalPort {*}
Dependent : ref ProtocolEndpoint {*}
ControlledBy
Antecedent : ref Controller {*}
Dependent : ref LogicalDevice {*}
DeviceNumber : string
AccessMode : uint16 { enum}
AccessPriority : uint16
AccessState : uint16 {enum}
TimeOfDeviceReset : datetime
NumberOfHardResets : uint32
NumberOfSoftResets : uint32
DeviceServiceImplementation (CORE)
Antecedent : ref LogicalDevice {*}
Dependent : ref Service {*}
LibraryExchange
Antecedent : ref InterLibraryPort {*}
Dependent : ref InterLibraryPort {*}
CurrentlyAccessingPort : uint16 {enum}
OOBAlertServiceOnModem
Antecedent : ref Modem {0..1}
Dependent : ref OOBAlertService {*}
MediaPresent
Antecedent : ref MediaAccessDevice {*}
Dependent : ref StorageExtent {*}
FixedMedia : boolean
OOBAlertServiceOnNetworkPort
Antecedent : ref NetworkPort {0..1}
Dependent : ref OOBAlertService {*}
SCSIInterface {D}
Antecedent : ref SCSIController {*}
Dependent : ref LogicalDevice {*}
SCSITimeouts : uint32
SCSIRetries : uint32
InitiatorId : uint32
TargetId : uint32
TargetLUN : uint64
SCSIReservation : uint16 {enum}
SCSISignal : uint16 {enum}
MaxQueueDepth : uint32
QueueDepthLimit : uint32
PackageDependency
Antecedent: ref LogicalDevice {*}
Dependent: ref PhysicalPackage {*}
WakeUpServiceOnModem {*}
Antecedent : ref Modem {0..1}
Dependent : ref WakeUpService
PickerForChanger
Antecedent : ref PickerElement {*}
Dependent : ref ChangerDevice {0..1}
WakeUpServiceOnNetworkPort
Antecedent : ref NetworkPort {0..1}
Dependent : ref WakeUpService {*}
AssociatedIndicatorLED {E}
Antecedent : ref ManagedSystemElement {1}
Dependent : ref IndicatorLED {*}
DeviceServicesLocation
Antecedent: ref MediaTransferDevice {*}
Dependent: ref StorageMediaLocation {*}
Inaccessible: boolean
AssociatedMaskingGroup
Antecedent : ref ProtocolController {*}
Dependent : ref MaskingGroup {*}
SerialInterface
Antecedent : ref SerialController {*}
Dependent : ref LogicalDevice {*}
NumberOfStopBits : uint16 {units}
ParityInfo : uint16 {enum}
FlowControlIInfo : uint16 {enum}
HostedDependency (CORE)
Antecedent ref ManagedElement {*}
Dependent ref ManagedElement {*}
AssociatedDeviceMaskingGroup
Antecedent : ref SCSIProtocolController {*}
Dependent : ref DeviceMaskingGroup {*}
USBControllerHasHub
Antecedent : ref USBController {1}
Dependent : ref USBHub {1..n}
PortOnDevice
Antecedent : ref LogicalDevice {*}
Dependent : ref LogicalPort {*}
AssociatedInitiatorMaskingGroup
Antecedent : ref SCSIProtocolController {*}
Dependent : ref InitiatorMaskingGroup {*}
USBConnection
Antecedent : ref USBPort {0..1}
Dependent : ref USBDevice {0..1}
USBPortOnHub
Antecedent : ref USBHub {1}
Dependent : ref USBPort {1..n}
AssociatedTargetMaskingGroup
Antecedent : ref SCSIProtocolController {*}
Dependent : ref TargetMaskingGroup {*}

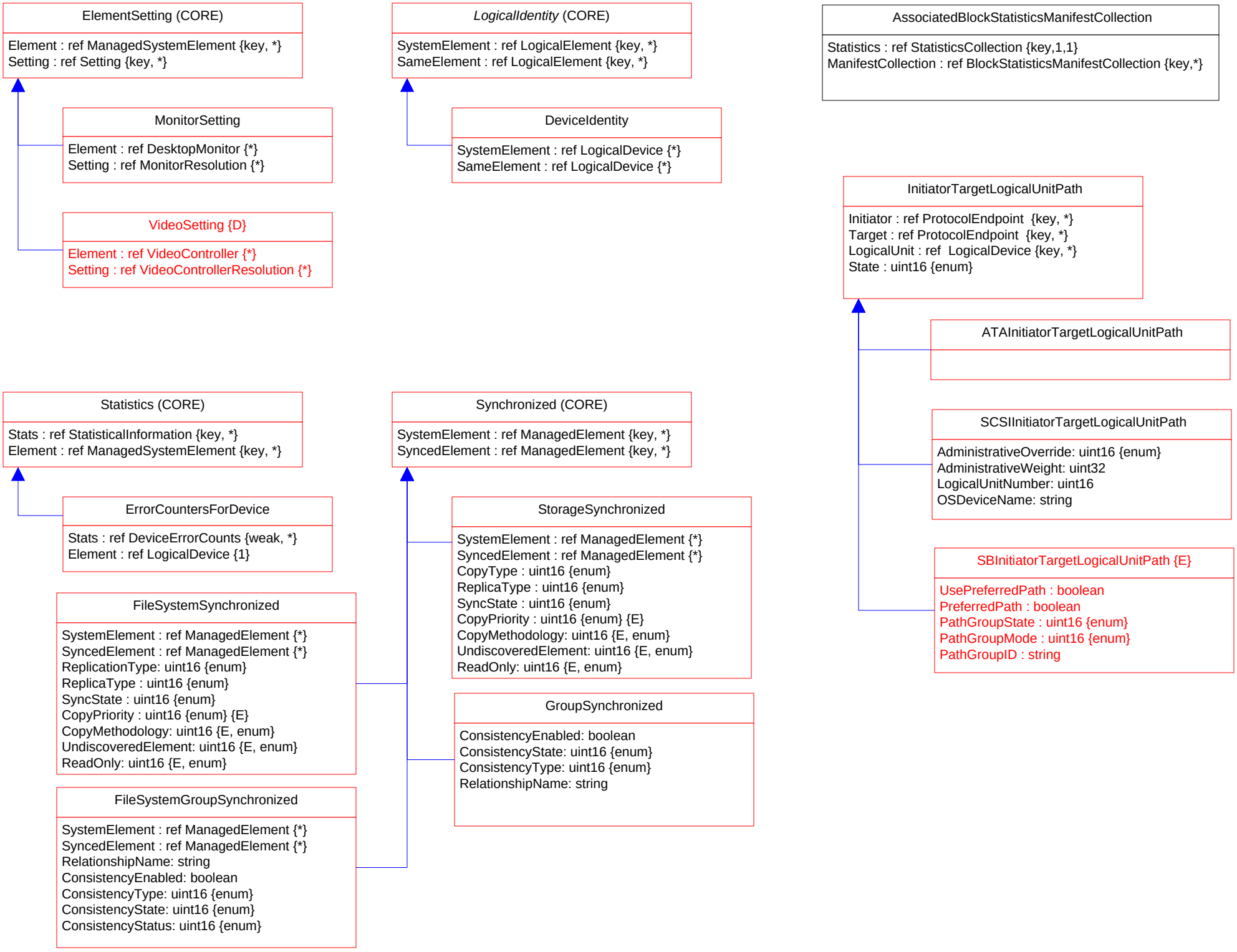

*Dependency* (CORE)
Antecedent ref ManagedElement {key, *}
Dependent ref ManagedElement {key, *}
DeviceSoftware
Antecedent : ref SoftwareElement {*}
Dependent : ref LogicalDevice {*}
LoadedOnDevice: boolean
Purpose: uint16 {enum}
PurposeDescription: string
UpgradeableOnDevice: boolean
PortActiveConnection
Antecedent: ref PhysicalConnector {*}
Dependent: ref NetworkPort {*}
QueueForPrintService
Antecedent : ref PrintQueue {*}
Dependent : ref PrintService {*}
QueueAcceptingFromService : boolean
SuppliesPower
Antecedent : ref PowerSource {*}
Dependent : ref ManagedSystemElement{*}
PrinterServicingJob
Antecedent : ref Printer {*}
Dependent : ref PrintJob {*}
QueueForwardsToPrintSAP
Antecedent : ref PrintSAP {*}
Dependent : ref PrintQueue {*}
SystemPackaging (CORE)
Antecedent: ref PhysicalElement {*}
Dependent: ref System {*}
AsymmetricAccessibility
Antecedent: ref TargetPortGroup {*}
Dependent: ref StorageResourceLoadGroup {*}
CurrentAccessState: uint16 {enum}
NormalAccessState: uint16 {enum}
PrinterServicingQueue
Antecedent : ref Printer {*}
Dependent : ref PrintQueue {*}
LibraryPackage
Antecedent: ref PhysicalPackage {*}
Dependent: ref StorageLibrary {*}
DoorAccessToDevice
Antecedent: ref Door {*}
Dependent: ref LogicalDevice {*}
StorageProcessorAffinity
Antecedent: ref ComputerSystem {*}
Dependent: ref Collection {*}
IsPrimjary: boolean
IsActive: boolean
InstalledPartitionTable
Capabilities: ref DiskPartitionConfigurationCapabilities {*}
Dependent : ref StorageExtent {*}
DoorAccessToDevice {E}
Antecedent: ref ResourcePool {*}
Dependent: ref System {*}
Realizes (CORE)
Antecedent: ref PhysicalElement {*}
Dependent: ref LogicalDevice {*}
SharingDependency
Antecedent: ref LogicalDevice{0..1}
Dependent : ref LogicalDevice{*}
CurrentStatus : uint16 {enum}
OtherCurrentStatus : string
AssociatedTierPolicy {E}
Antecedent: ref PolicyRule {*}
Dependent: ref StorageTier {*}
MaxPercentAllocated : uint16
RealizesExtent
Antecedent: ref PhysicalComponent {0..1}
Dependent: ref StorageExtent {*}
StartingAddress: uint64
ReplicaPoolForStorage
Antecedent: ref EnabledLogicalElement {0..1}
Dependent : ref StoragePool
RealizesProcessor {E}
Antecedent: ref PhysicalComponent {0..1}
Dependent: ref StorageExtent {*}
RealizationType: uint16
RealizedOnSide
Antecedent: ref PhysicalMedia {0..1}
Dependent: ref StorageExtent {*}
Side: uint16 {enum}
SettingAssociatedToCapabilities (CORE)
Antecedent: ref StorageCapabilities {*}
Dependent : ref StorageSetting {*}
DefaultSetting : boolean
RealizesDiskPartition
Antecedent: ref PhysicalMedia {0..1}
Dependent: ref GenericDiskPartition {*}
StorageSettingsAssociatedToCapabilities
Antecedent: ref StorageCapabilities {*}
Dependent : ref StorageSetting {*}
DefaultSetting : boolean
RealizesTapePartition
Antecedent: ref PhysicalTape {0..1}
Dependent: ref TapePartition {*}
StorageSettingsGeneratedFromCapabilities
Antecedent: ref StorageCapabilities {0..1}
Dependent : ref StorageSetting {*}

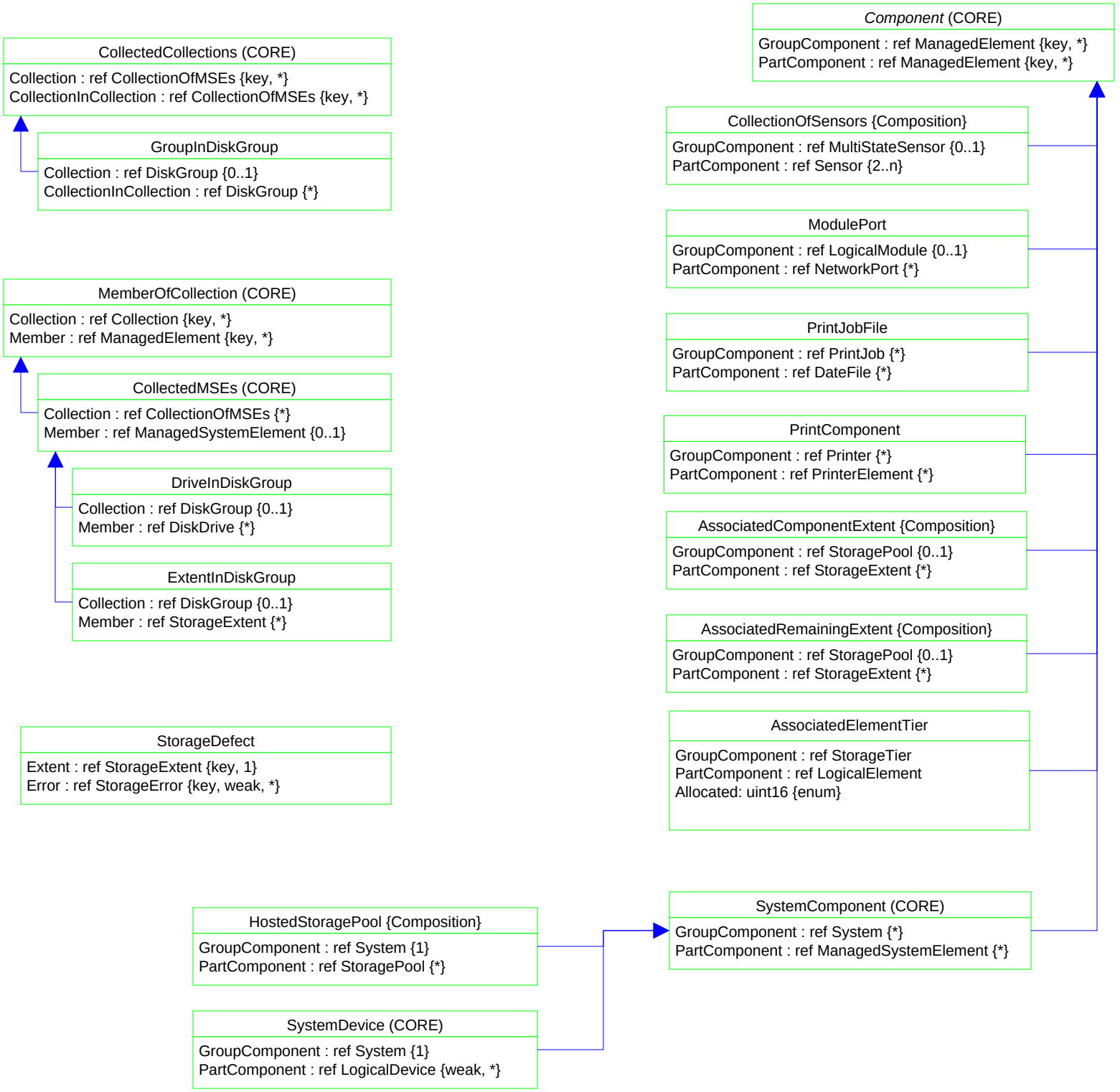
## Page 64 of 70: Dependency- (4)

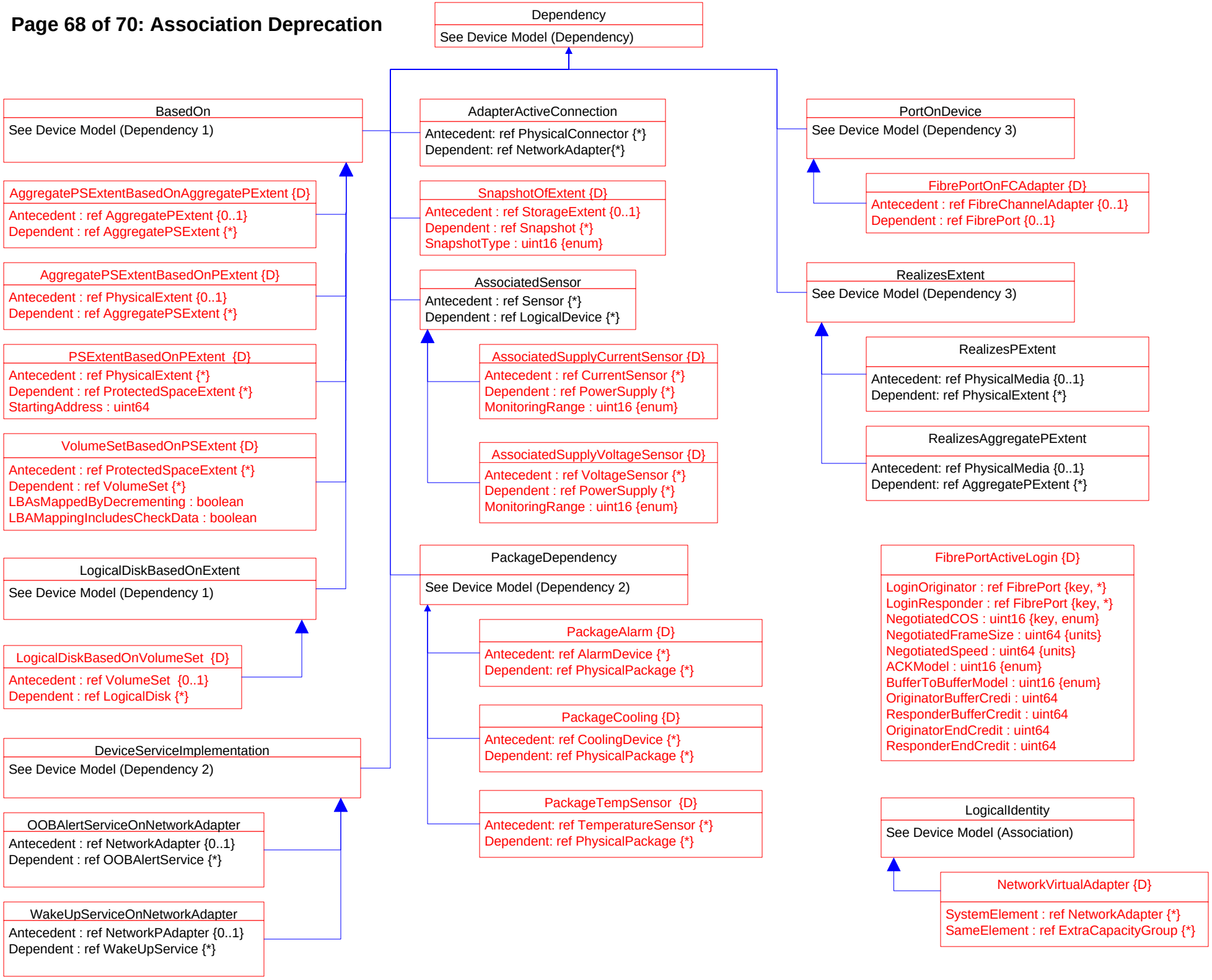


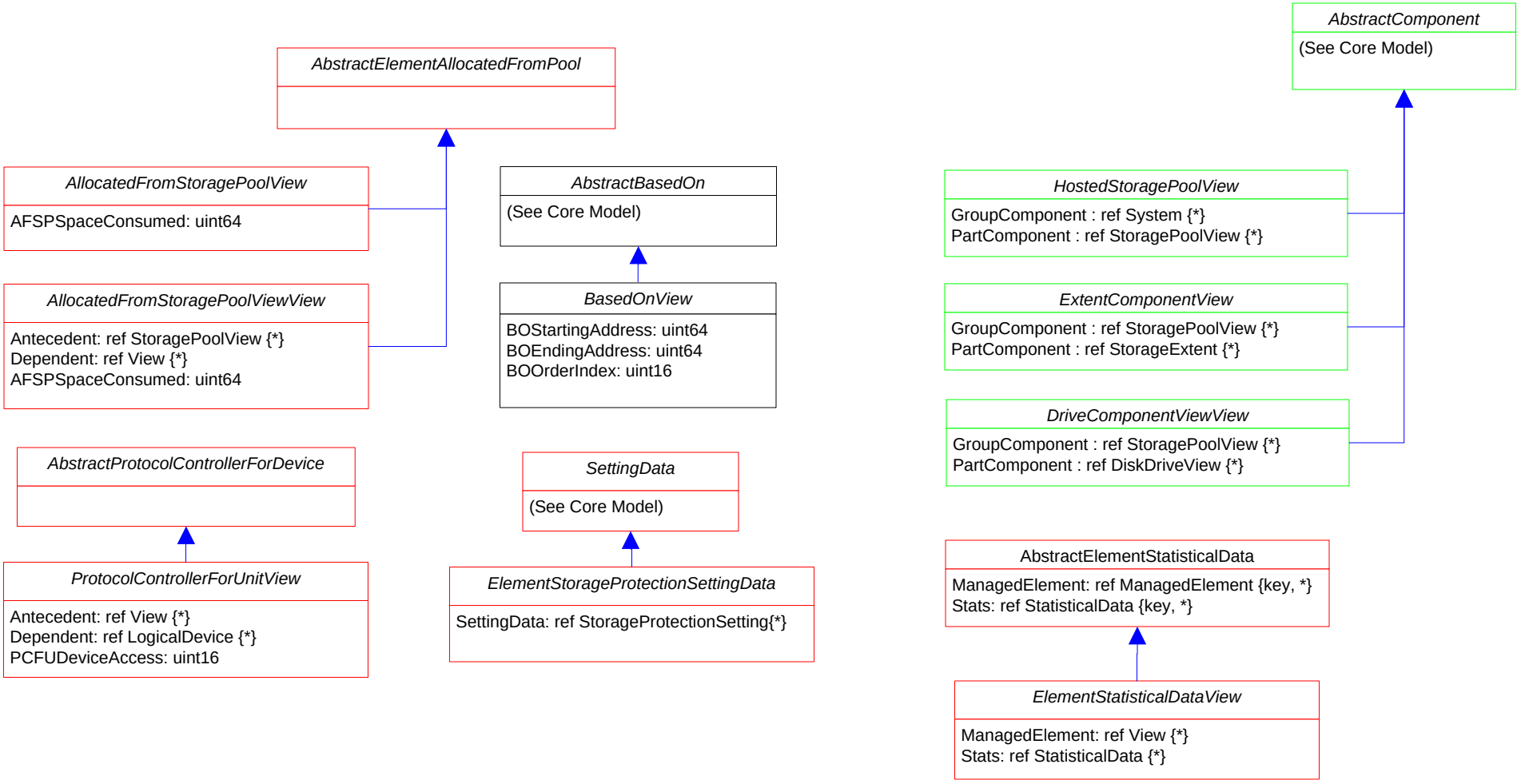
# Page 65 of 70: Aggregation Deprecation

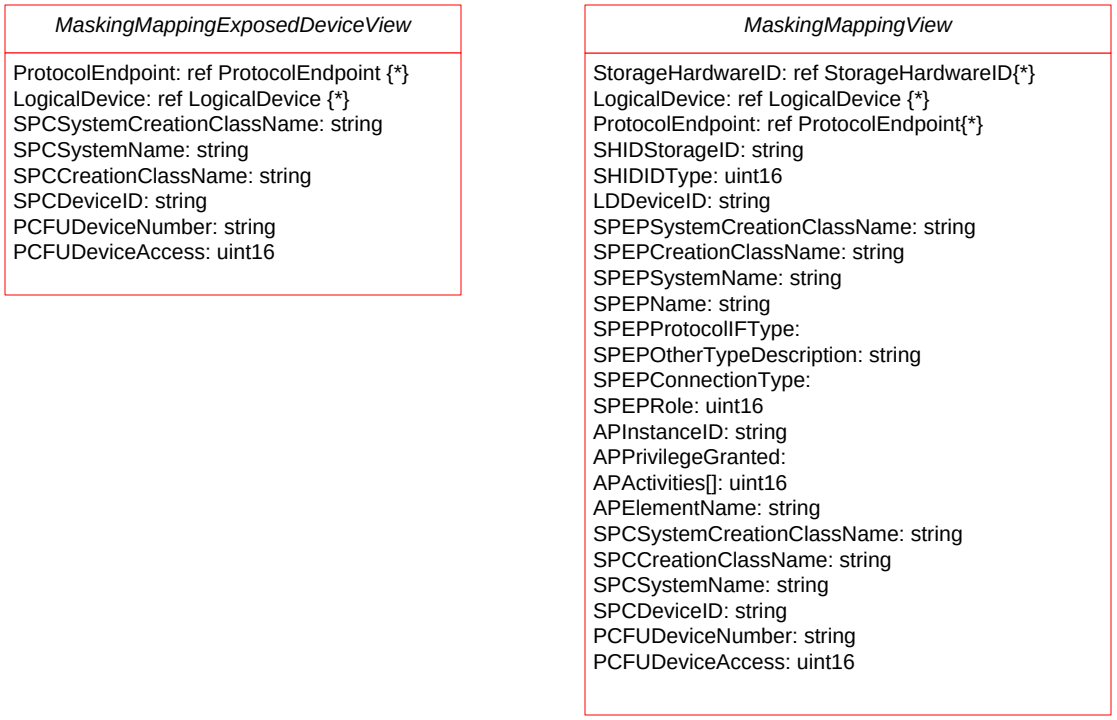



ElementSetting (CORE)
Element : ref ManagedSystemElement {key, *}
Setting : ref Setting {key, *}
MonitorSetting
Element : ref DesktopMonitor {*}
Setting : ref MonitorResolution {*}
VideoSetting {D}
Element : ref VideoController {*}
Setting : ref VideoControllerResolution {*}
LogicalIdentity (CORE)
SystemElement : ref LogicalElement {key, *}
SameElement : ref LogicalElement {key, *}
DeviceIdentity
SystemElement : ref LogicalDevice {*}
SameElement : ref LogicalDevice {*}
AssociatedBlockStatisticsManifestCollection
Statistics : ref StatisticsCollection {key,1,1}
ManifestCollection : ref BlockStatisticsManifestCollection {key,*}
InitiatorTargetLogicalUnitPath
Initiator : ref ProtocolEndpoint {key, *}
Target : ref ProtocolEndpoint {key, *}
LogicalUnit : ref LogicalDevice {key, *}
State : uint16 {enum}
ATAInitiatorTargetLogicalUnitPath
SCSIInitiatorTargetLogicalUnitPath
AdministrativeOverride: uint16 {enum}
AdministrativeWeight: uint32
LogicalUnitNumber: uint16
OSDeviceName: string
SBInitiatorTargetLogicalUnitPath {E}
UsePreferredPath : boolean
PreferredPath : boolean
PathGroupState : uint16 {enum}
PathGroupMode : uint16 {enum}
PathGroupID : string
Statistics (CORE)
Stats : ref StatisticalInformation {key, *}
Element : ref ManagedSystemElement {key, *}
ErrorCountersForDevice
Stats : ref DeviceErrorCounts {weak, *}
Element : ref LogicalDevice {1}
FileSystemSynchronized
SystemElement : ref ManagedElement {*}
SyncedElement : ref ManagedElement {*}
ReplicationType: uint16 {enum}
ReplicaType : uint16 {enum}
SyncState : uint16 {enum}
CopyPriority : uint16 {enum} {E}
CopyMethodology: uint16 {E, enum}
UndiscoveredElement: uint16 {E, enum}
ReadOnly: uint16 {E, enum}
FileSystemGroupSynchronized
SystemElement : ref ManagedElement {*}
SyncedElement : ref ManagedElement {*}
RelationshipName: string
ConsistencyEnabled: boolean
ConsistencyType: uint16 {enum}
ConsistencyState: uint16 {enum}
ConsistencyStatus: uint16 {enum}
Synchronized (CORE)
SystemElement : ref ManagedElement {key, *}
SyncedElement : ref ManagedElement {key, *}
StorageSynchronized
SystemElement : ref ManagedElement {*}
SyncedElement : ref ManagedElement {*}
CopyType : uint16 {enum}
ReplicaType : uint16 {enum}
SyncState : uint16 {enum}
CopyPriority : uint16 {enum} {E}
CopyMethodology: uint16 {E, enum}
UndiscoveredElement: uint16 {E, enum}
ReadOnly: uint16 {E, enum}
GroupSynchronized
ConsistencyEnabled: boolean
ConsistencyState: uint16 {enum}
ConsistencyType: uint16 {enum}
RelationshipName: string


CollectedCollections (CORE)
Collection : ref CollectionOfMSEs {key, *}
CollectionInCollection : ref CollectionOfMSEs {key, *}
GroupInDiskGroup
Collection : ref DiskGroup {0..1}
CollectionInCollection : ref DiskGroup {*}
MemberOfCollection (CORE)
Collection : ref Collection {key, *}
Member : ref ManagedElement {key, *}
CollectedMSEs (CORE)
Collection : ref CollectionOfMSEs {*}
Member : ref ManagedSystemElement {0..1}
DriveInDiskGroup
Collection : ref DiskGroup {0..1}
Member : ref DiskDrive {*}
ExtentInDiskGroup
Collection : ref DiskGroup {0..1}
Member : ref StorageExtent {*}
StorageDefect
Extent : ref StorageExtent {key, 1}
Error : ref StorageError {key, weak, *}
HostedStoragePool {Composition}
GroupComponent : ref System {1}
PartComponent : ref StoragePool {*}
SystemDevice (CORE)
GroupComponent : ref System {1}
PartComponent : ref LogicalDevice {weak, *}
Component (CORE)
GroupComponent : ref ManagedElement {key, *}
PartComponent : ref ManagedElement {key, *}
CollectionOfSensors {Composition}
GroupComponent : ref MultiStateSensor {0..1}
PartComponent : ref Sensor {2..n}
ModulePort
GroupComponent : ref LogicalModule {0..1}
PartComponent : ref NetworkPort {*}
PrintJobFile
GroupComponent : ref PrintJob {*}
PartComponent : ref DateFile {*}
PrintComponent
GroupComponent : ref Printer {*}
PartComponent : ref PrinterElement {*}
AssociatedComponentExtent {Composition}
GroupComponent : ref StoragePool {0..1}
PartComponent : ref StorageExtent {*}
AssociatedRemainingExtent {Composition}
GroupComponent : ref StoragePool {0..1}
PartComponent : ref StorageExtent {*}
AssociatedElementTier
GroupComponent : ref StorageTier
PartComponent : ref LogicalElement
Allocated: uint16 {enum}
SystemComponent (CORE)
GroupComponent : ref System {*}
PartComponent : ref ManagedSystemElement {*}


Dependency
See Device Model (Dependency)
BasedOn
See Device Model (Dependency 1)
AdapterActiveConnection
Antecedent: ref PhysicalConnector {*}
Dependent: ref NetworkAdapter{*}
PortOnDevice
See Device Model (Dependency 3)
AggregatePSExtentBasedOnAggregatePExtent {D}
Antecedent : ref AggregatePExtent {0..1}
Dependent : ref AggregatePSExtent {*}
SnapshotOfExtent {D}
Antecedent : ref StorageExtent {0..1}
Dependent : ref Snapshot {*}
SnapshotType : uint16 {enum}
FibrePortOnFCAdapter {D}
Antecedent : ref FibreChannelAdapter {0..1}
Dependent : ref FibrePort {0..1}
AggregatePSExtentBasedOnPExtent {D}
Antecedent : ref PhysicalExtent {0..1}
Dependent : ref AggregatePSExtent {*}
AssociatedSensor
Antecedent : ref Sensor {*}
Dependent : ref LogicalDevice {*}
RealizesExtent
See Device Model (Dependency 3)
PSExtentBasedOnPExtent {D}
Antecedent : ref PhysicalExtent {*}
Dependent : ref ProtectedSpaceExtent {*}
StartingAddress : uint64
AssociatedSupplyCurrentSensor {D}
Antecedent : ref CurrentSensor {*}
Dependent : ref PowerSupply {*}
MonitoringRange : uint16 {enum}
RealizesPExtent
Antecedent: ref PhysicalMedia {0..1}
Dependent: ref PhysicalExtent {*}
VolumeSetBasedOnPSExtent {D}
Antecedent : ref ProtectedSpaceExtent {*}
Dependent : ref VolumeSet {*}
LBAsMappedByDecrementing : boolean
LBAMappingIncludesCheckData : boolean
AssociatedSupplyVoltageSensor {D}
Antecedent : ref VoltageSensor {*}
Dependent : ref PowerSupply {*}
MonitoringRange : uint16 {enum}
RealizesAggregatePExtent
Antecedent: ref PhysicalMedia {0..1}
Dependent: ref AggregatePExtent {*}
LogicalDiskBasedOnExtent
See Device Model (Dependency 1)
PackageDependency
See Device Model (Dependency 2)
FibrePortActiveLogin {D}
LoginOriginator : ref FibrePort {key, *}
LoginResponder : ref FibrePort {key, *}
NegotiatedCOS : uint16 {key, enum}
NegotiatedFrameSize : uint64 {units}
NegotiatedSpeed : uint64 {units}
ACKModel : uint16 {enum}
BufferToBufferModel : uint16 {enum}
OriginatorBufferCredi : uint64
ResponderBufferCredit : uint64
OriginatorEndCredit : uint64
ResponderEndCredit : uint64
PackageAlarm {D}
Antecedent: ref AlarmDevice {*}
Dependent: ref PhysicalPackage {*}
LogicalDiskBasedOnVolumeSet {D}
Antecedent : ref VolumeSet {0..1}
Dependent : ref LogicalDisk {*}
PackageCooling {D}
Antecedent: ref CoolingDevice {*}
Dependent: ref PhysicalPackage {*}
DeviceServiceImplementation
See Device Model (Dependency 2)
PackageTempSensor {D}
Antecedent: ref TemperatureSensor {*}
Dependent: ref PhysicalPackage {*}
LogicalIdentity
See Device Model (Association)
OOBAlertServiceOnNetworkAdapter
Antecedent : ref NetworkAdapter {0..1}
Dependent : ref OOBAlertService {*}
NetworkVirtualAdapter {D}
SystemElement : ref NetworkAdapter {*}
SameElement : ref ExtraCapacityGroup {*}
WakeUpServiceOnNetworkAdapter
Antecedent : ref NetworkPAdapter {0..1}
Dependent : ref WakeUpService {*}


AbstractElementAllocatedFromPool
AllocatedFromStoragePoolView
AFSPSpaceConsumed: uint64
AbstractBasedOn
(See Core Model)
AllocatedFromStoragePoolViewView
Antecedent: ref StoragePoolView {*}
Dependent: ref View {*}
AFSPSpaceConsumed: uint64
BasedOnView
BOStartingAddress: uint64
BOEndingAddress: uint64
BOOrderIndex: uint16
AbstractProtocolControllerForDevice
SettingData
(See Core Model)
ProtocolControllerForUnitView
Antecedent: ref View {*}
Dependent: ref LogicalDevice {*}
PCFUDeviceAccess: uint16
ElementStorageProtectionSettingData
SettingData: ref StorageProtectionSetting{*}
AbstractComponent
(See Core Model)
HostedStoragePoolView
GroupComponent : ref System {*}
PartComponent : ref StoragePoolView {*}
ExtentComponentView
GroupComponent : ref StoragePoolView {*}
PartComponent : ref StorageExtent {*}
DriveComponentViewView
GroupComponent : ref StoragePoolView {*}
PartComponent : ref DiskDriveView {*}
AbstractElementStatisticalData
ManagedElement: ref ManagedElement {key, *}
Stats: ref StatisticalData {key, *}
ElementStatisticalDataView
ManagedElement: ref View {*}
Stats: ref StatisticalData {*}


MaskingMappingExposedDeviceView
ProtocolEndpoint: ref ProtocolEndpoint {*}
LogicalDevice: ref LogicalDevice {*}
SPCSystemCreationClassName: string
SPCSystemName: string
SPCCreationClassName: string
SPCDeviceID: string
PCFUDeviceNumber: string
PCFUDeviceAccess: uint16
MaskingMappingView
StorageHardwareID: ref StorageHardwareID{*}
LogicalDevice: ref LogicalDevice {*}
ProtocolEndpoint: ref ProtocolEndpoint{*}
SHIDStorageID: string
SHIDIDType: uint16
LDDeviceID: string
SPEPSystemCreationClassName: string
SPEPCreationClassName: string
SPEPSystemName: string
SPEPName: string
SPEPProtocolIFType:
SPEPOtherTypeDescription: string
SPEPConnectionType:
SPEPRole: uint16
APInstanceID: string
APPrivilegeGranted:
APActivities[]: uint16
APElementName: string
SPCSystemCreationClassName: string
SPCCreationClassName: string
SPCSystemName: string
SPCDeviceID: string
PCFUDeviceNumber: string
PCFUDeviceAccess: uint16