

Title : Device Specification 2.30.0

Filename : CIM\_Device.vsd

Author : DMTF Core Schema WG

Date : 22 August 2011

Page 1 - Overview

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

Page 10 - Logical Port Group

Page 11 - Protocol Controllers

Page 12 - Network Adapters

Page 13 - Network Adapter Statistics

Page 14 - Fibre Channel

Page 15 - Fibre Channel Statistics

Page 16 - Fibre Channel Services & Zoning

Page 17 - InfiniBand

Page 18 - Storage Devices

Page 19 - Storage Multipath

Page 20,21 - Storage Extents 1,2

Page 22 - Storage Name Binding

Page 23 - SCC Extent Model

Page 24,25,26 - Storage Services 1,2,3

Page 27 - Storage Tiers

Page 28 - Storage Groups

Page 29,30 - Storage Capabilities 1,2

Page 31 - Storage Settings

Page 32 - Storage Statistics

Page 33 - Storage Library

Page 34,35 - Storage Views 1,2

Page 36 - User Devices (Keyboards, Mouse)

Page 37 - Displays

Page 38 - Memory

Page 39 - Modems

Page 40,41,42 - Printing 1,2,3

Page 43 - Sensors & Alarm

Page 44 - USB

Page 45 - Disk Group

Page 46 - Device Sharing

Page 47 - LED

Page 48 - WiFi Services

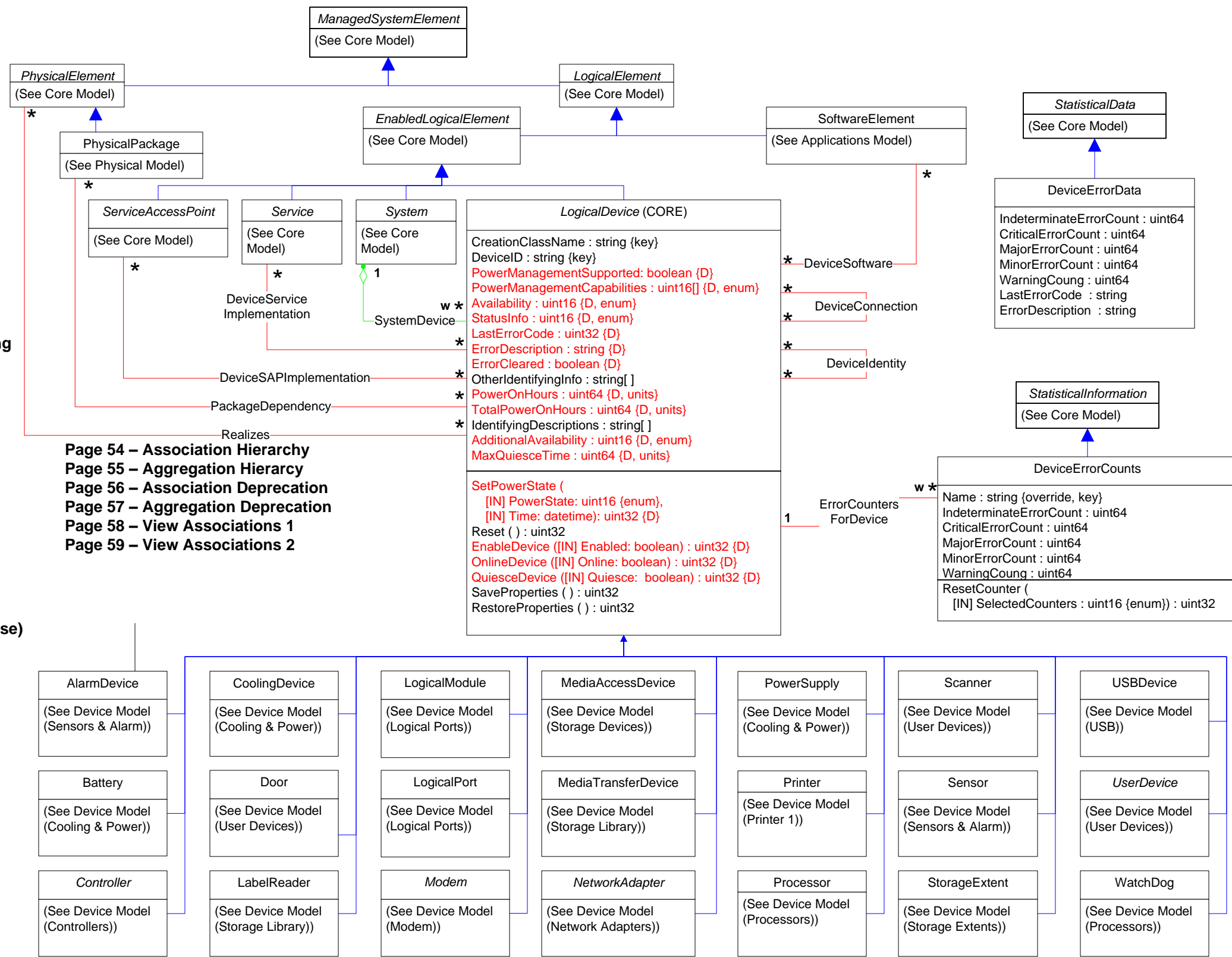
Page 49 - VTL Statistics

Page 50 - Dependency (1) [A - Ba]

Page 51 - Dependency (2) [D - Pi]







Page 52 - Dependency (3) [Po - S]

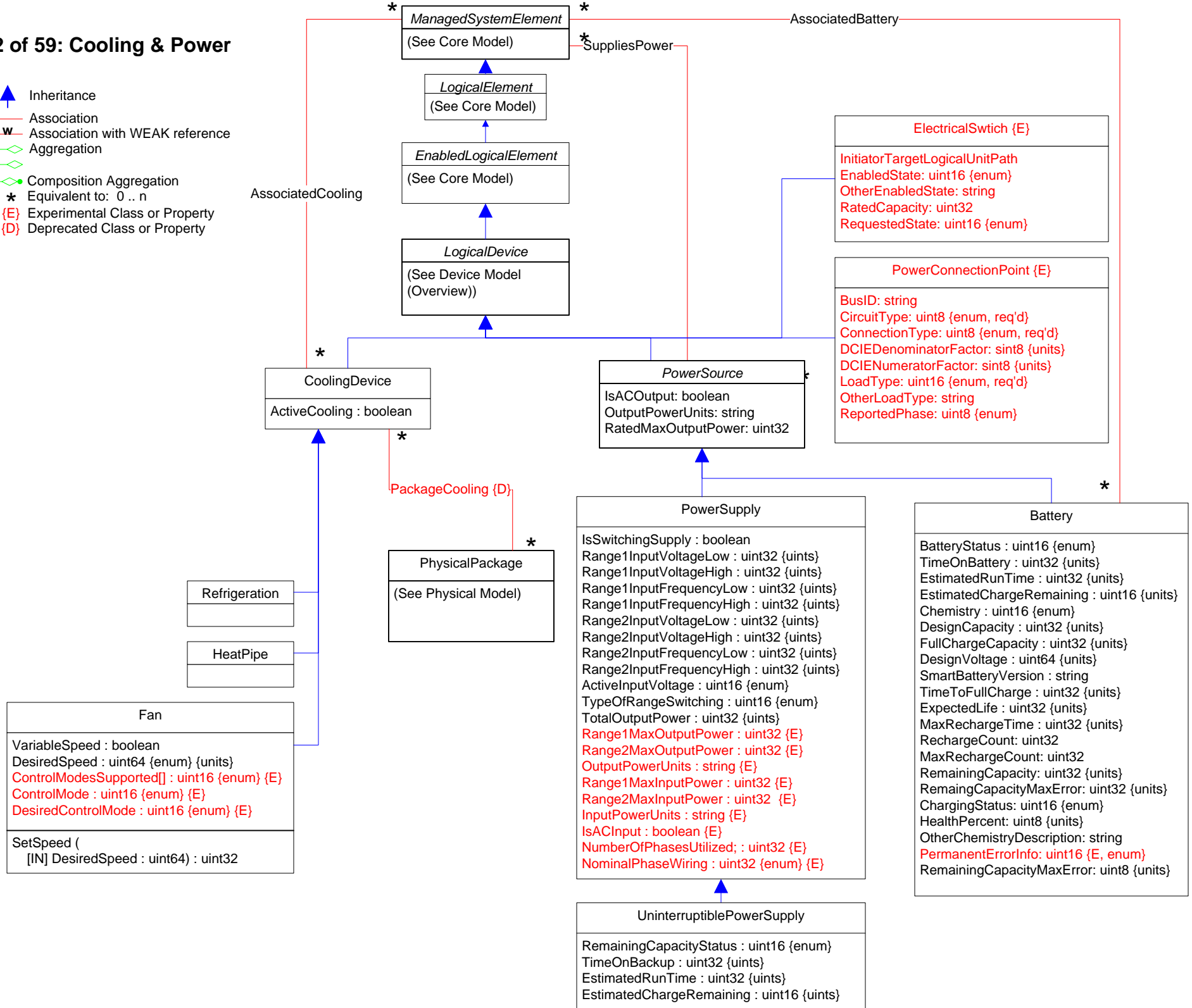
Page 53 - Dependency (4) [Po - S]

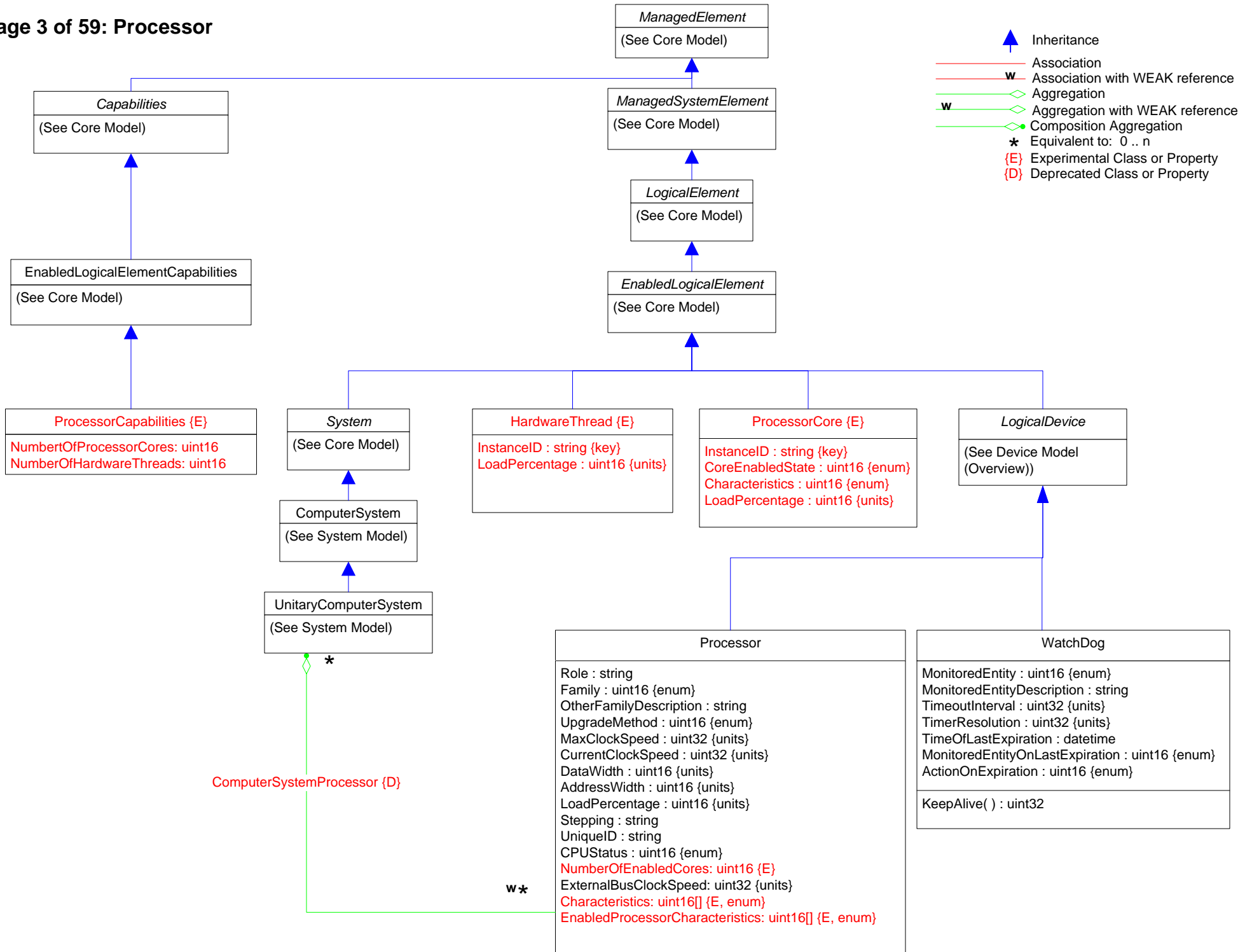


Page 54 - Association Hierarchy  
 Page 55 - Aggregation Hierarchy  
 Page 56 - Association Deprecation  
 Page 57 - Aggregation Deprecation  
 Page 58 - View Associations 1  
 Page 59 - View Associations 2

# Page 2 of 59: Cooling & Power

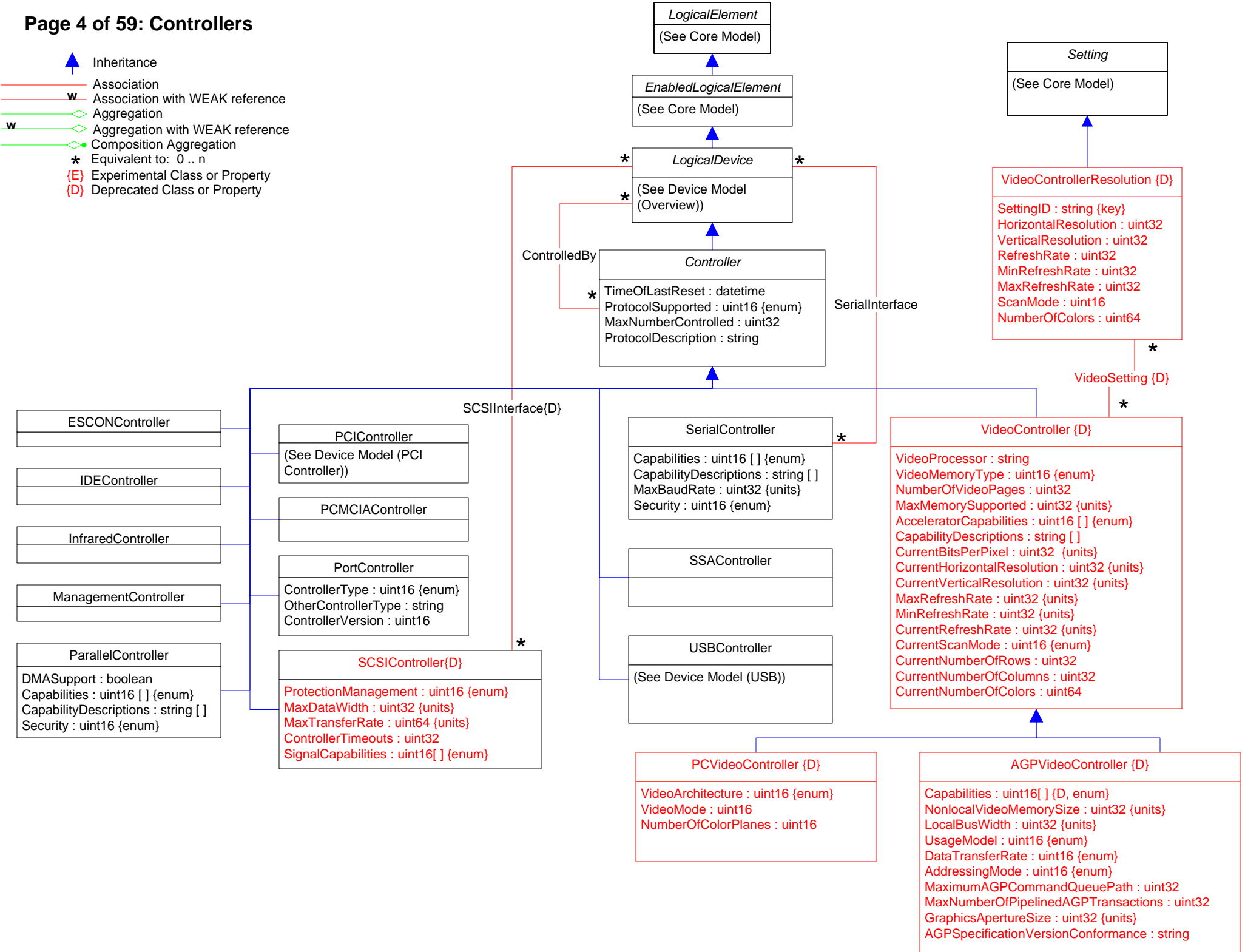
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Composition Aggregation
-  Equivalent to: 0..n
- (E) Experimental Class or Property
- (D) Deprecated Class or Property



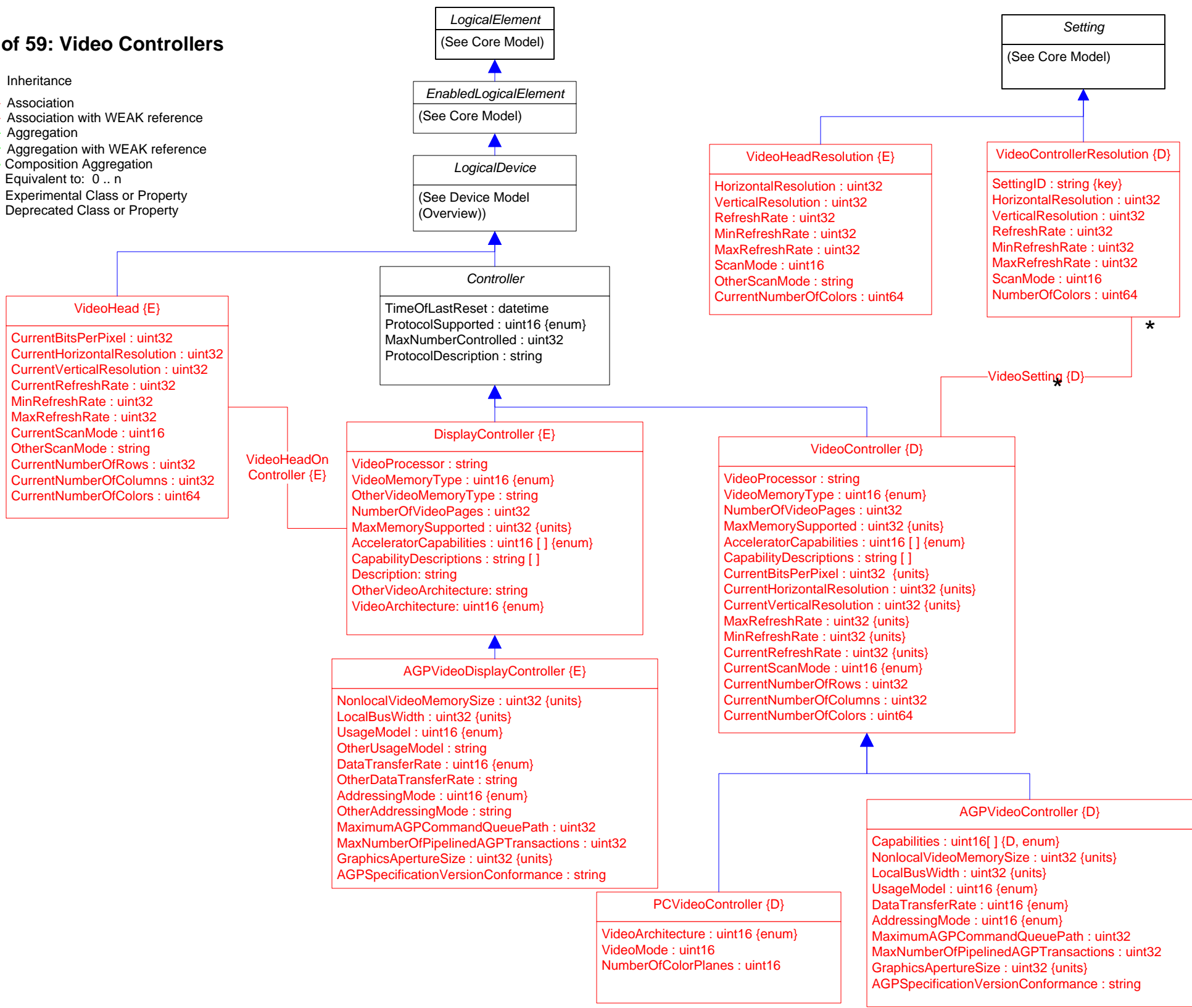


Page 4 of 59: Controllers










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

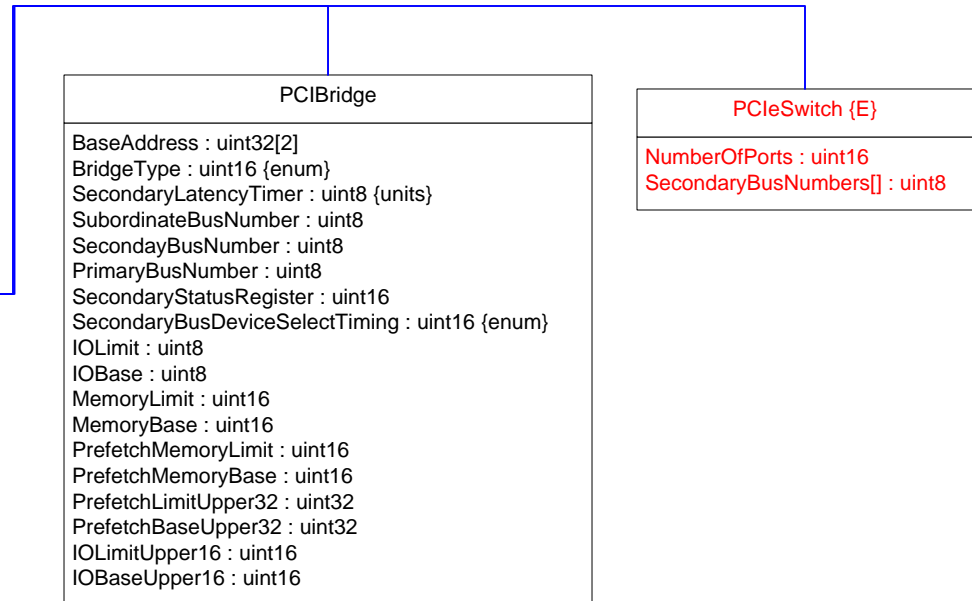
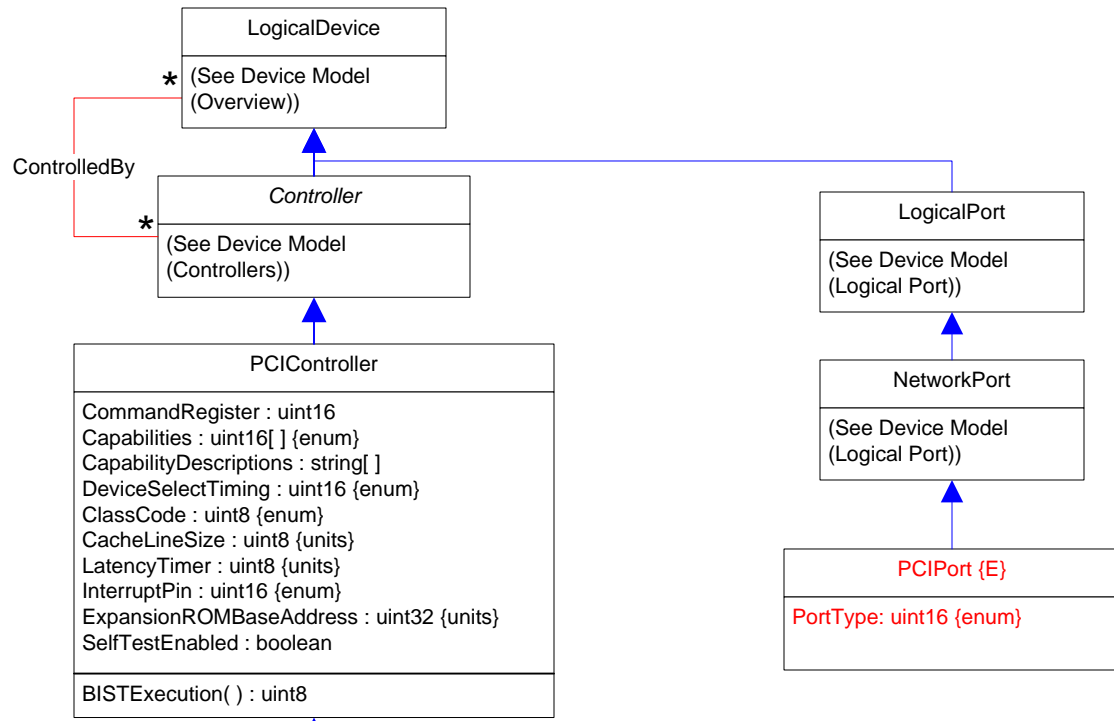
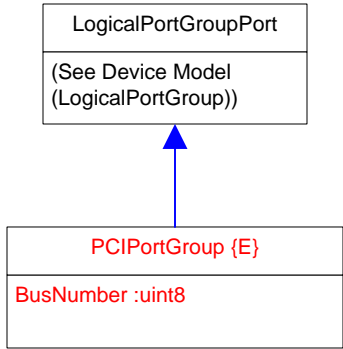


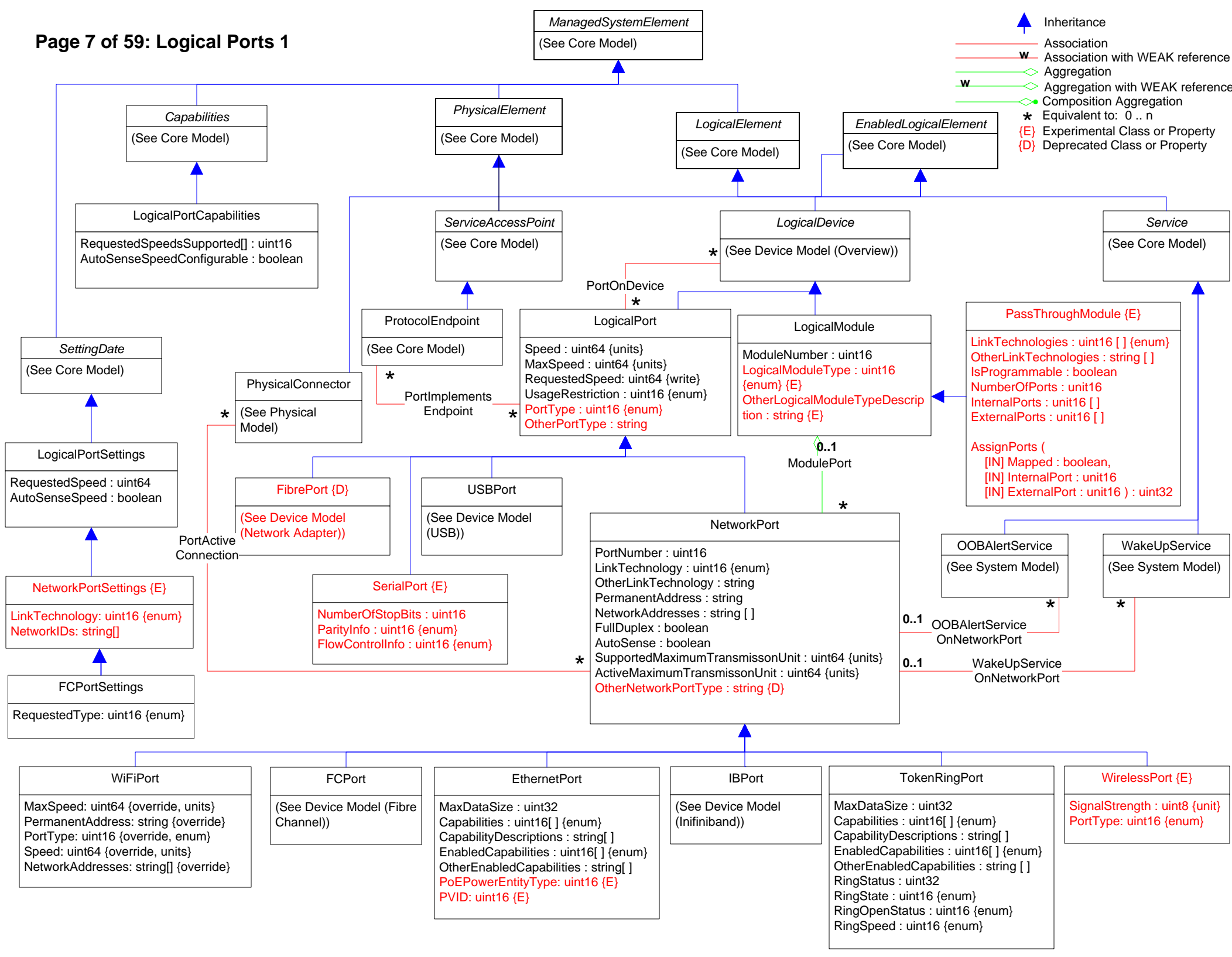
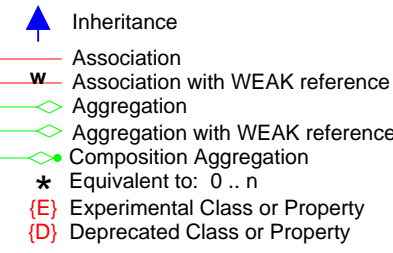
- ▲ Inheritance
- Association
- w Association with WEAK reference
- ◇ Aggregation
- w◇ Aggregation with WEAK reference
- ◇ Composition Aggregation
- ★ Equivalent to: 0 .. n
- {E} Experimental Class or Property
- {D} Deprecated Class or Property












# Page 6 of 59: PCI Controllers

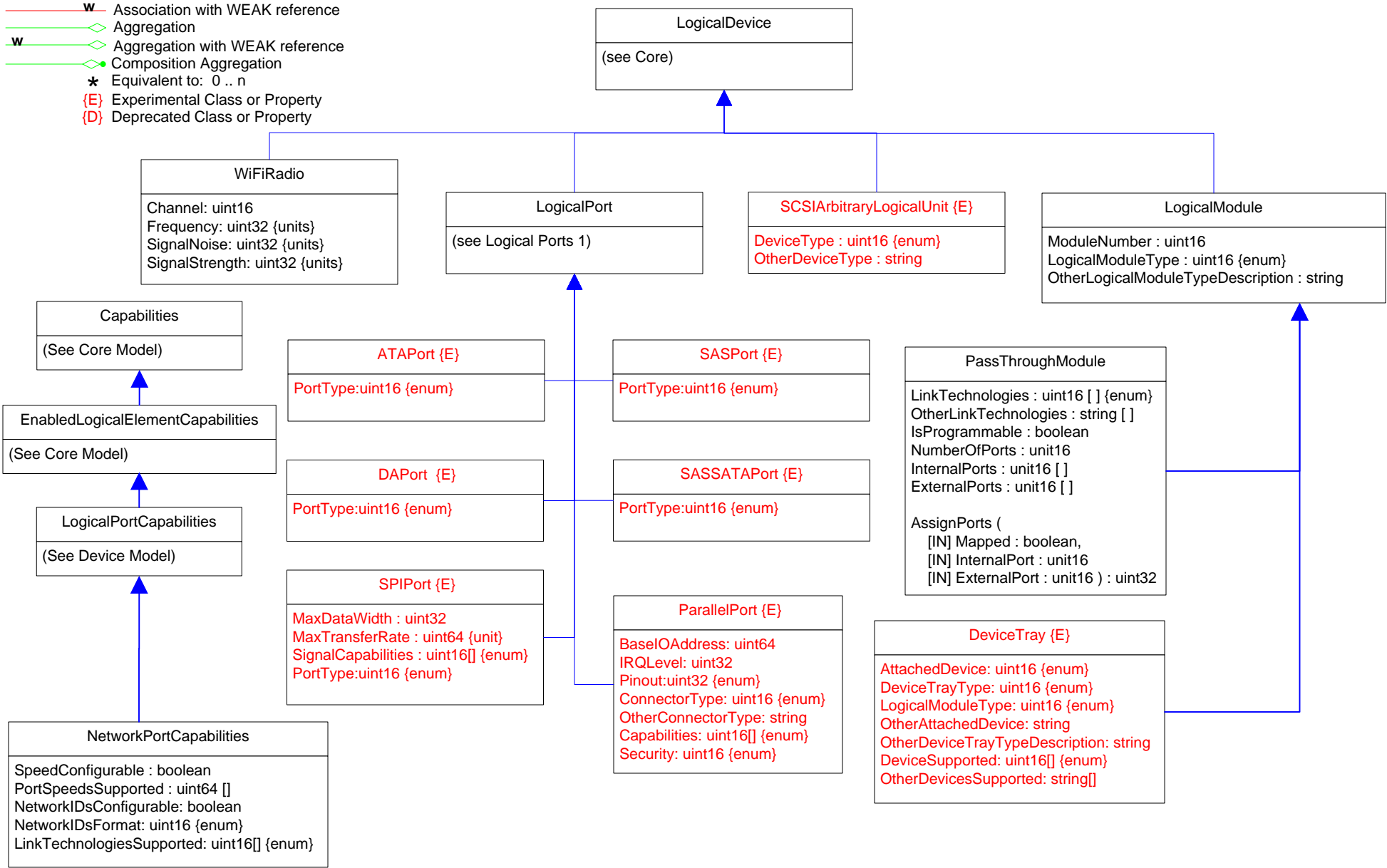
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property














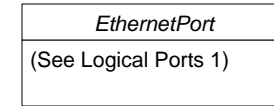
# Page 8 of 59: Logical Ports 2

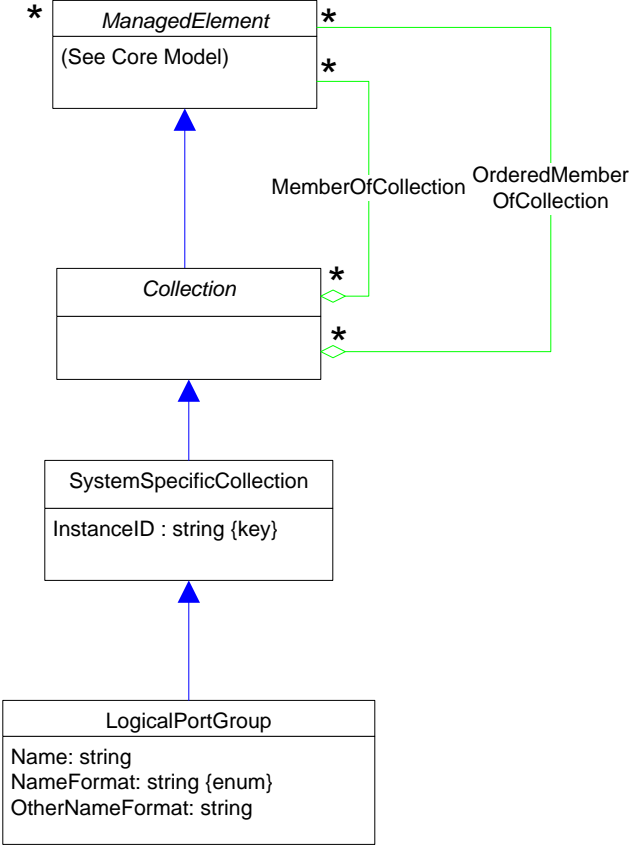
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property












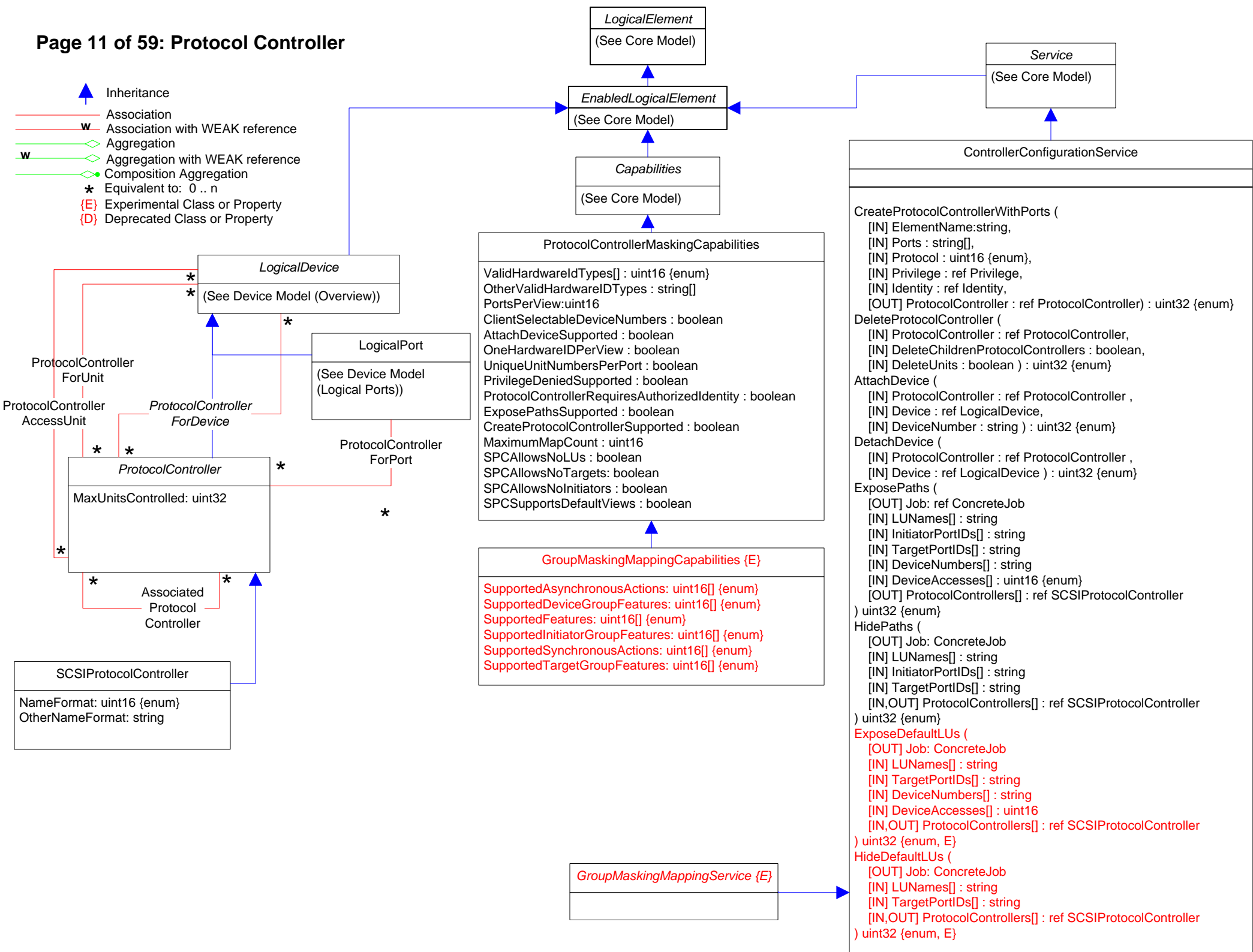


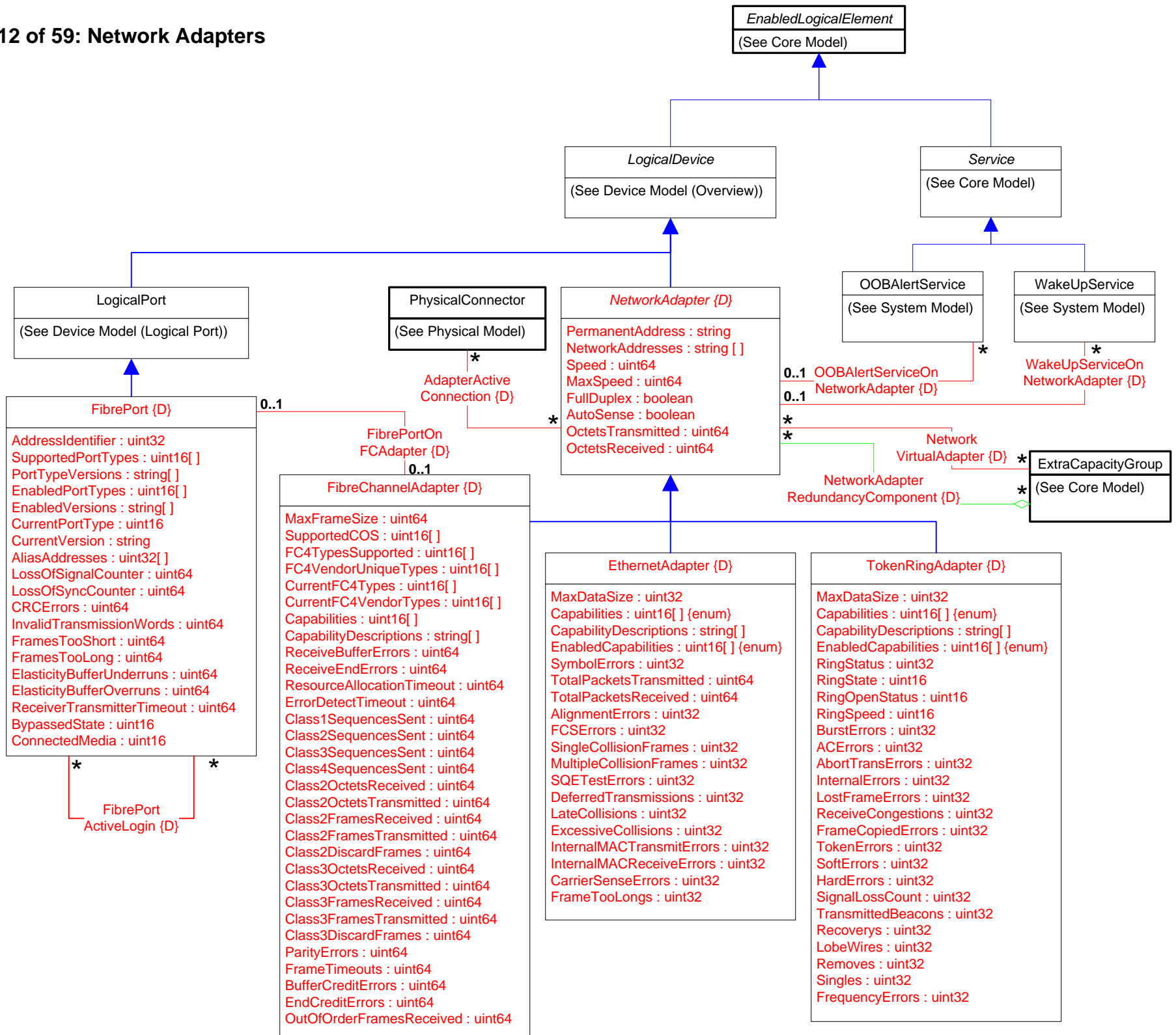
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

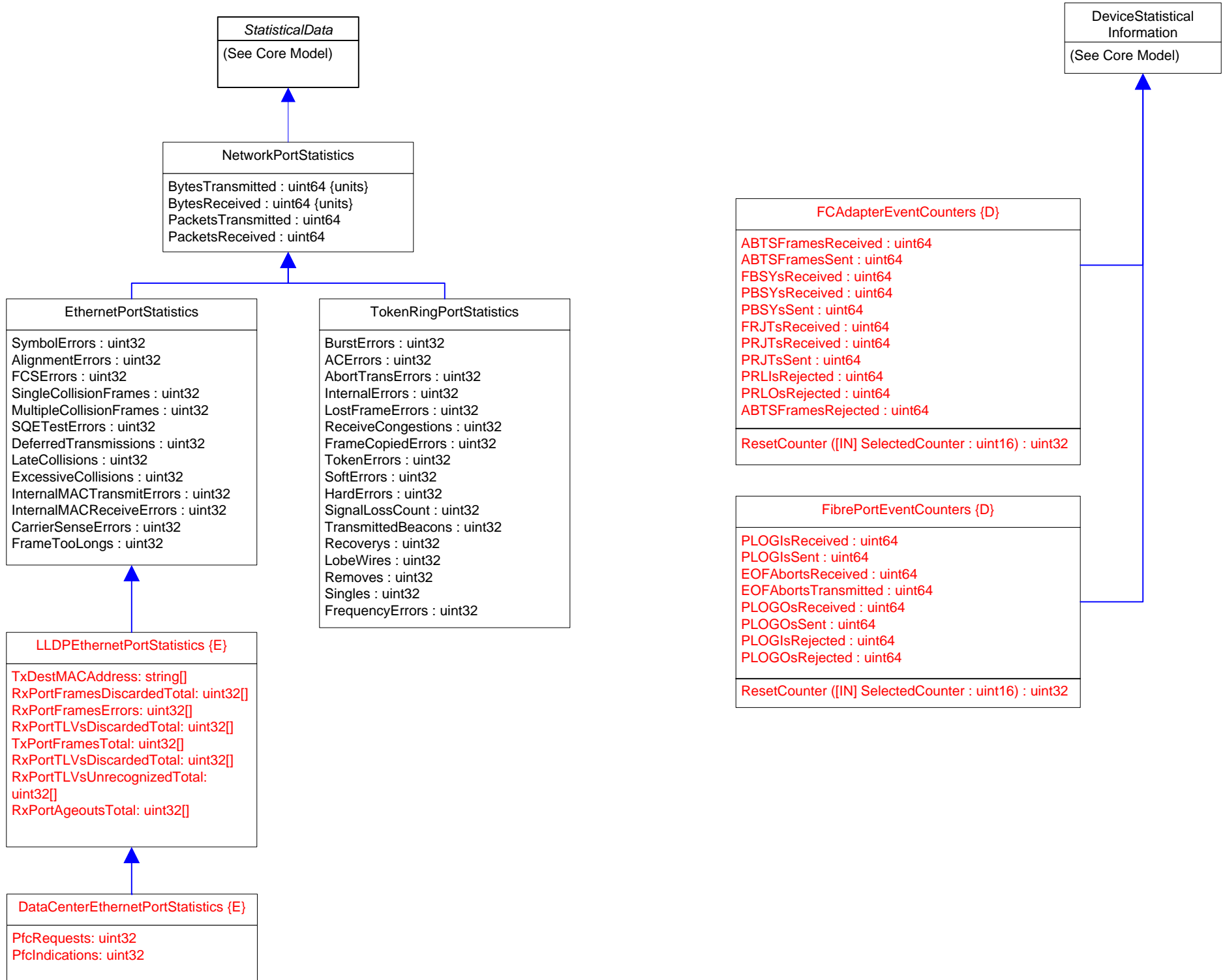





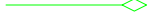







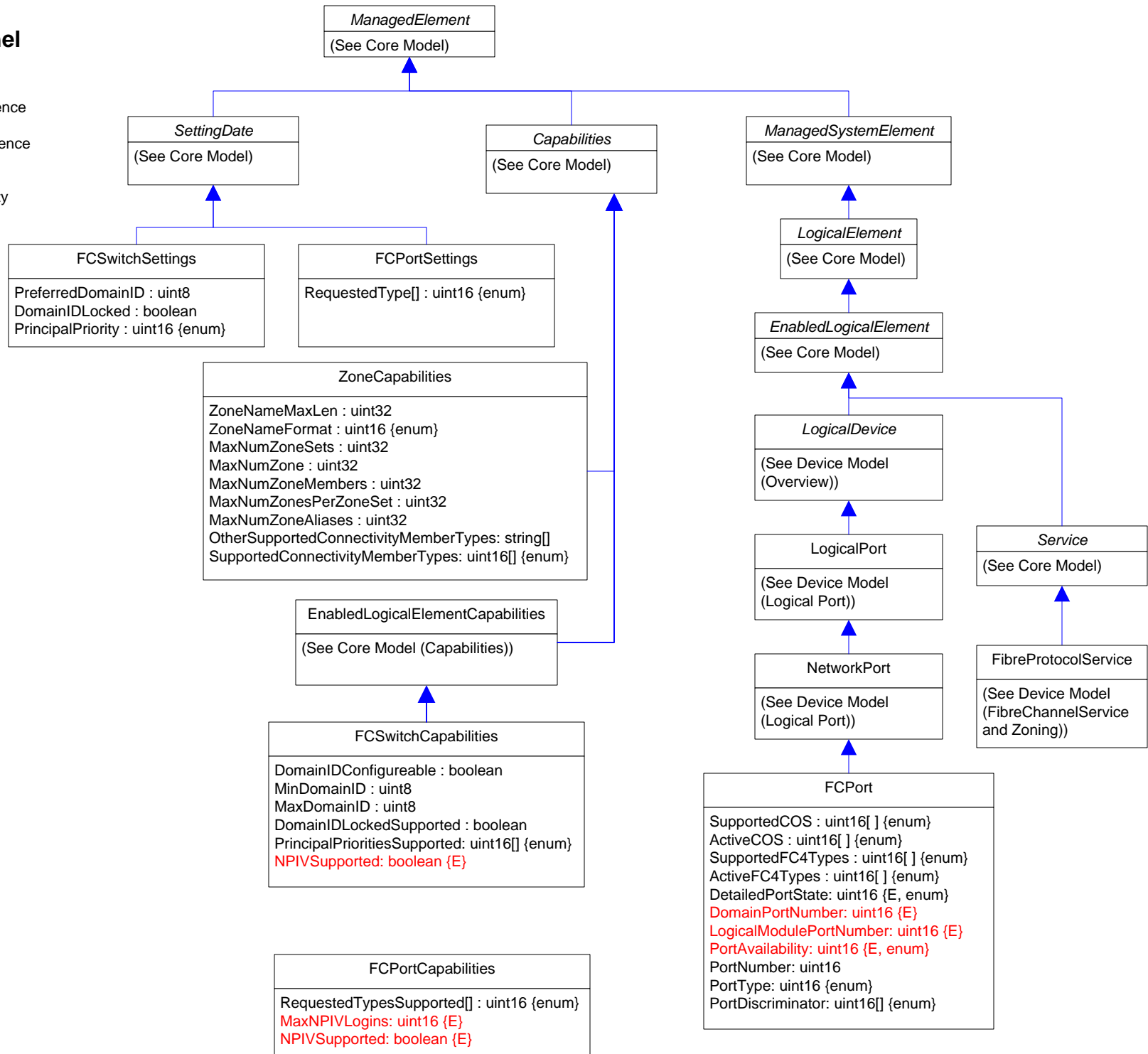
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  {E} Experimental Class or Property
-  {D} Deprecated Class or Property

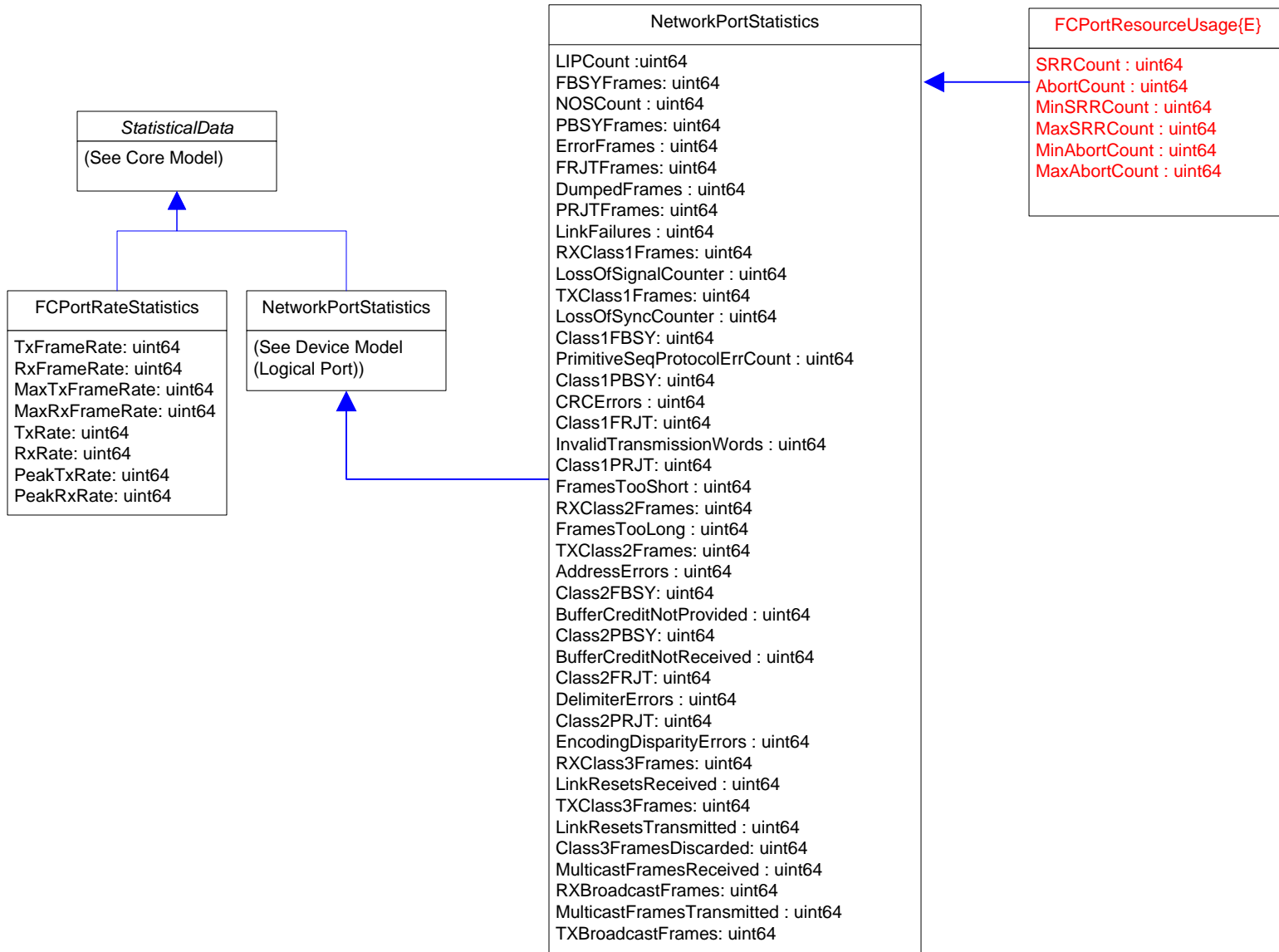















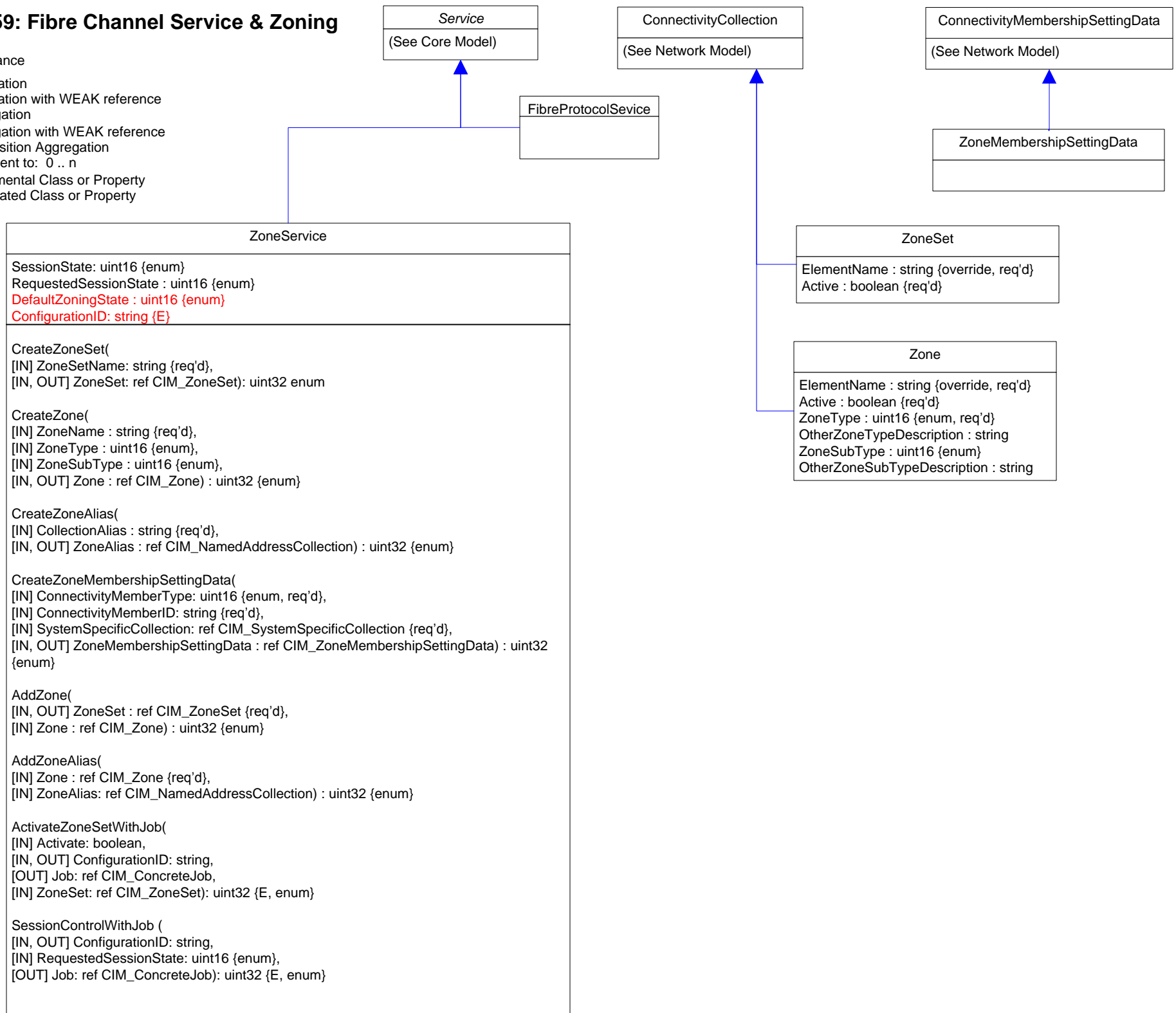
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property














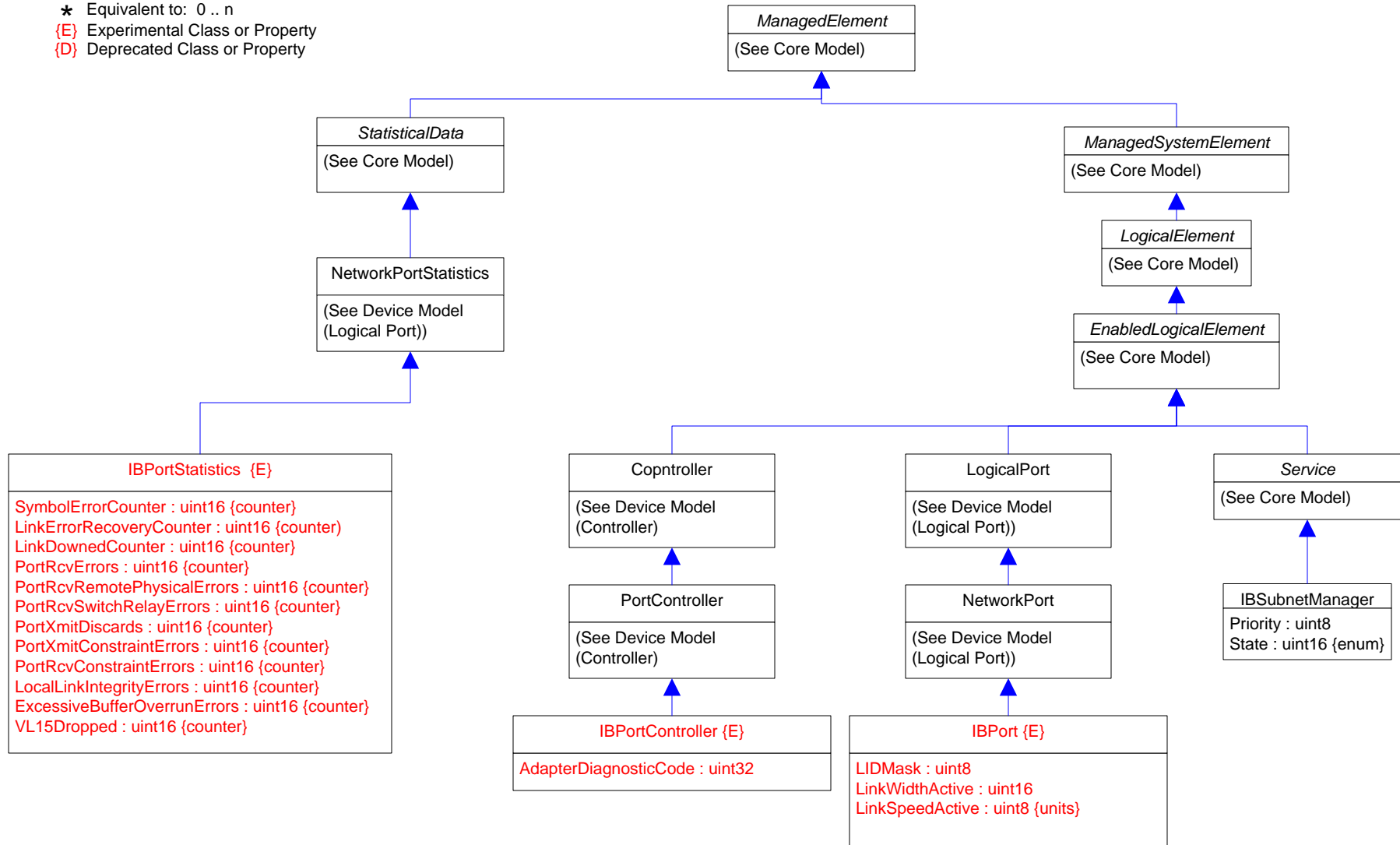
# Page 16 of 59: Fibre Channel Service & Zoning










-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

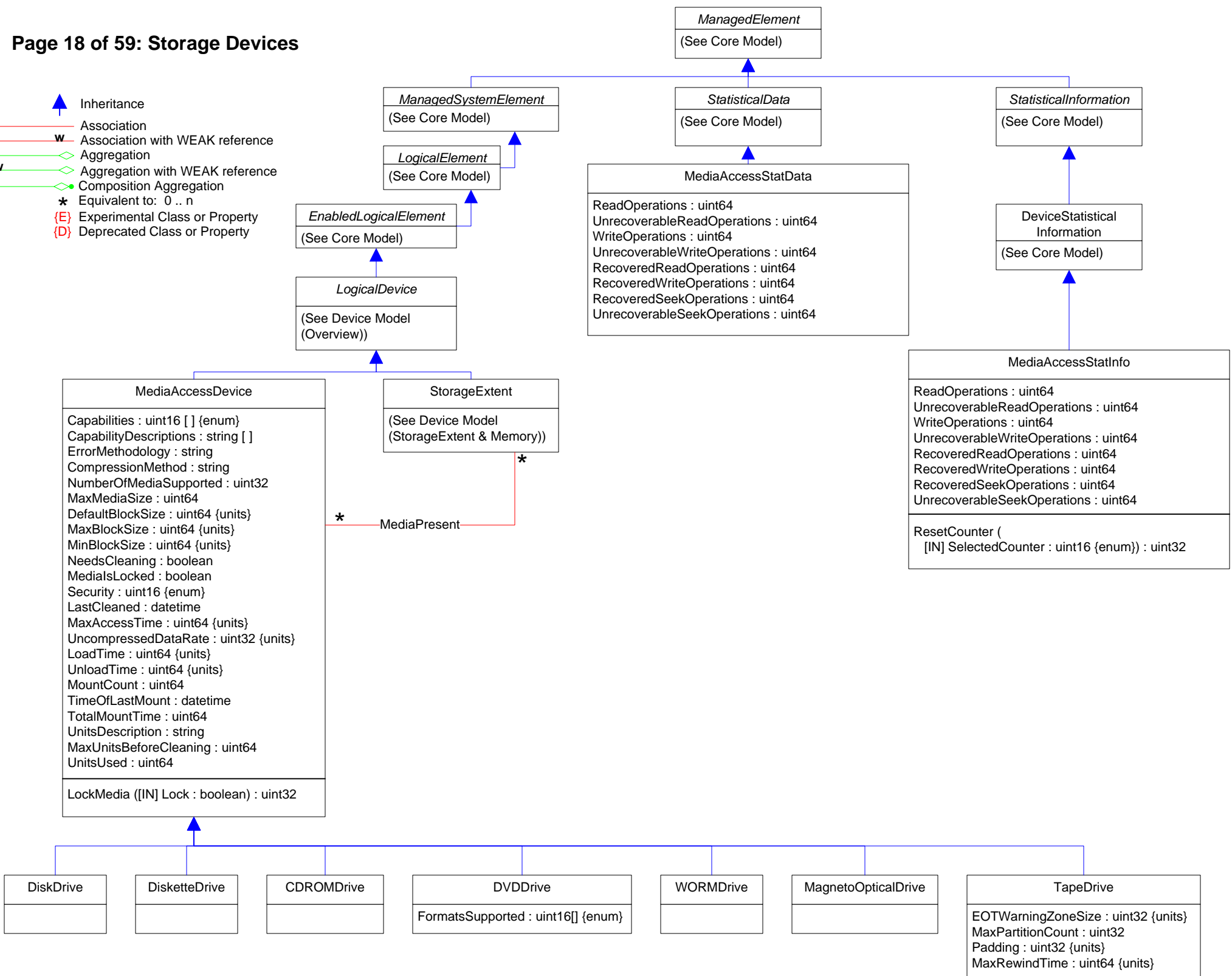





-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

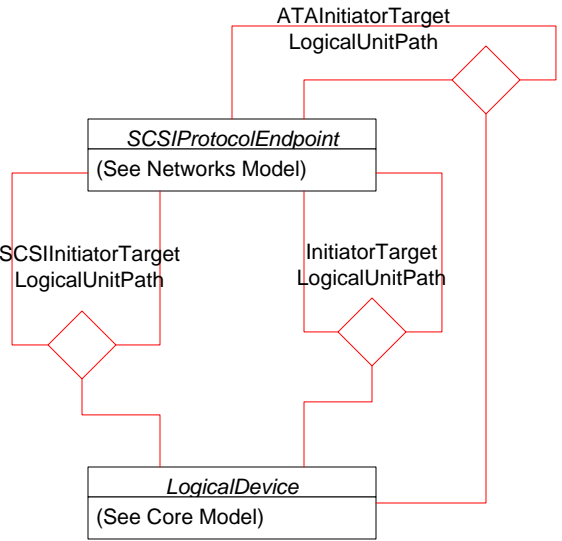
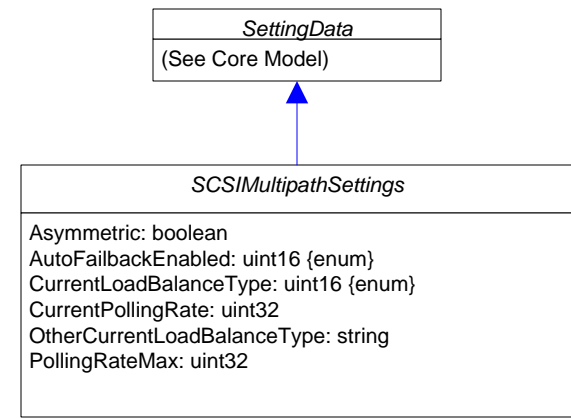
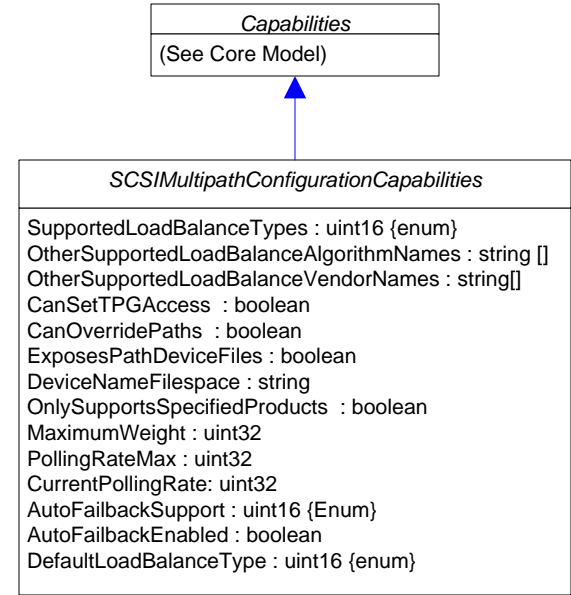
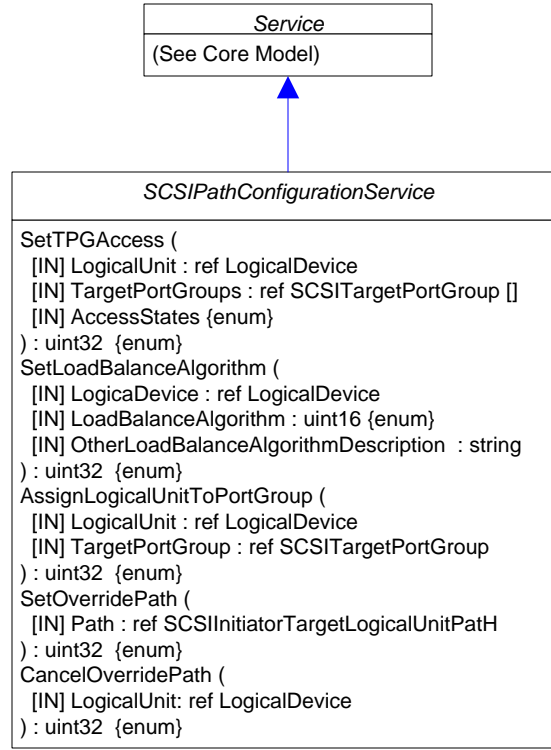
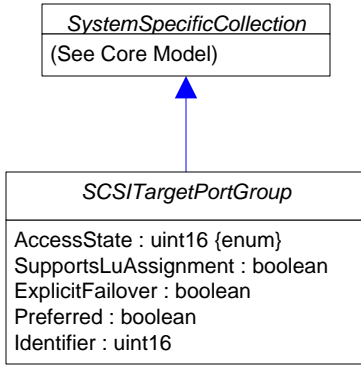


-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property



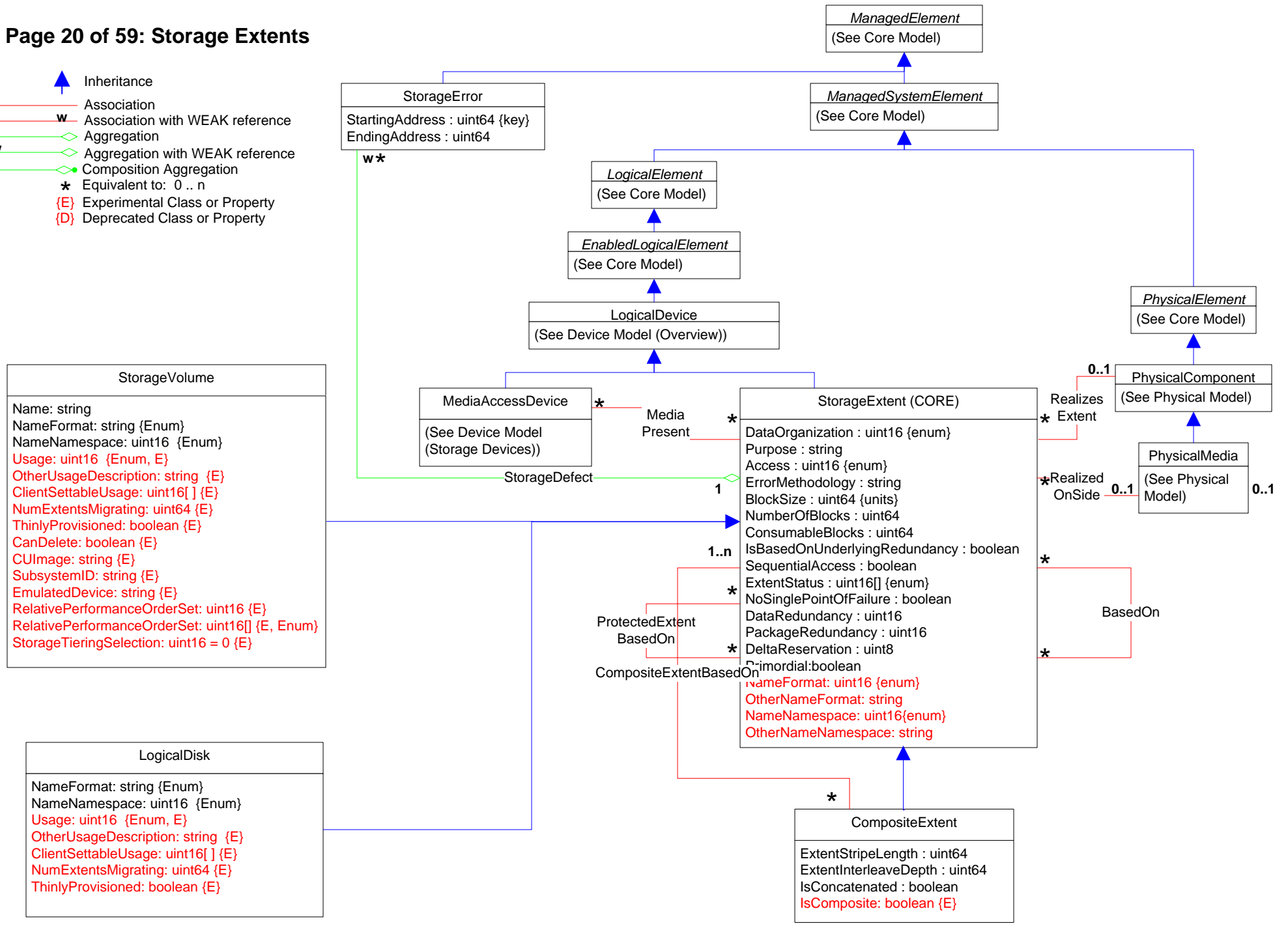
# Page 19 of 59: Storage Multipath

-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property



# Page 20 of 59: Storage Extents

- Inheritance
- Association
- Association with WEAK reference
- Aggregation
- Aggregation with WEAK reference
- Composition Aggregation
- Equivalent to: 0..n
- Experimental Class or Property
- Deprecated Class or Property



Capabilities  
(See core model)

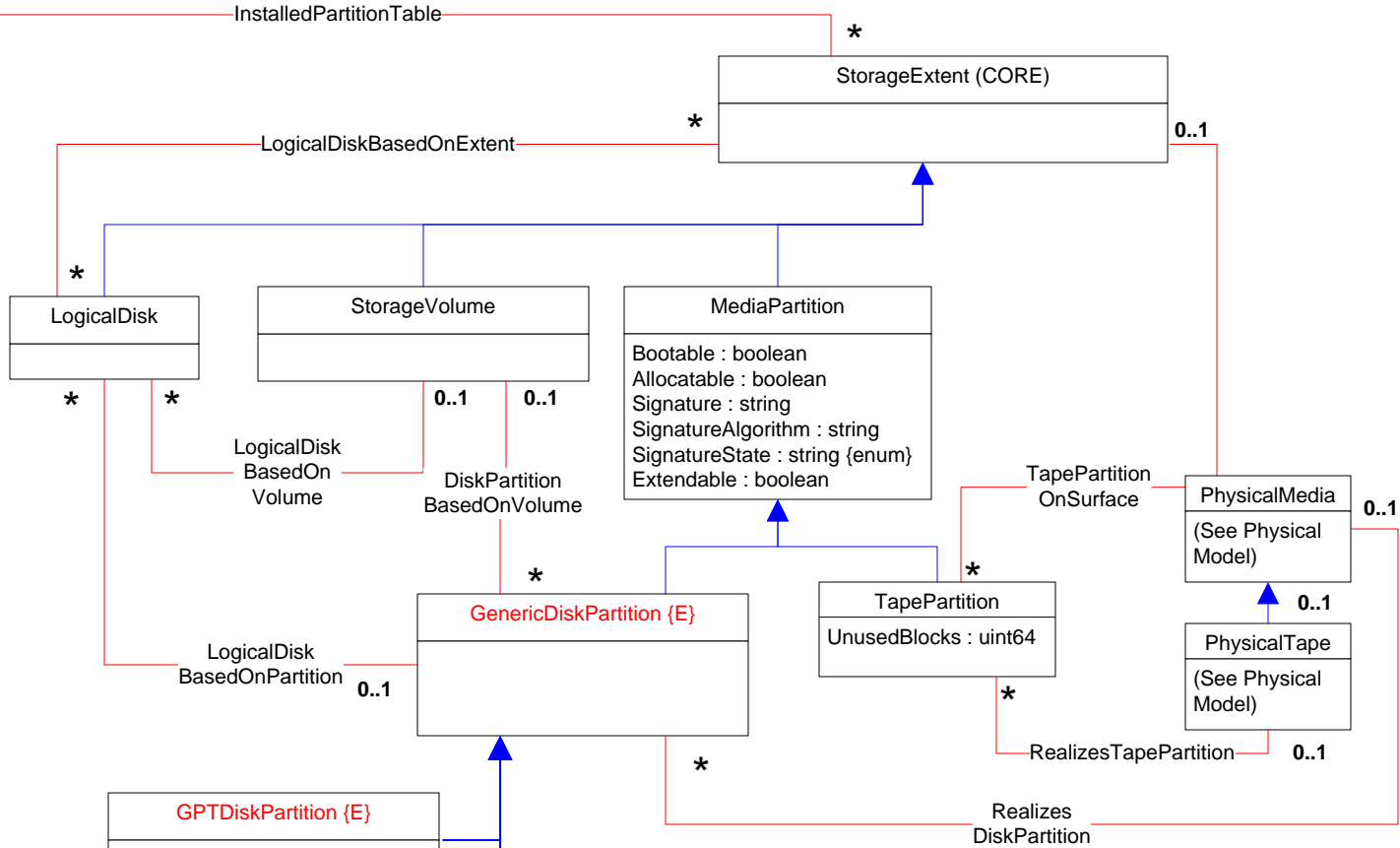
**DiskPartitionConfigurationCapabilities {E}**

PartitionStyle : uint16 {enum}  
ValidSubPartitionStyles : uint16 [] {enum}  
OtherValidSubPartitionStyles : string []  
Version : uint16  
MaxNumberOfPartitions : uint16  
SupportedSynchronousActions: uint16[] {enum}  
MaxCapacity : uint64  
OverlapAllowed : boolean  
PartitionTableSize : uint32

**StorageElementCompositionCapabilities {E}**

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}

0..1



**GPTDiskPartition {E}**

PartitionType: string

**EFIDiskPartition {E}**

**VTOCDiskPartition {E}**

Flags : uint16 {enum}  
Tag : uint16 {enum}  
AsciiLabel : string

**DiskPartition**

NameFormat: uint16 {enum}  
NameNamespace: uint16 {enum}  
PartitionSubtype: uint16 {enum}  
PartitionType: uint16 {enum}  
PrimaryPartition: boolean

**DiskPartitionConfigurationCapabilities {E}**

PartitionStyle : uint16 {enum}  
ValidSubPartitionStyles : uint16 [] {enum}  
OtherValidSubPartitionStyles : string []  
Version : uint16  
MaxNumberOfPartitions : uint16  
SupportedSynchronousActions: uint16[] {enum}  
MaxCapacity : uint64  
OverlapAllowed : boolean  
PartitionTableSize : uint32

- Inheritance
- Association
- Association with WEAK reference
- Aggregation
- Aggregation with WEAK reference
- Composition Aggregation
- Equivalent to: 0..n
- Experimental Class or Property
- Deprecated Class or Property

**Service**  
(See Core model)

**StorageElementCompositionService**










**DiskPartitionConfigurationService {E}**

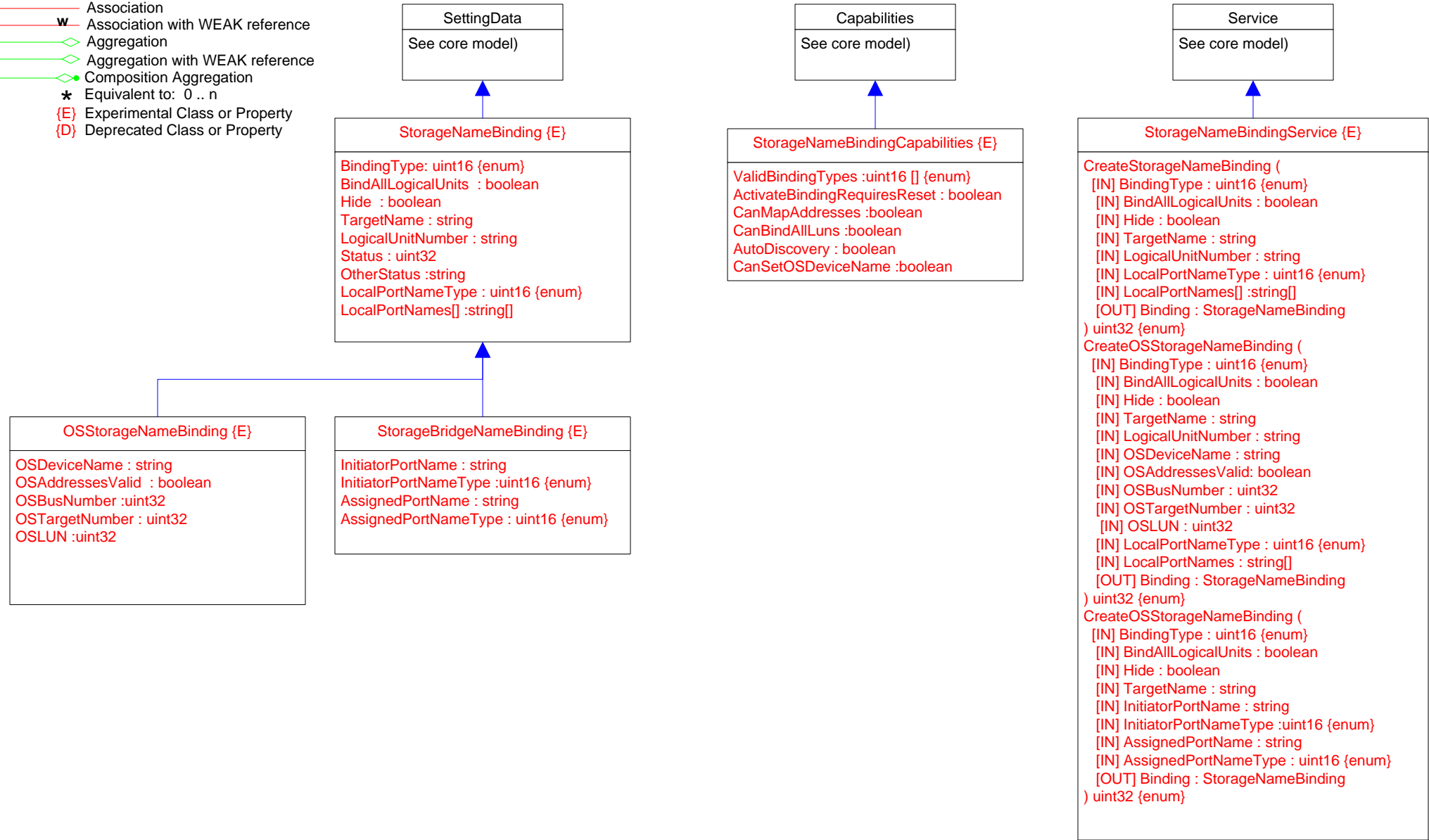
PartitioningSchemes : uint16 {enum}

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}

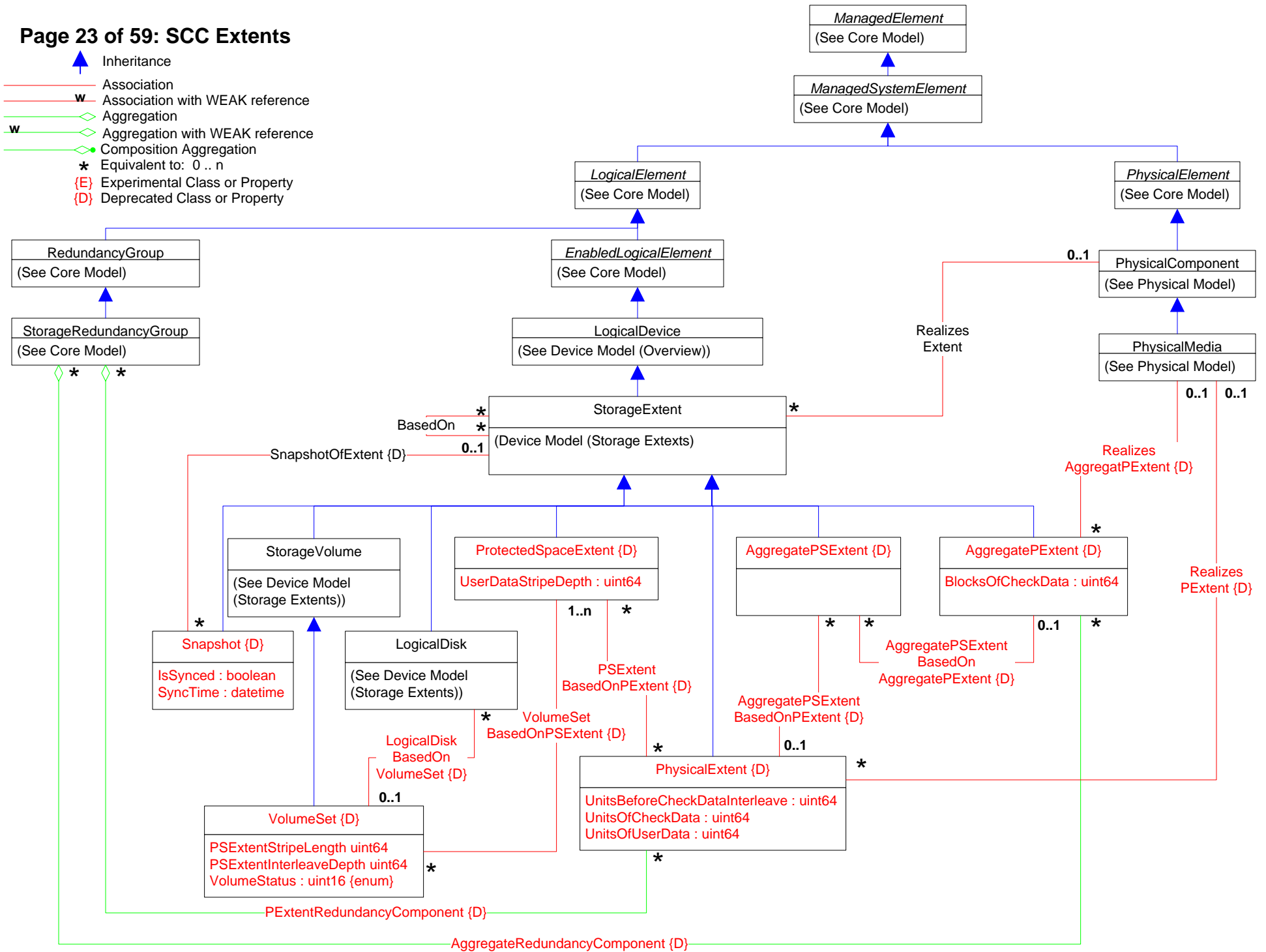
# Page 22 of 59: StorageNameBinding

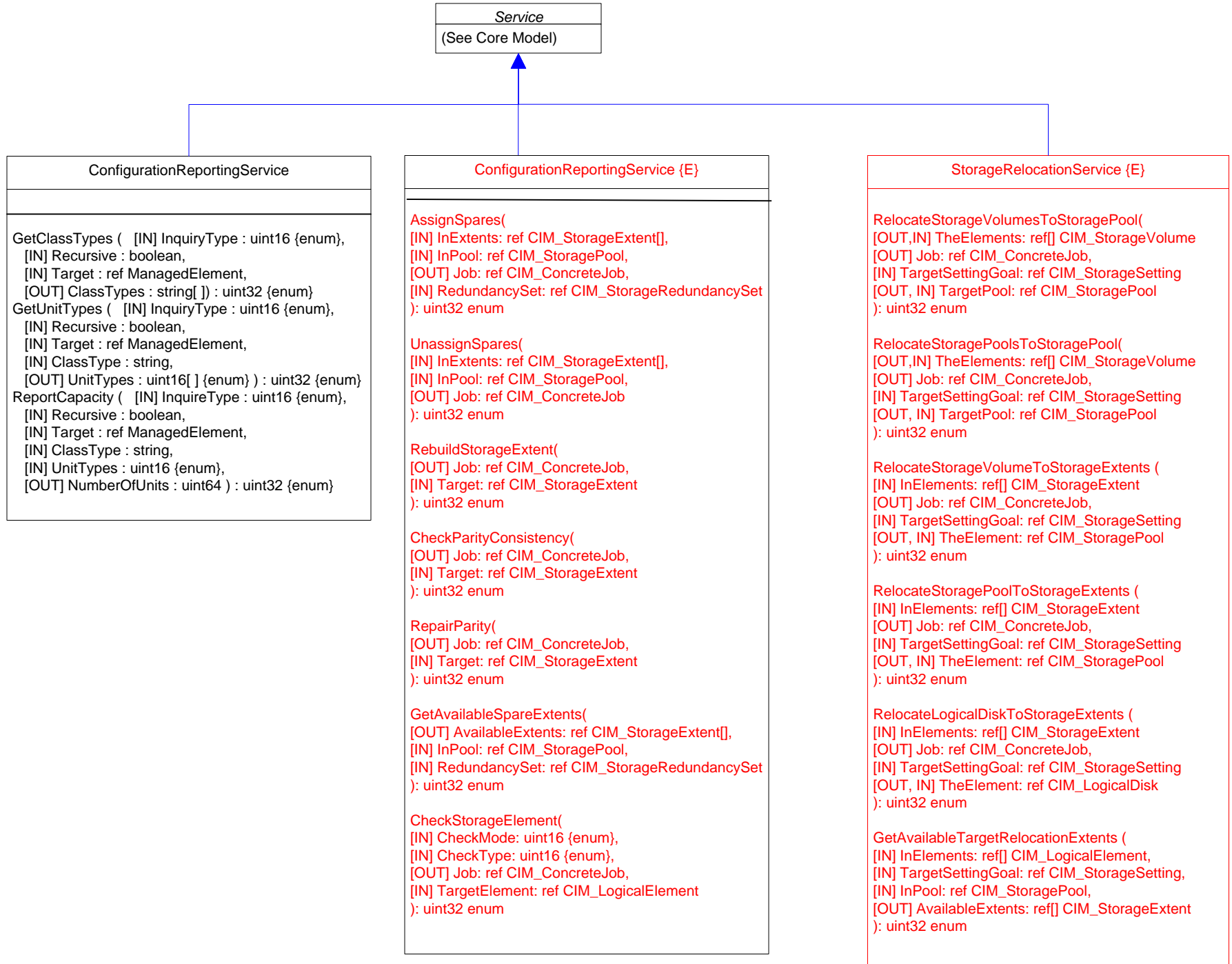
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property



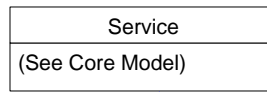
# Page 23 of 59: SCC Extents

- ▲ 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







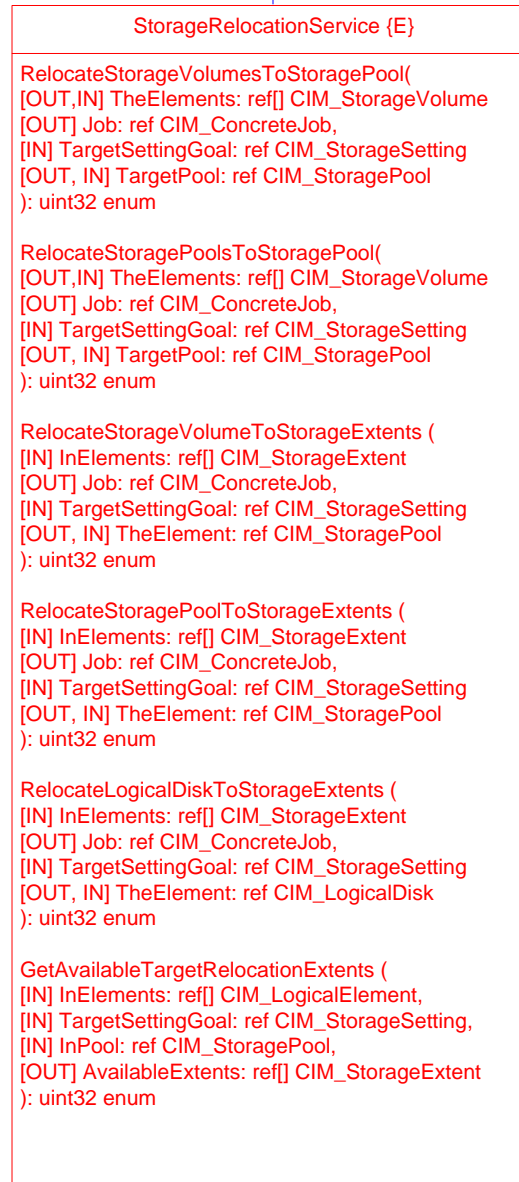
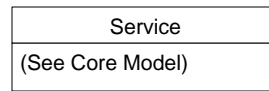


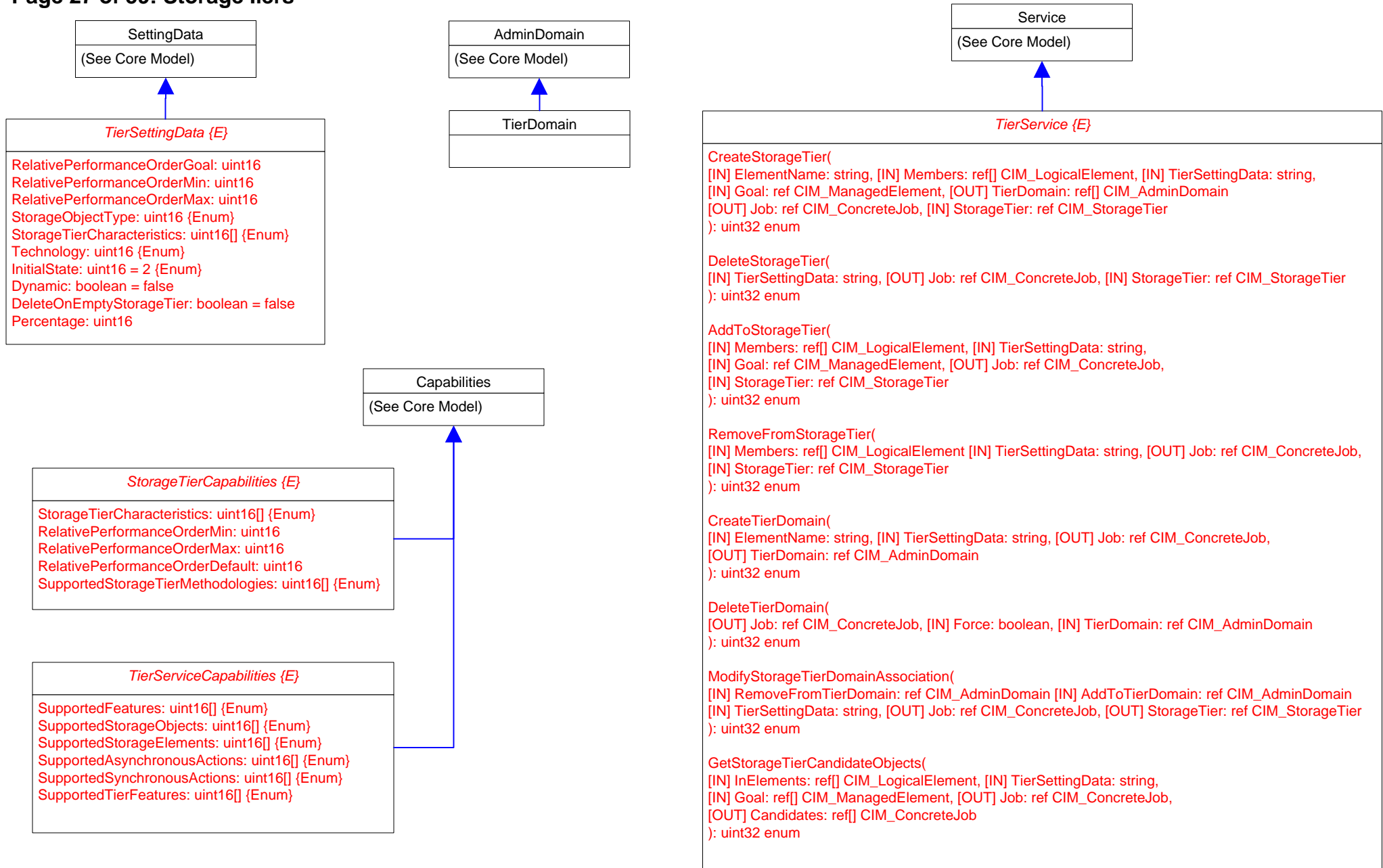
StorageConfigurationService {E}

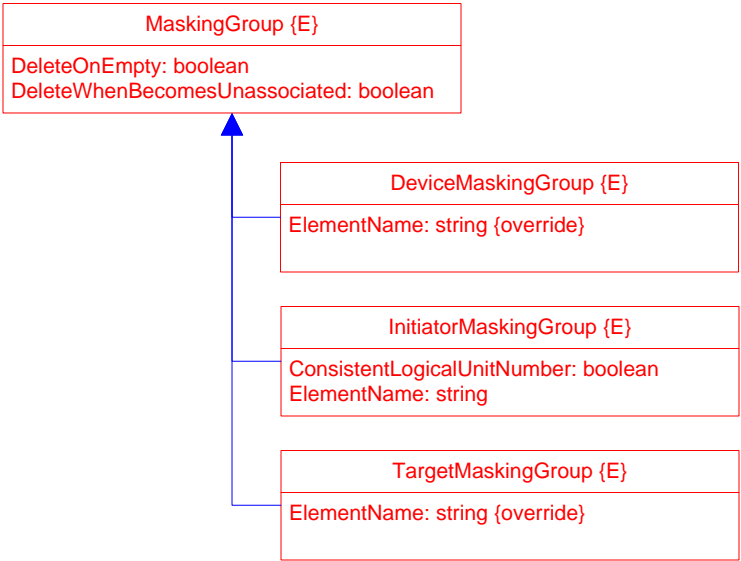
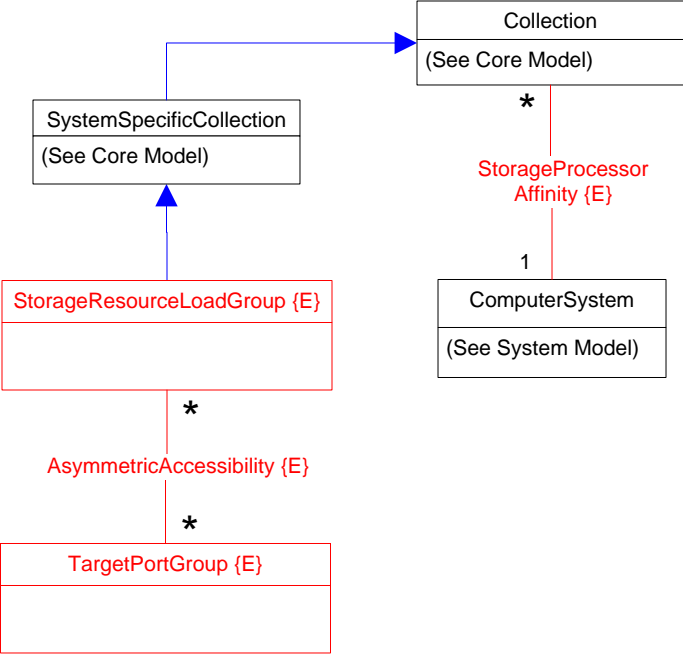
```

CreateOrModifyStoragePool(
  [IN] string ElementName, [OUT] CIM_ConcreteJob ref Job, [IN] CIM_StorageSetting 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: ref CIM_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_StorageSetting,
  [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)
CreateElementsFromStoragePool(
  [IN] string ElementNames[], [IN] uint16 ElementType, (enum), [IN] uint64 ElementCount, [IN] Job: ref CIM_ConcreteJob, [IN] Goal: ref CIM_ManagedElement, [IN] uint64 Size, [IN] InPool: ref
  CIM_StoragePool, [IN] TheElements: ref CIM_LogicalElement[]); uint32 (enum)
ReturnElementsToStoragePool(
  [IN] uint16 Options, (enum), [IN] Job: ref CIM_ConcreteJob, [IN] TheElements: ref CIM_LogicalElement[]); uint32 (enum)

```



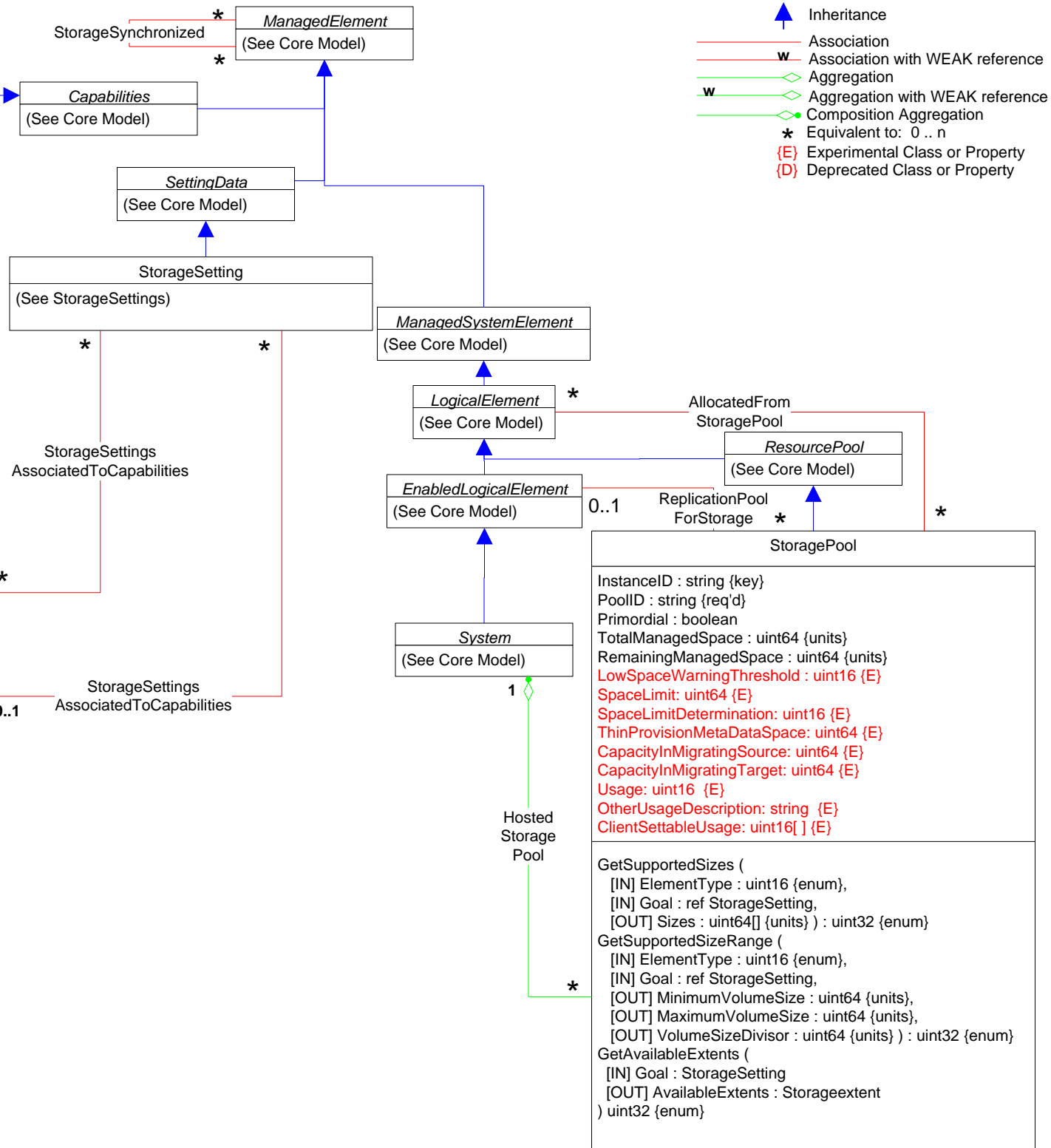




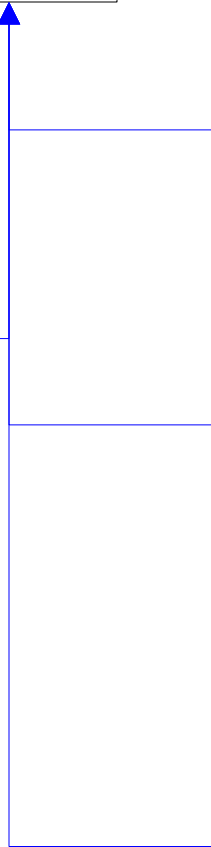
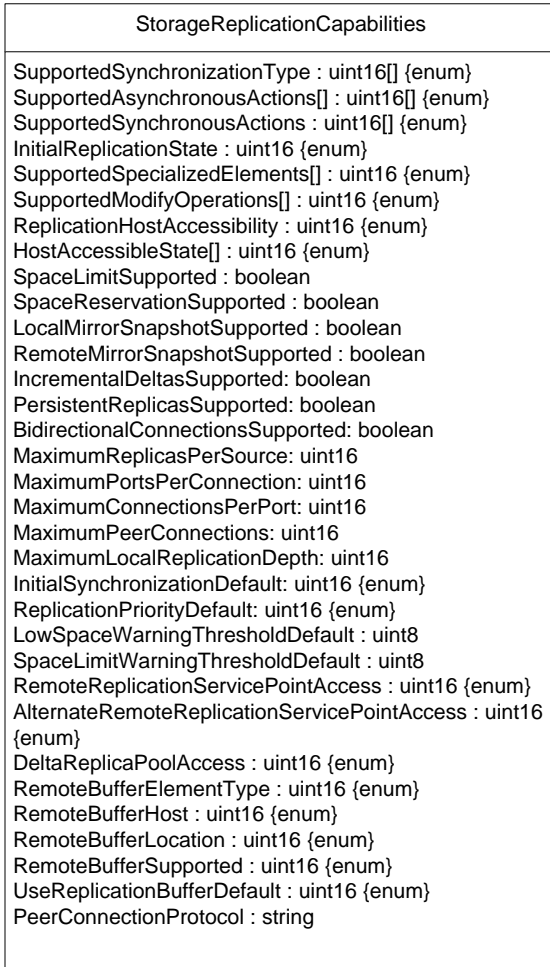
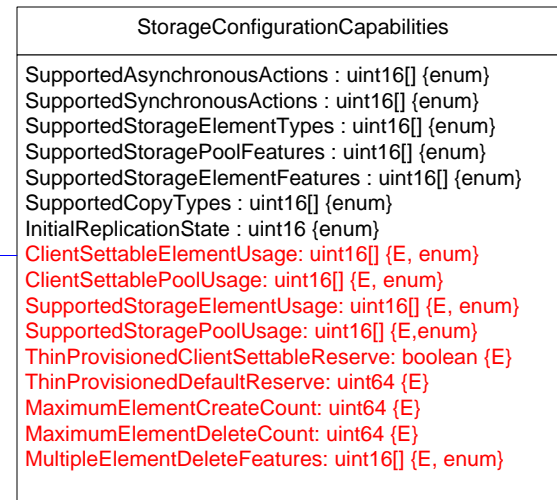
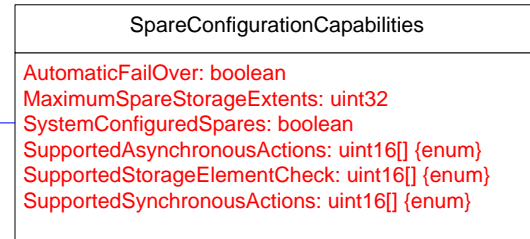
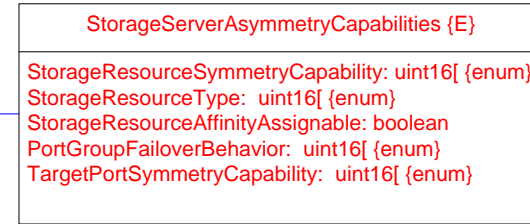
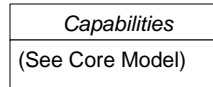
```

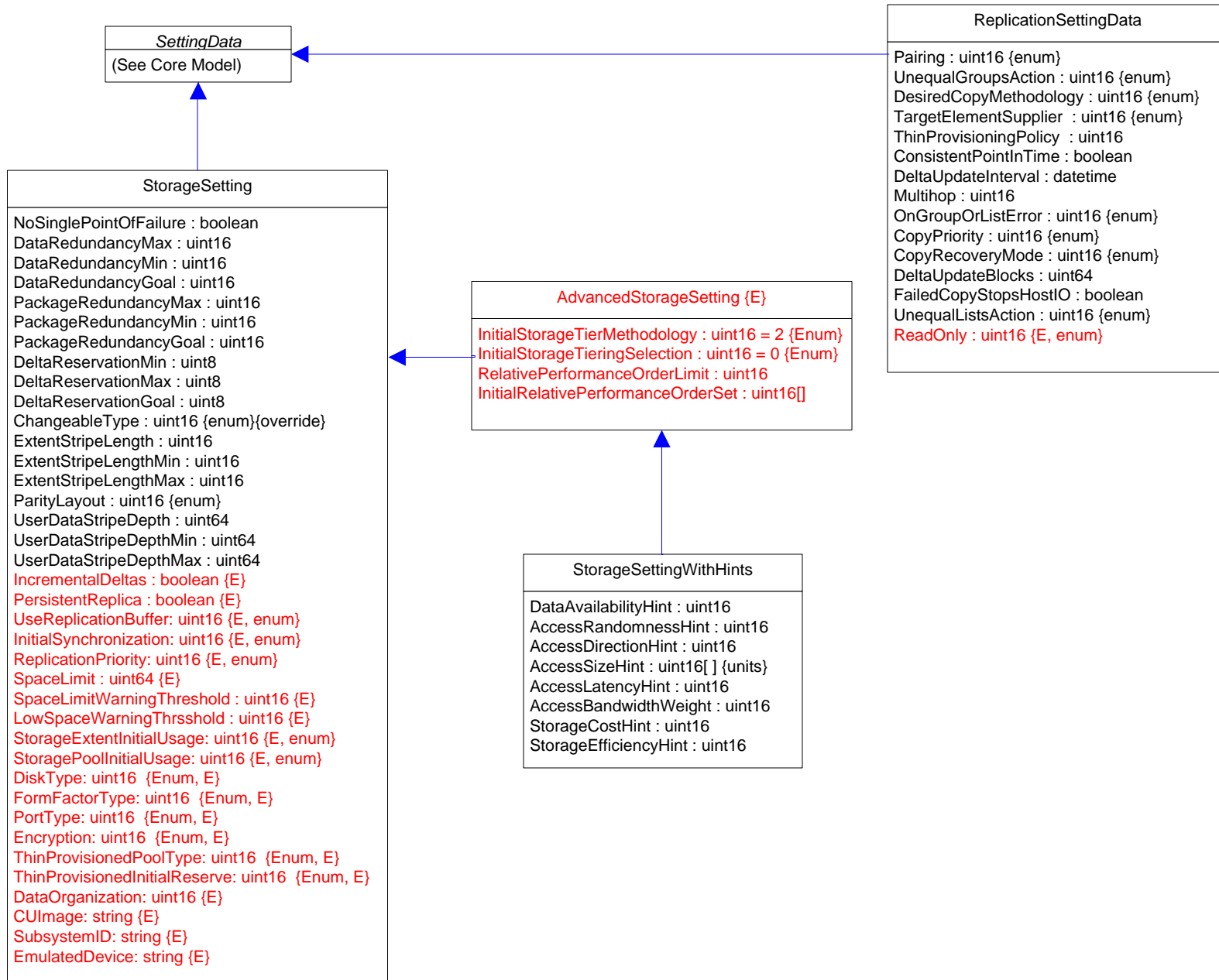
class StorageCapabilities {
  ElementType : uint16 {enum}
  NoSinglePointOfFailure : boolean
  NoSinglePointOfFailureDefault : boolean
  DataRedundancyMax : uint16
  DataRedundancyMin : uint16
  DataRedundancyDefault : uint16
  PackageRedundancyMax : uint16
  PackageRedundancyMin : uint16
  PackageRedundancyDefault : uint16
  DeltaReservationMax : uint16
  DeltaReservationMin : uint16
  DeltaReservationDefault : uint16
  ExtentStripeLengthDefault : uint16
  ParityLayoutDefault : uint16 {enum}
  UserDataStripeDepthDefault : uint64
  Encryption : uint16 {E, Enum}

  CreateSetting (
    [IN] SettingType : uint16 {enum},
    [OUT] NewSetting : ref StorageSetting) : uint32 {enum}
  GetSupportedStripeLengths (
    [OUT] StripeLengths : uint16 [] ) : uint32 {enum, E}
  GetSupportedStripeLengthRange (
    [OUT] MinimumStripeLength : uint16
    [OUT] MaximumStripeLength : uint16
    [OUT] StripeLengthDivisor : uint32 ) : uint32 {enum, E}
  GetSupportedParityLayouts (
    [OUT] ParityLayout : uint16 [] ) : uint32 {enum, E}
  GetSupportedStripeDepths (
    [OUT] StripeLengths : uint64 [] {unit}
  ) : uint32 {enum, unit, E}
  GetSupportedStripeLengthRange (
    [OUT] MinimumStripeDepth : uint64 {unit}
    [OUT] MaximumStripeDepth : uint64 {unit}
    [OUT] StripeDepthDivisor : uint64 {unit}
  ) : uint32 {enum, E}
}
    
```












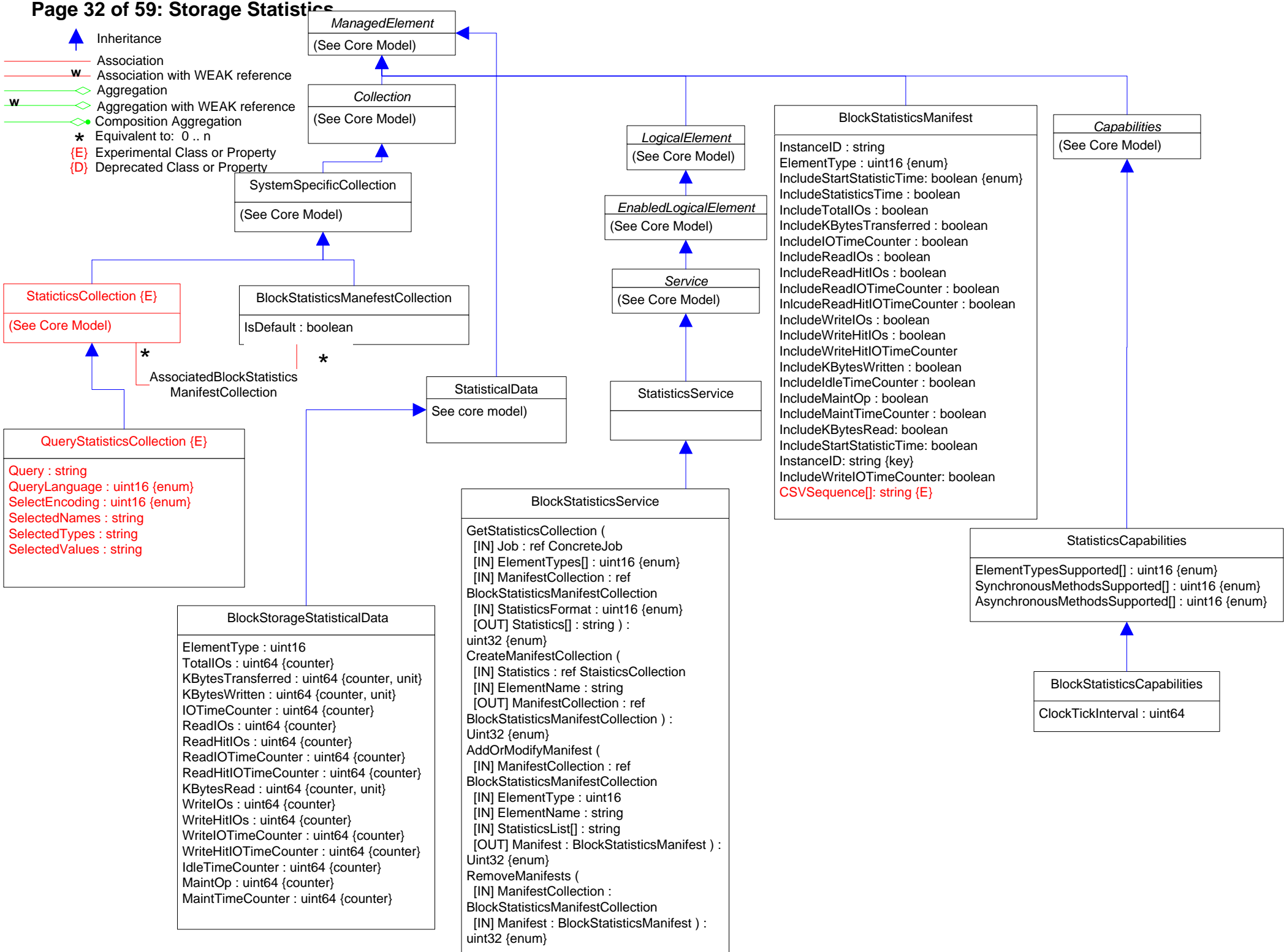
- Inheritance
- Association
- Association with WEAK reference
- Aggregation
- Aggregation with WEAK reference
- Composition Aggregation
- Equivalent to: 0 .. n
- Experimental Class or Property
- Deprecated Class or Property



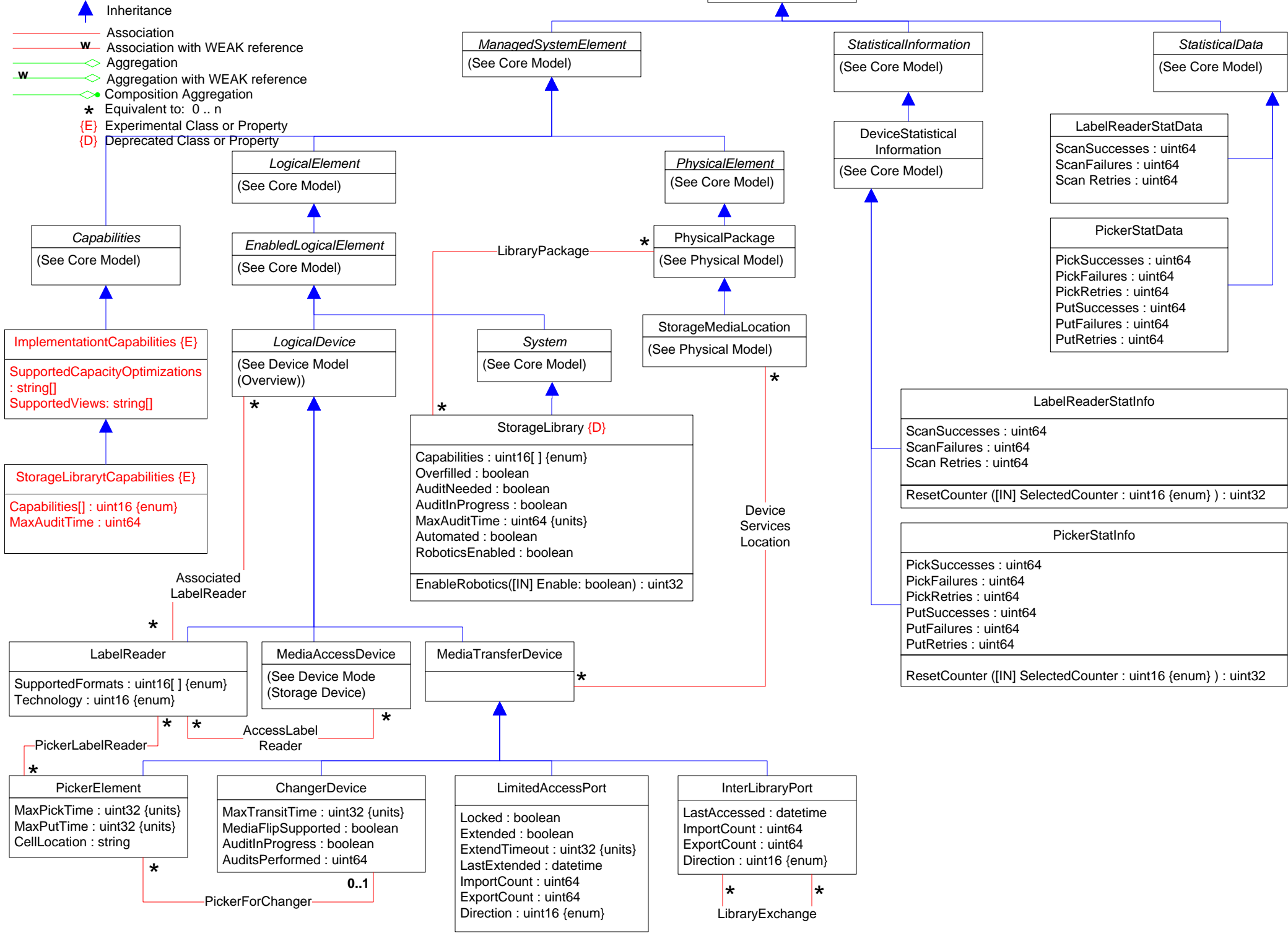


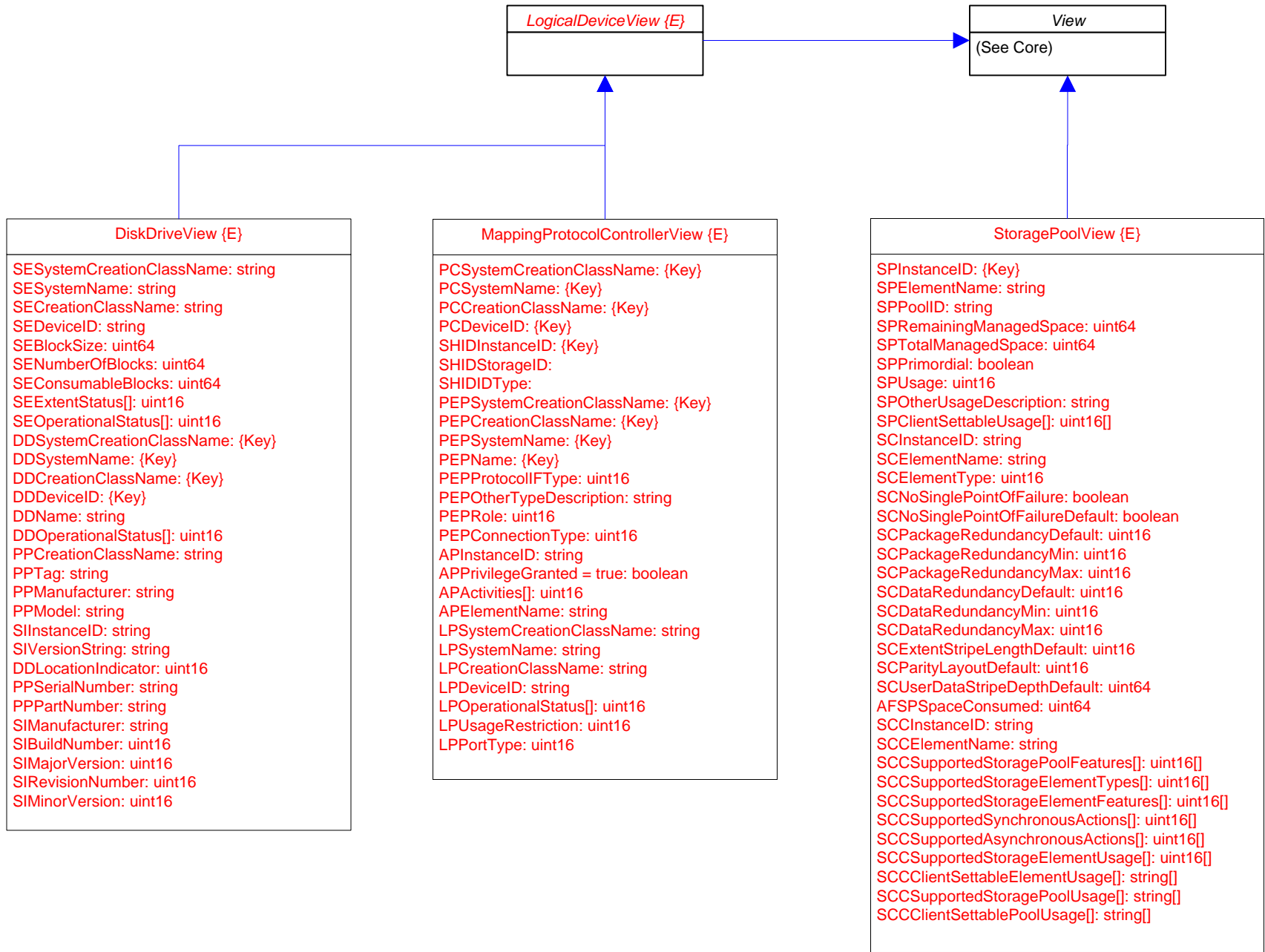
# Page 32 of 59: Storage Statistics

-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property

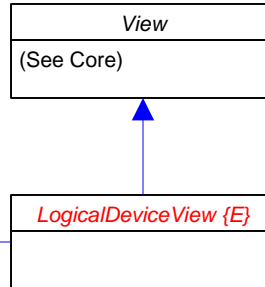















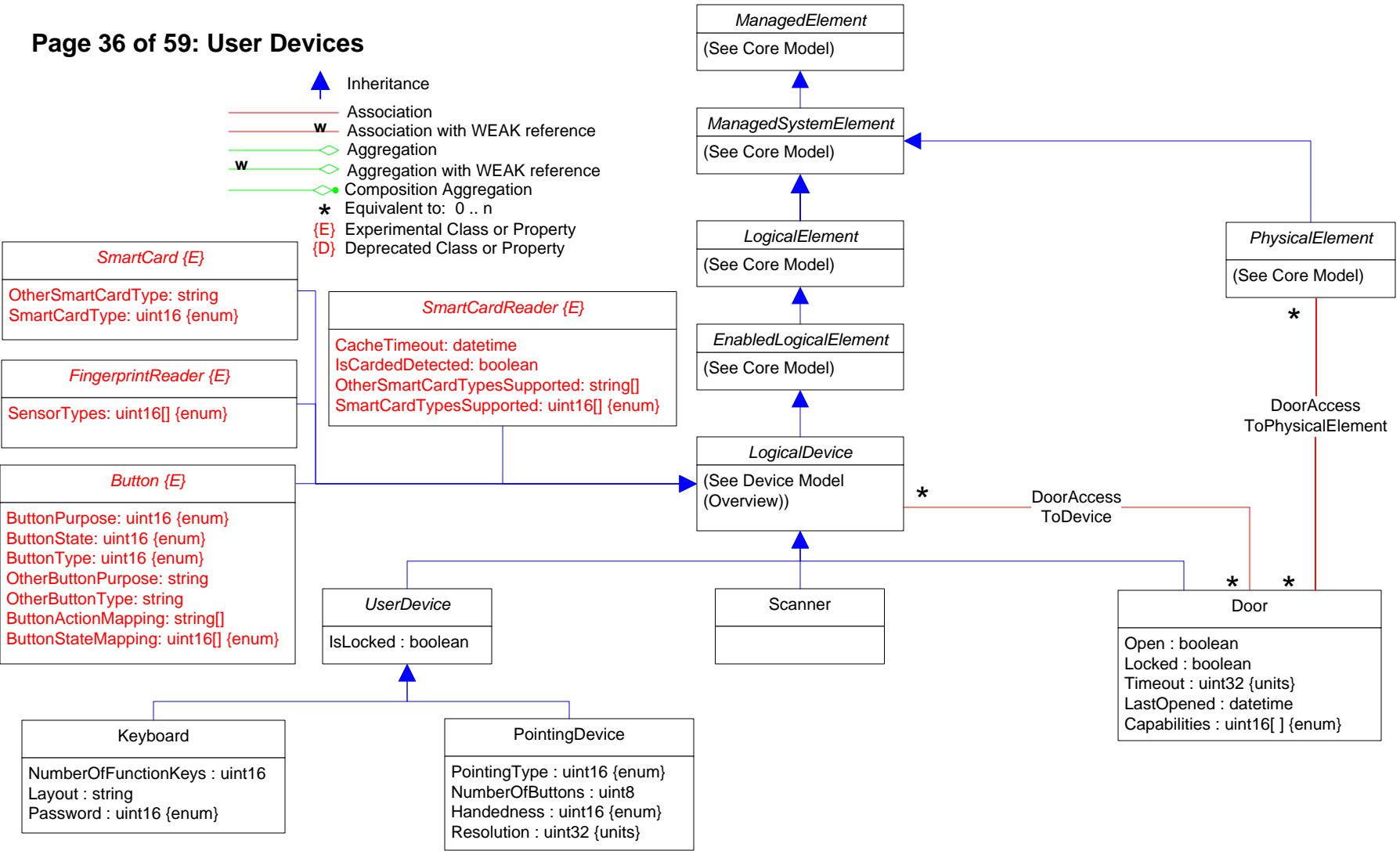
VolumeView {E}
SVSystemCreationClassName: {Key}
SVSystemName: {Key}
SVCreationClassName: {Key}
SVDeviceID: {Key}
SVName: string
SVNameFormat: uint16
SVNameNamespace: uint16
SVExtentStatus[]: uint16
SVOperationalStatus[]: uint16
SVBlockSize: uint64
SVNumberOfBlocks: uint64
SVConsumableBlocks: uint64
SVIsBasedOnUnderlyingRedundancy: 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










ReplicaPairView {E}
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[]

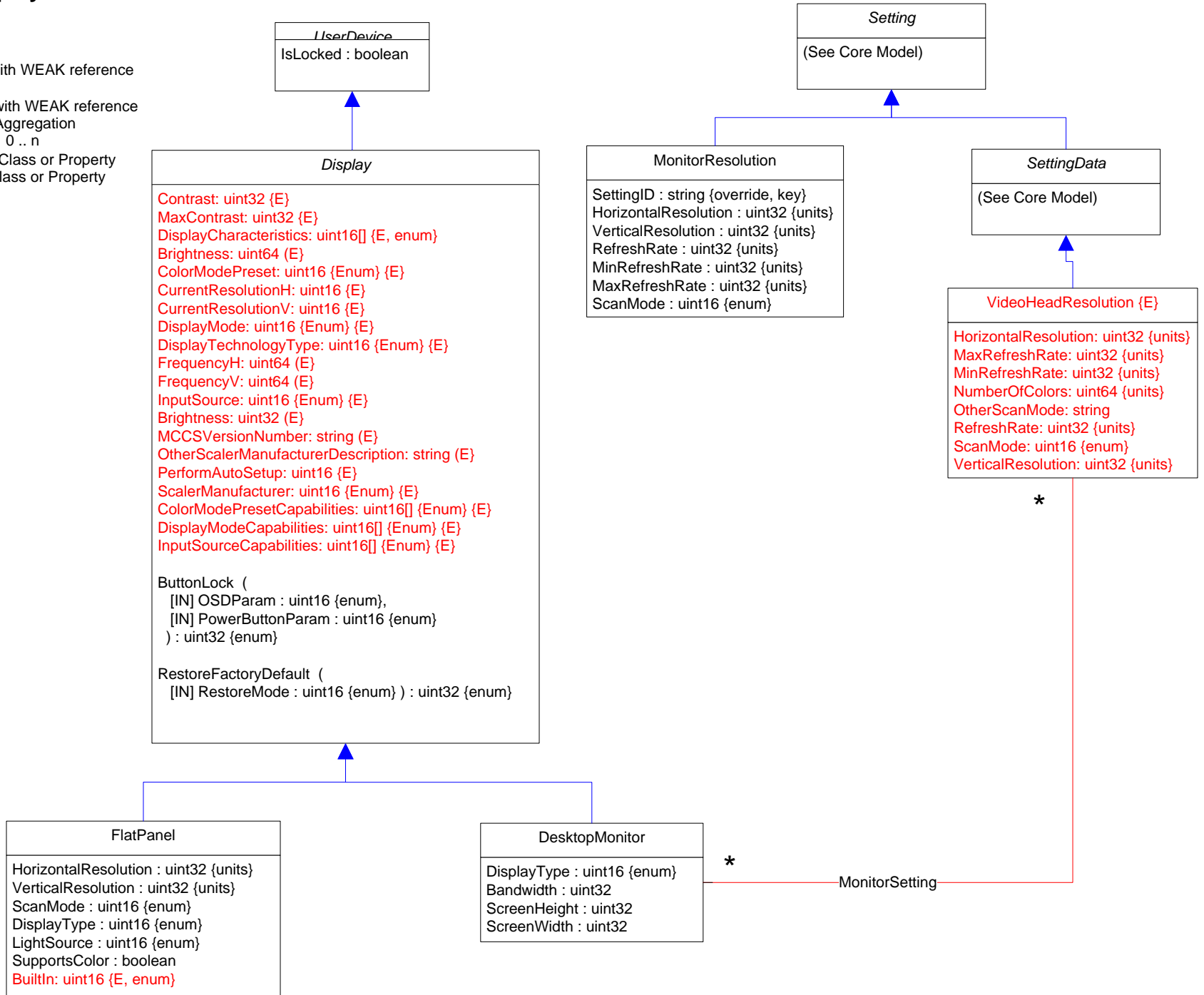
# Page 36 of 59: User Devices

-  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

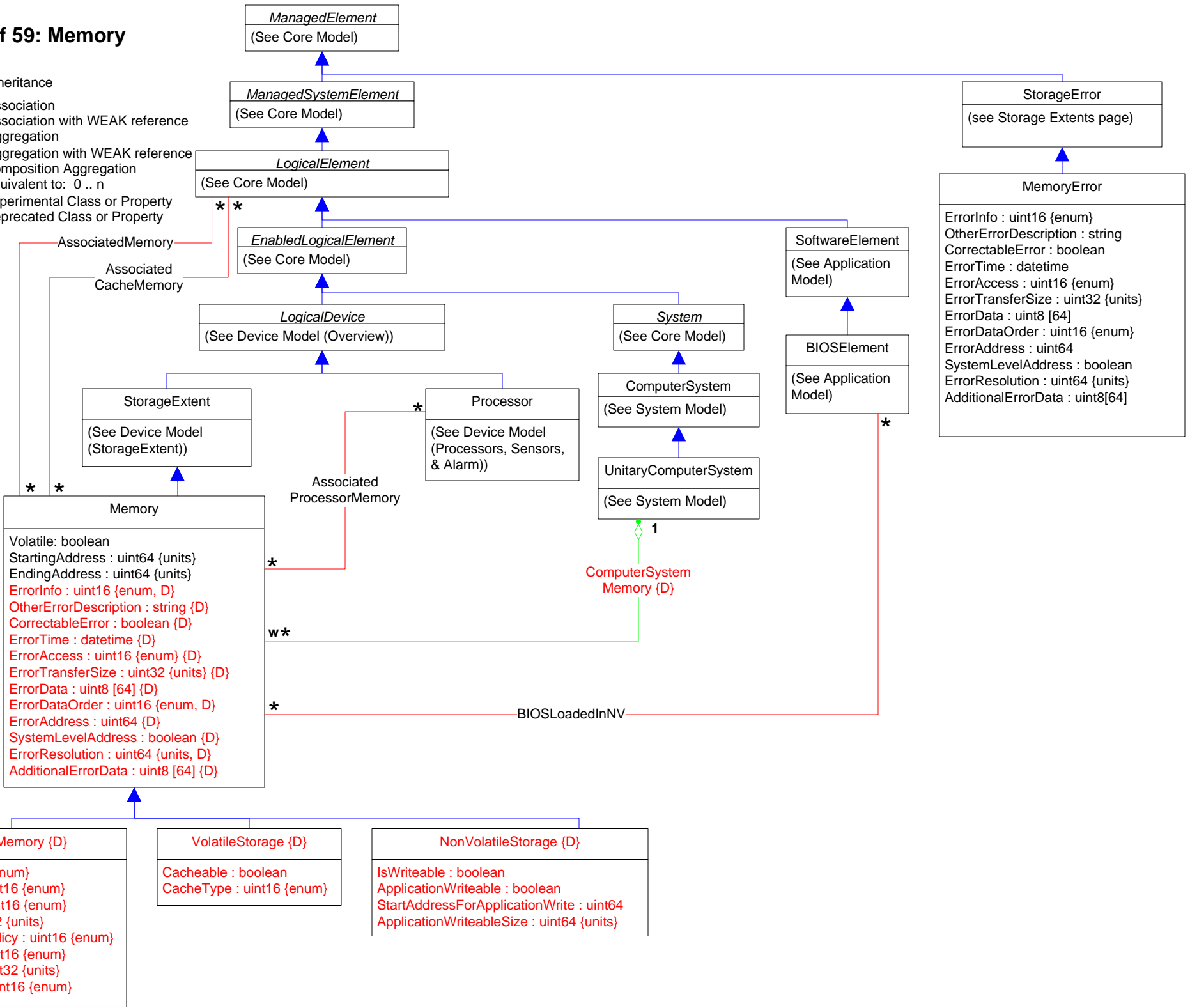











# Page 37 of 59: Displays

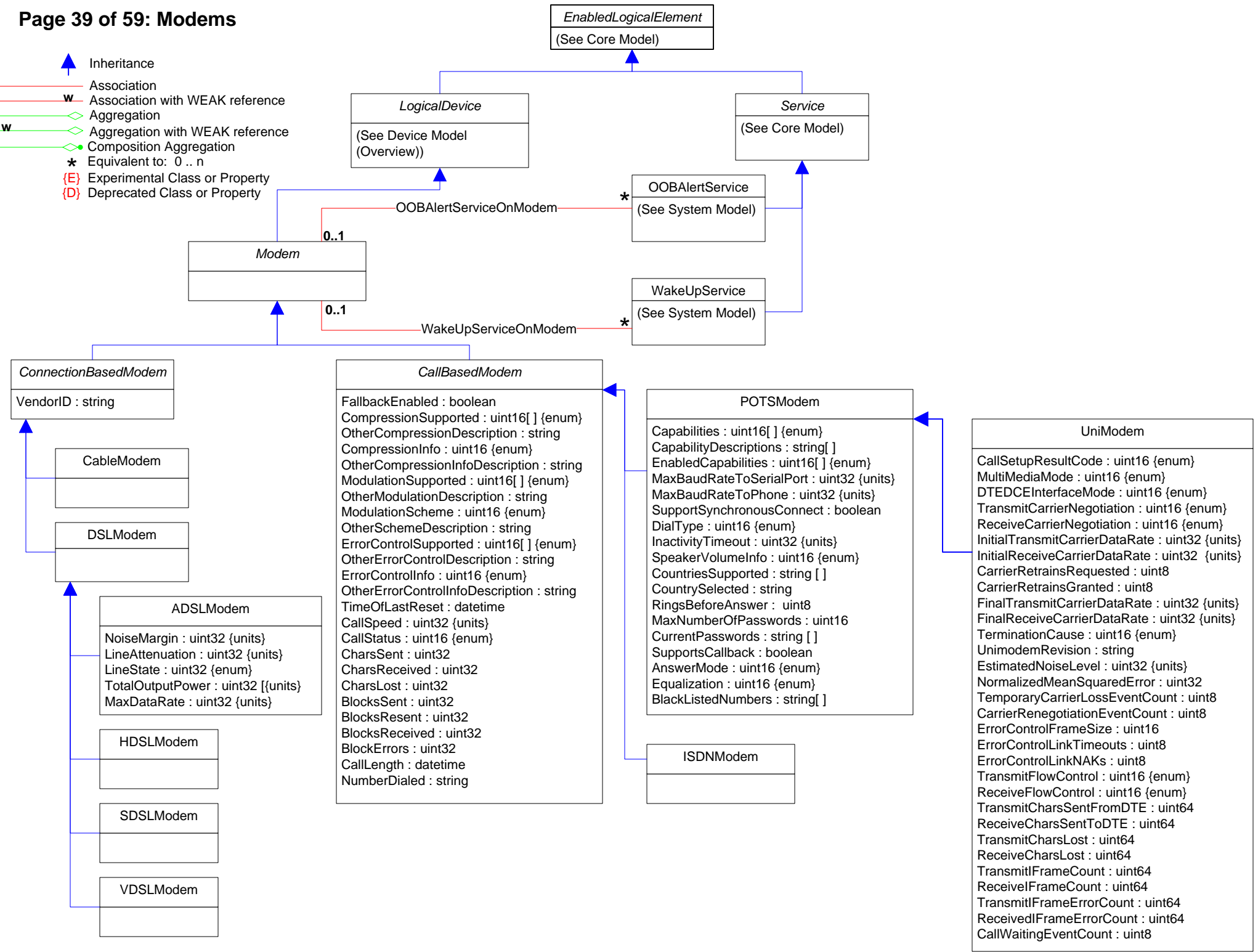
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
- {E} Experimental Class or Property
- {D} Deprecated Class or Property

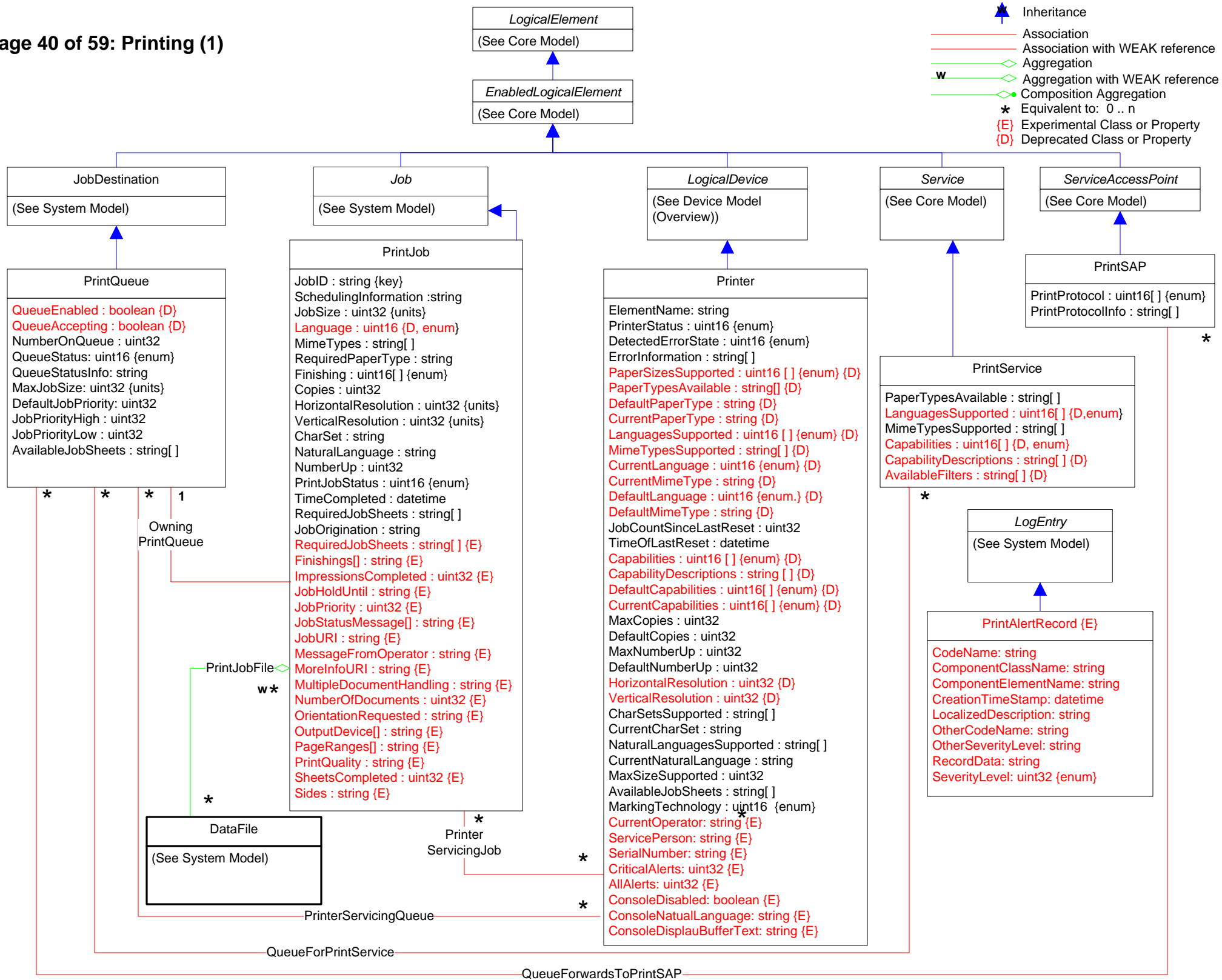


- Inheritance
- Association
- Association with WEAK reference
- Aggregation
- Aggregation with WEAK reference
- Composition Aggregation
- Equivalent to: 0 .. n
- Experimental Class or Property
- Deprecated Class or Property

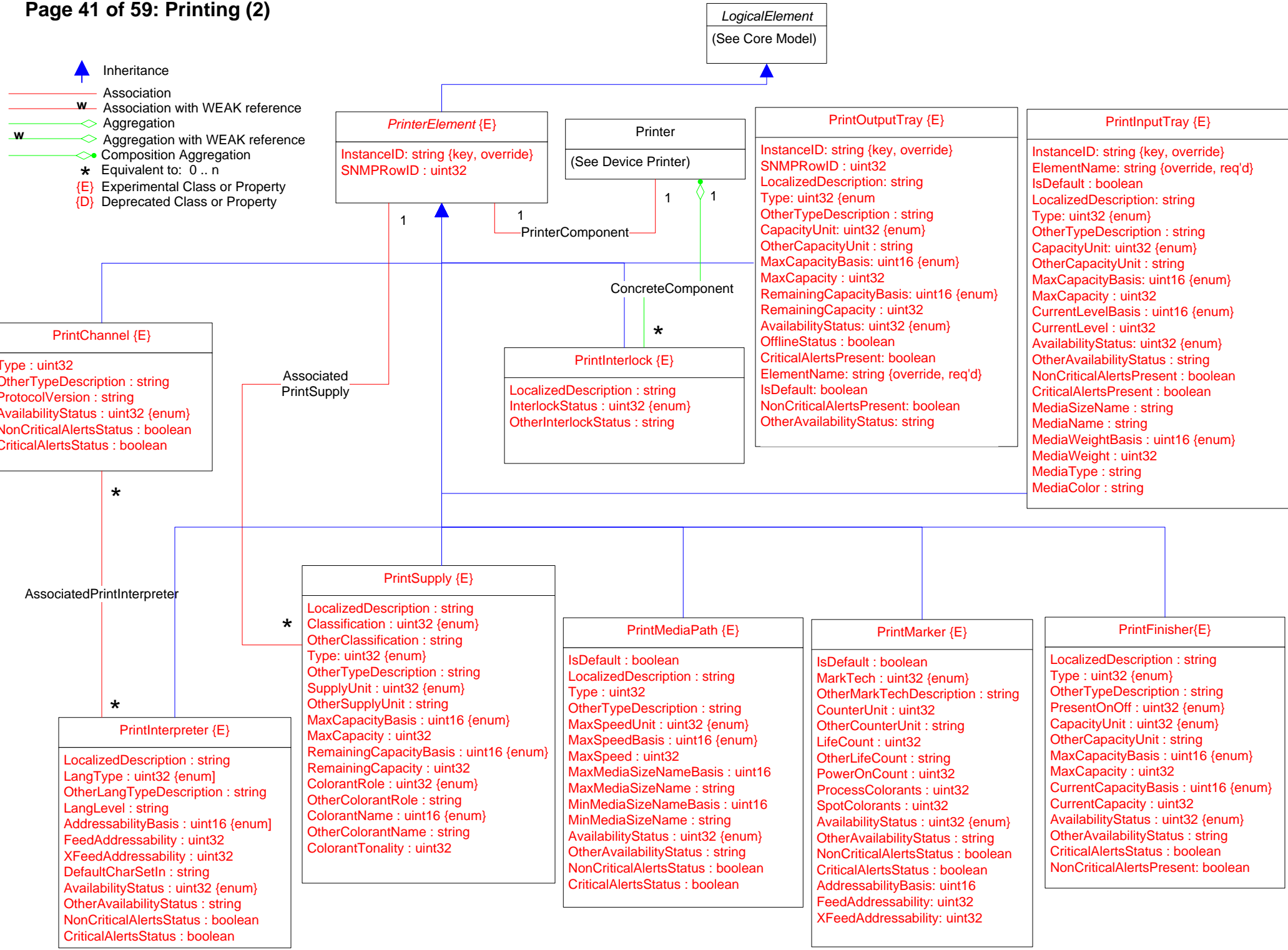


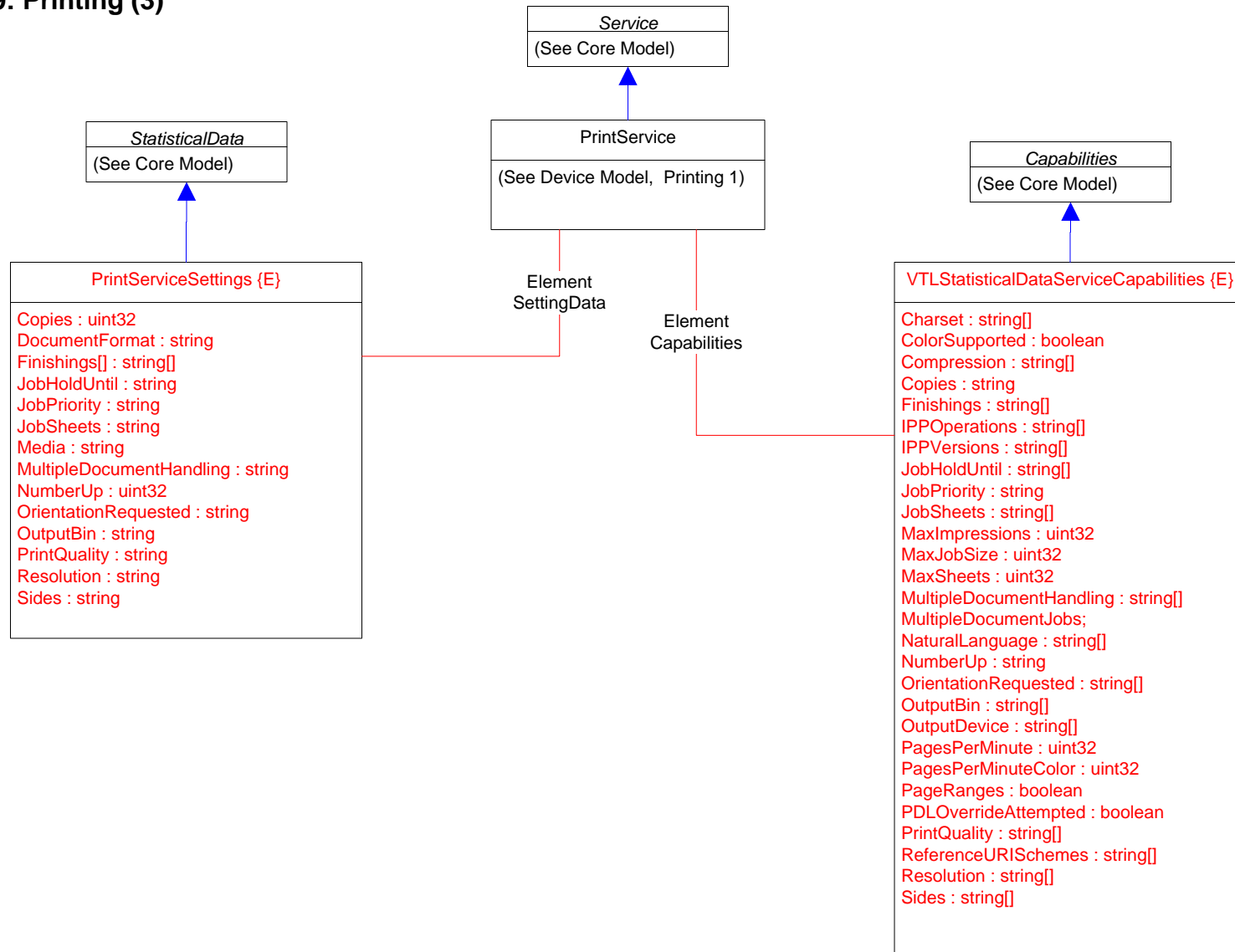
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  {E} Experimental Class or Property
-  {D} Deprecated Class or Property












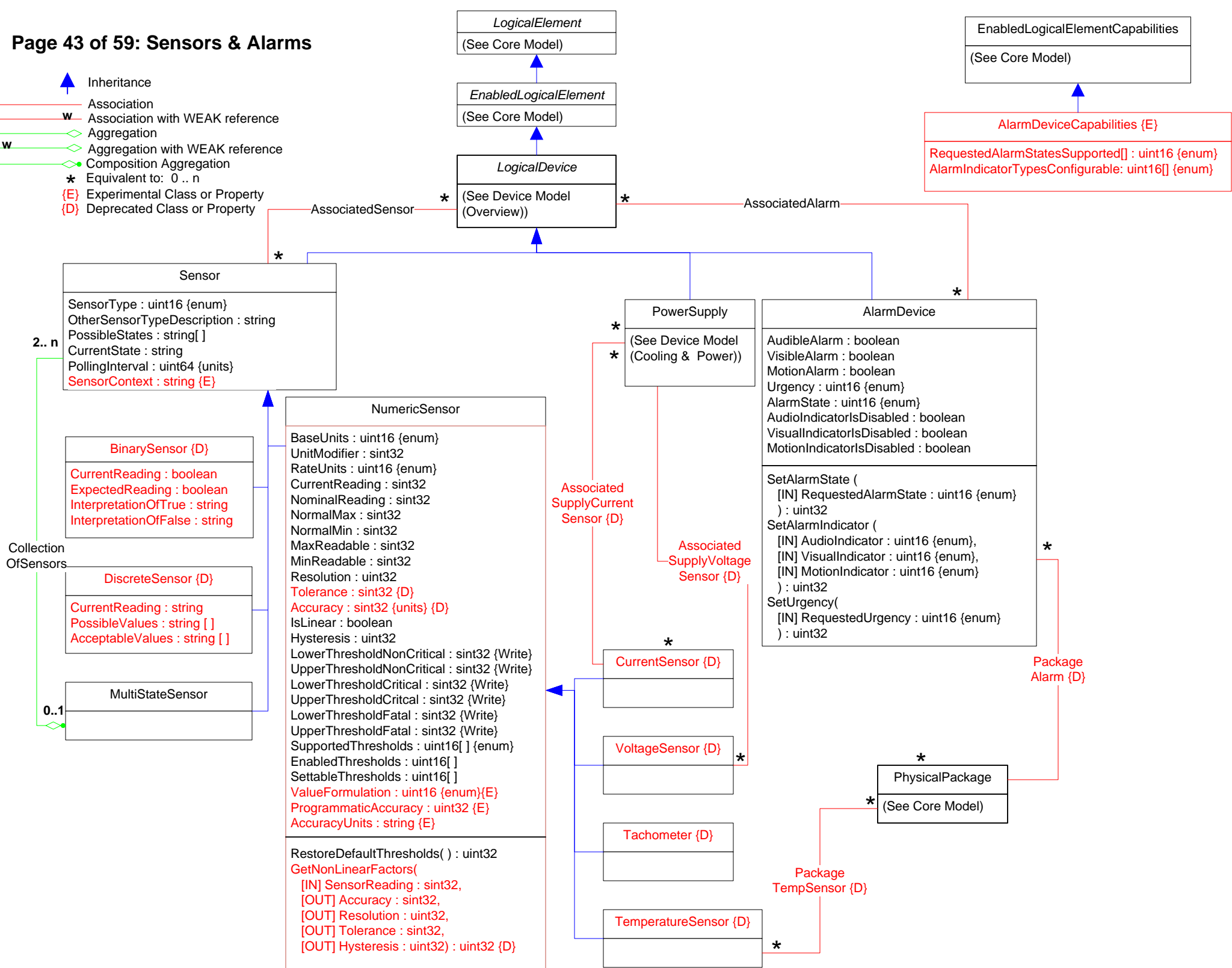











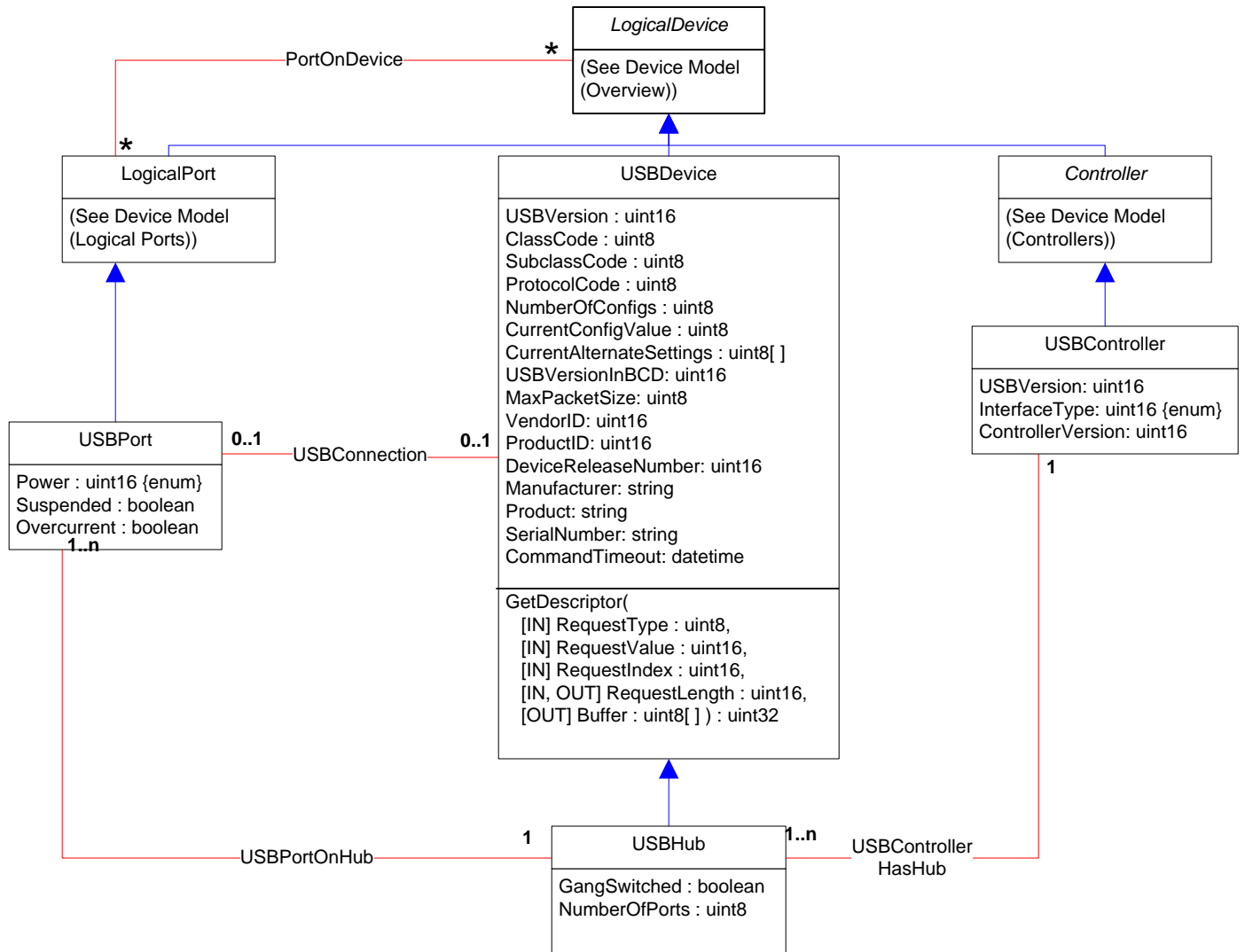





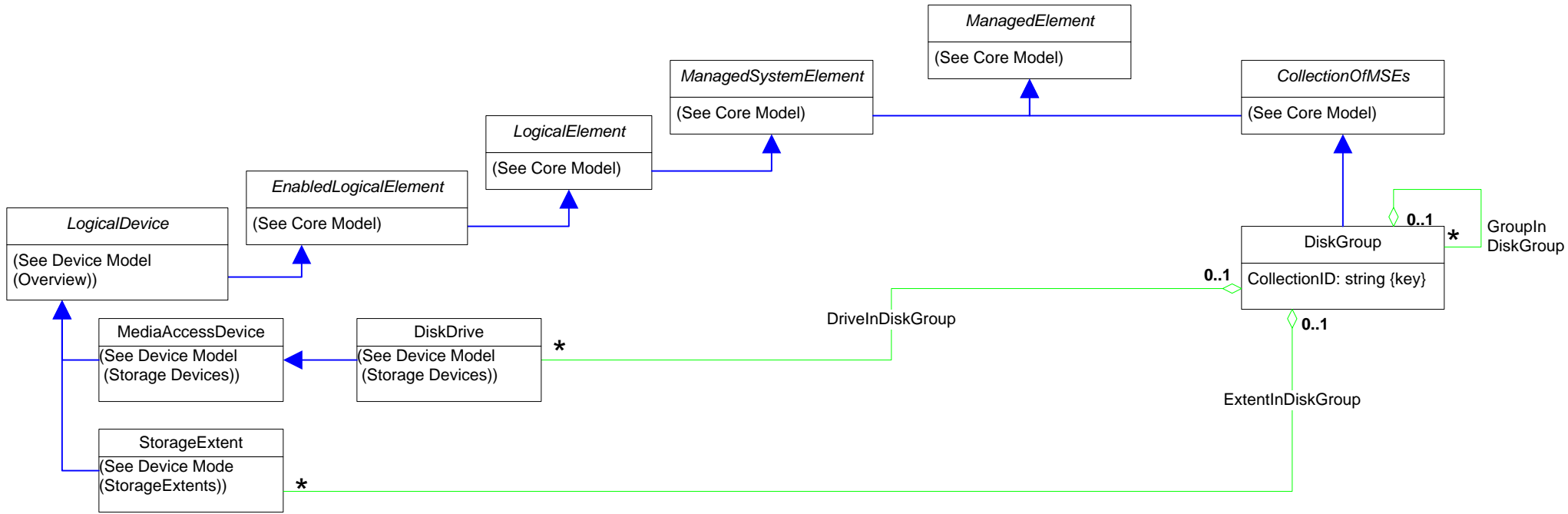
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property










-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n

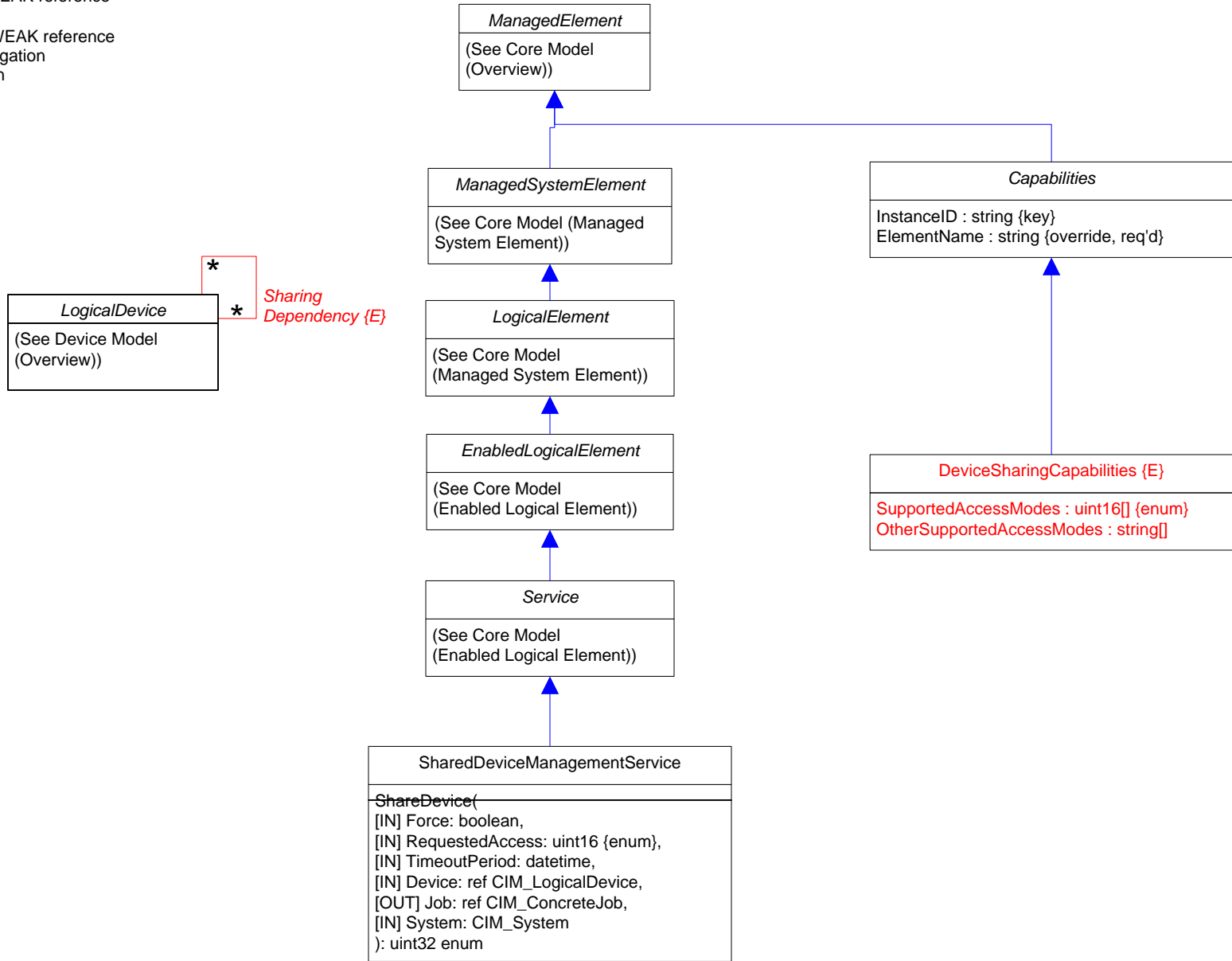







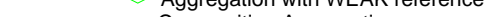

-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n

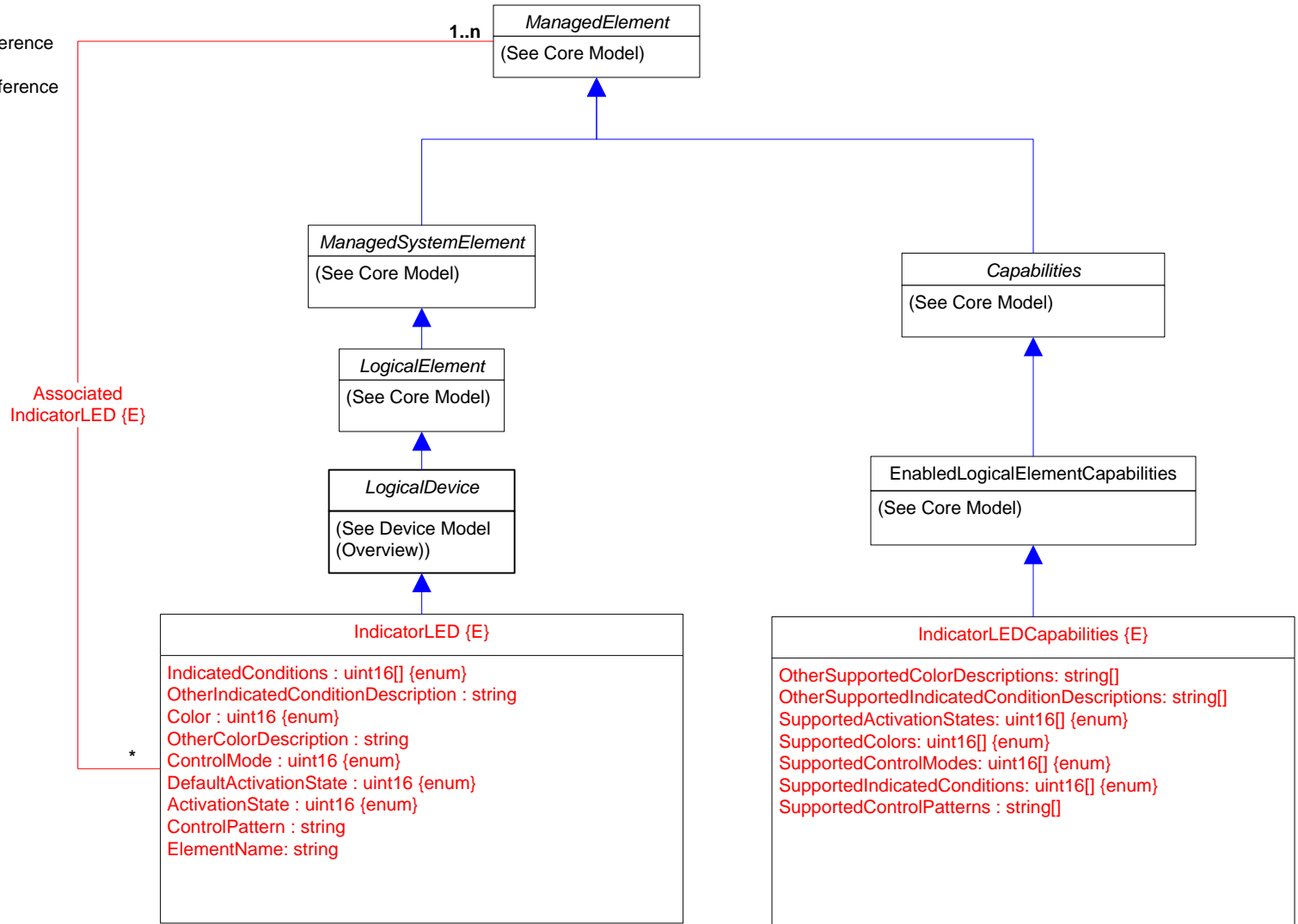











# Page 46 of 59: Device Sharing

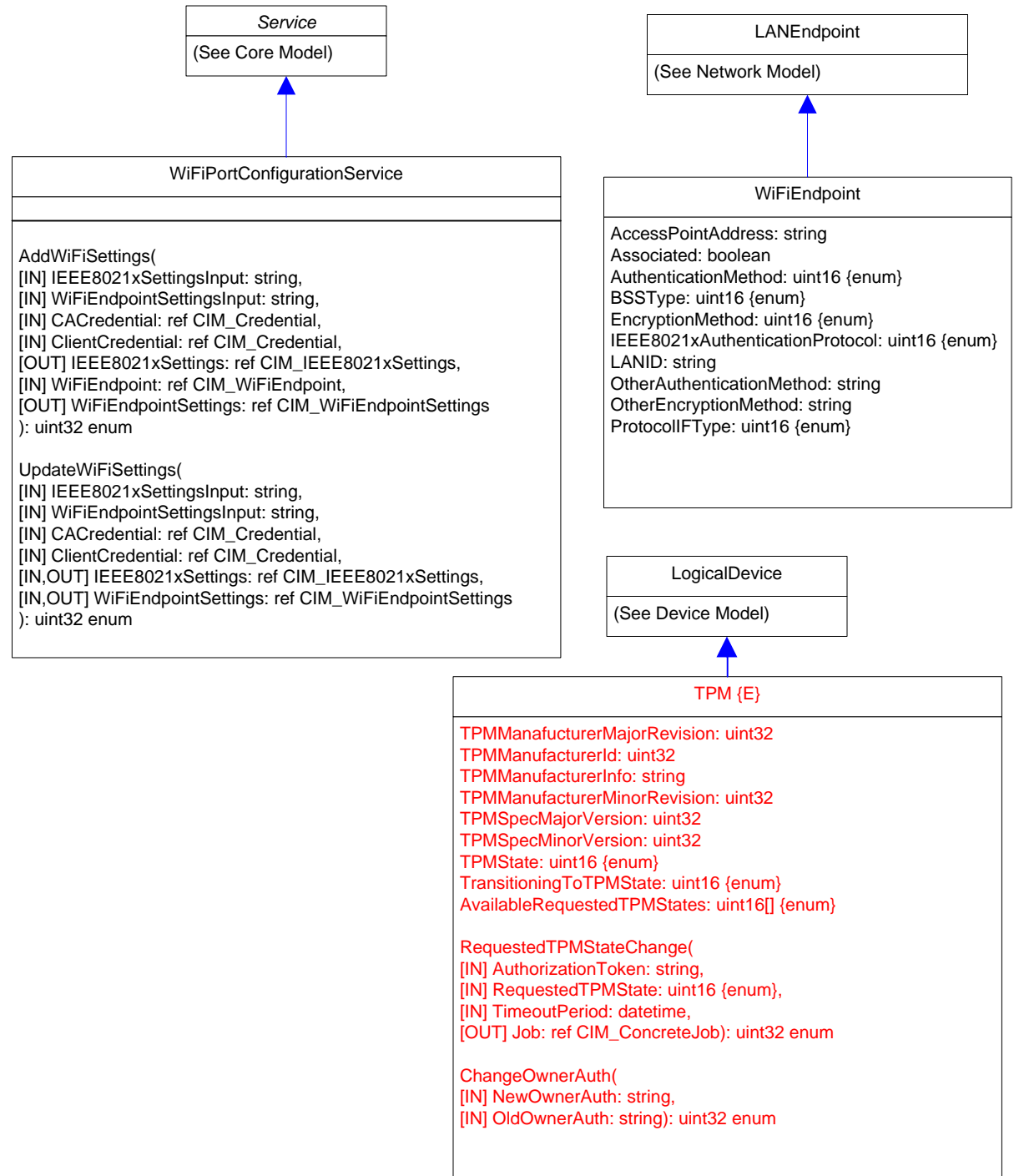
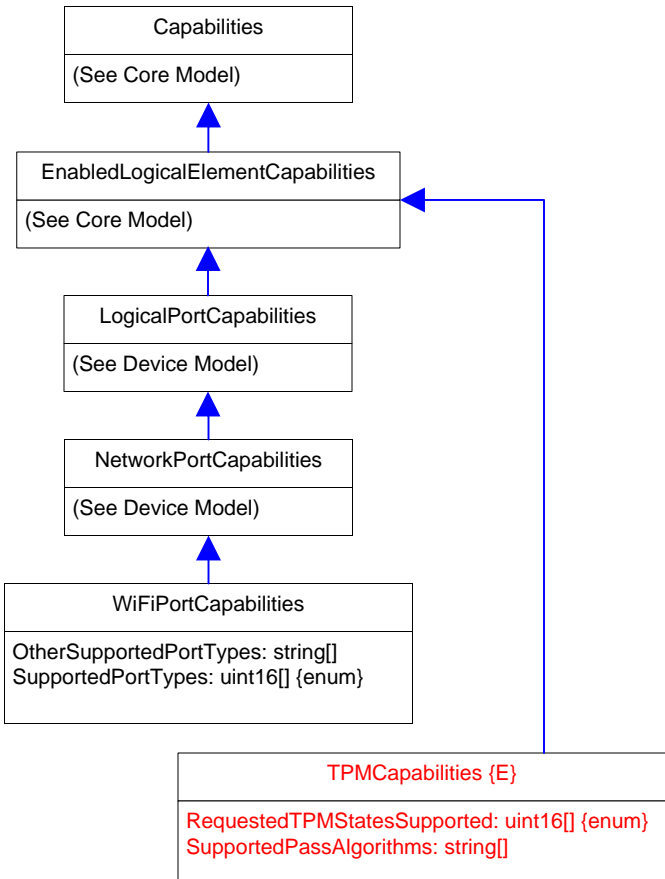
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n



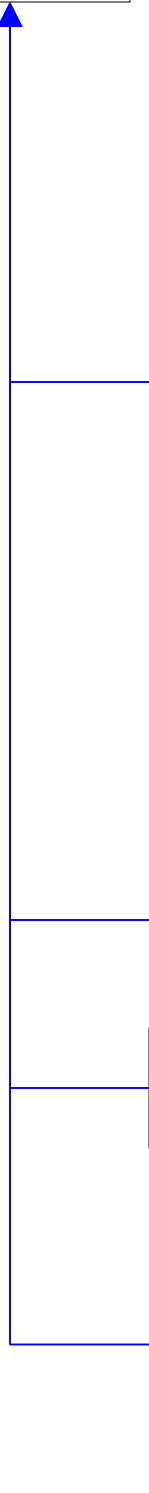
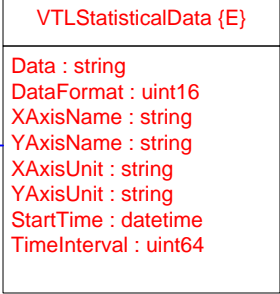
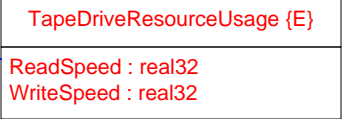
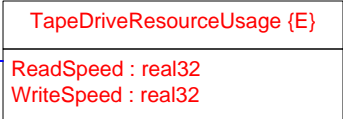
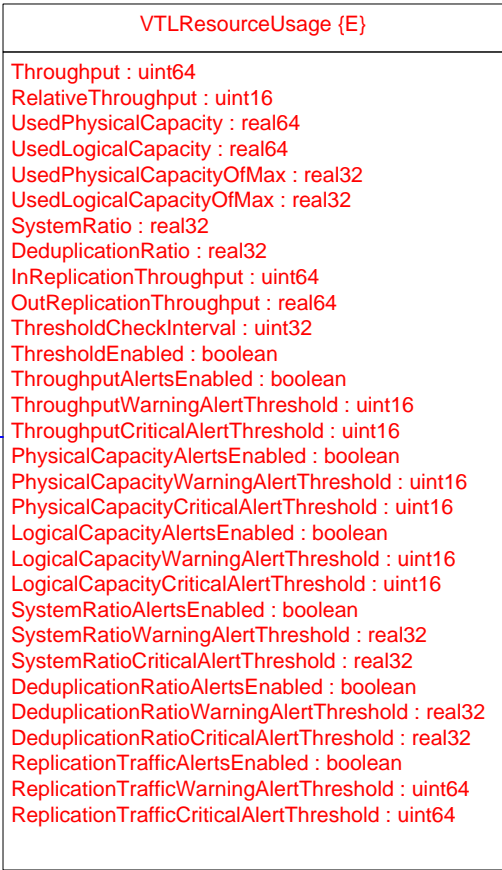
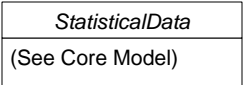
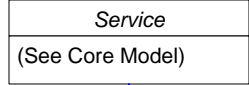
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n

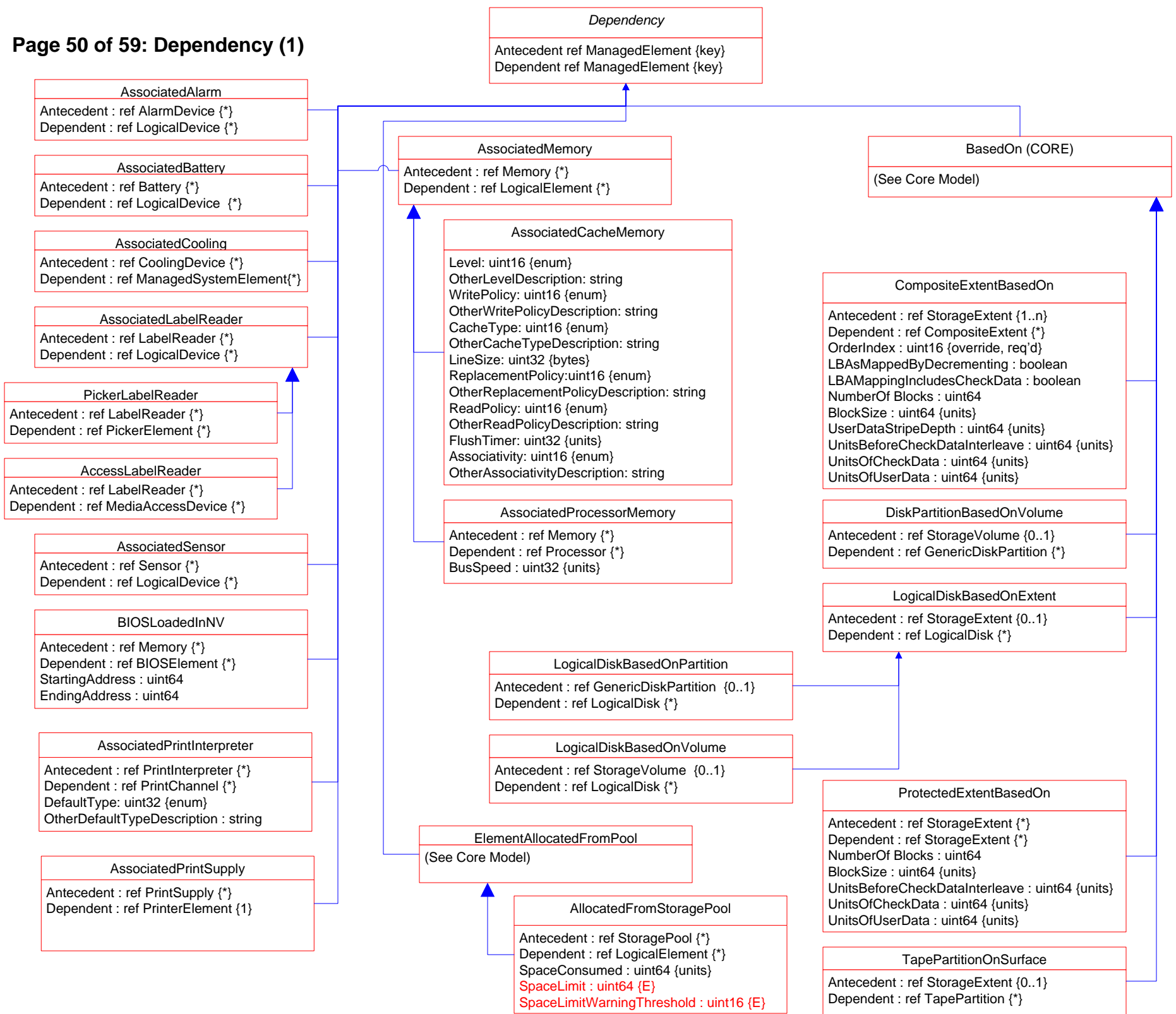


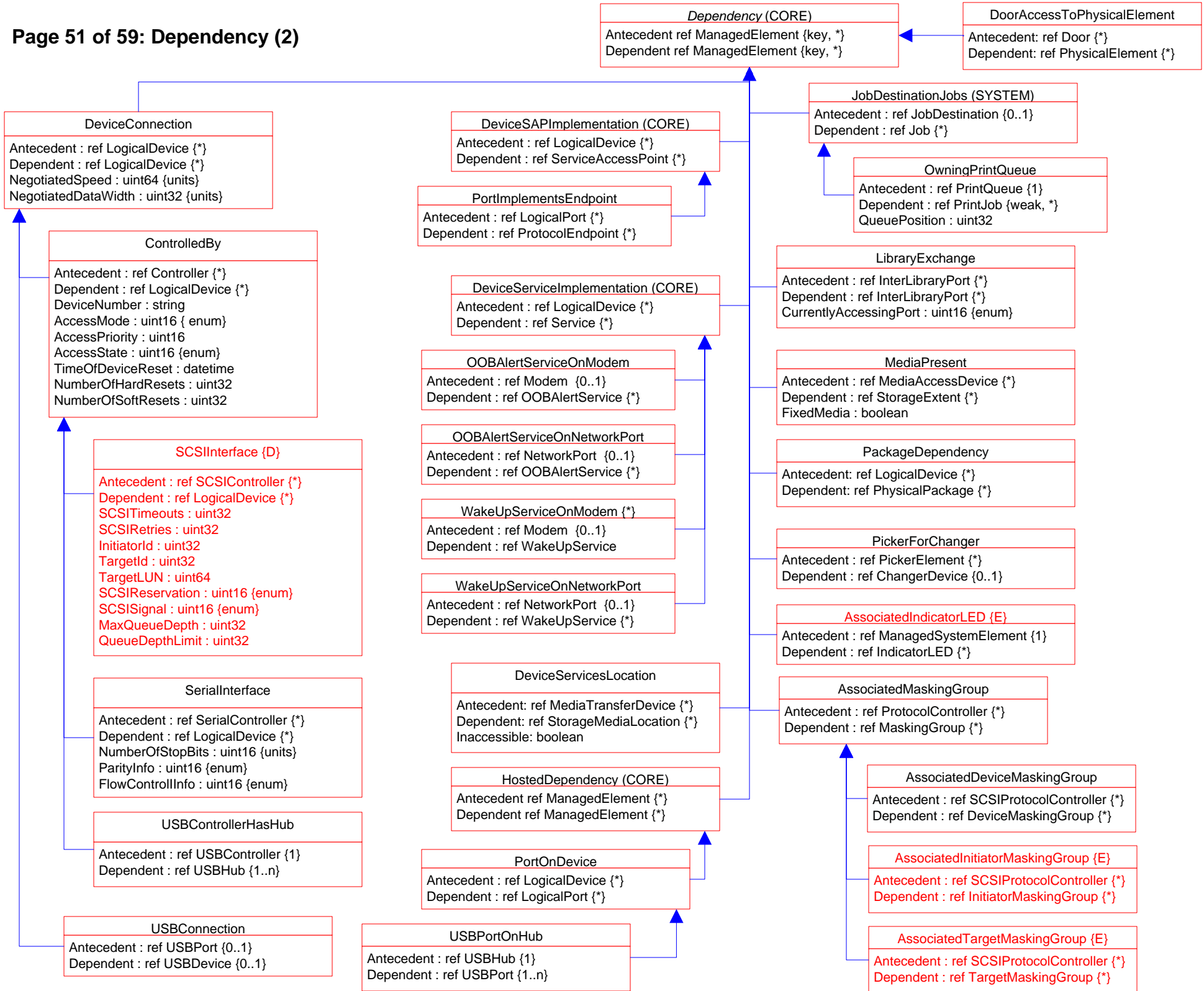
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

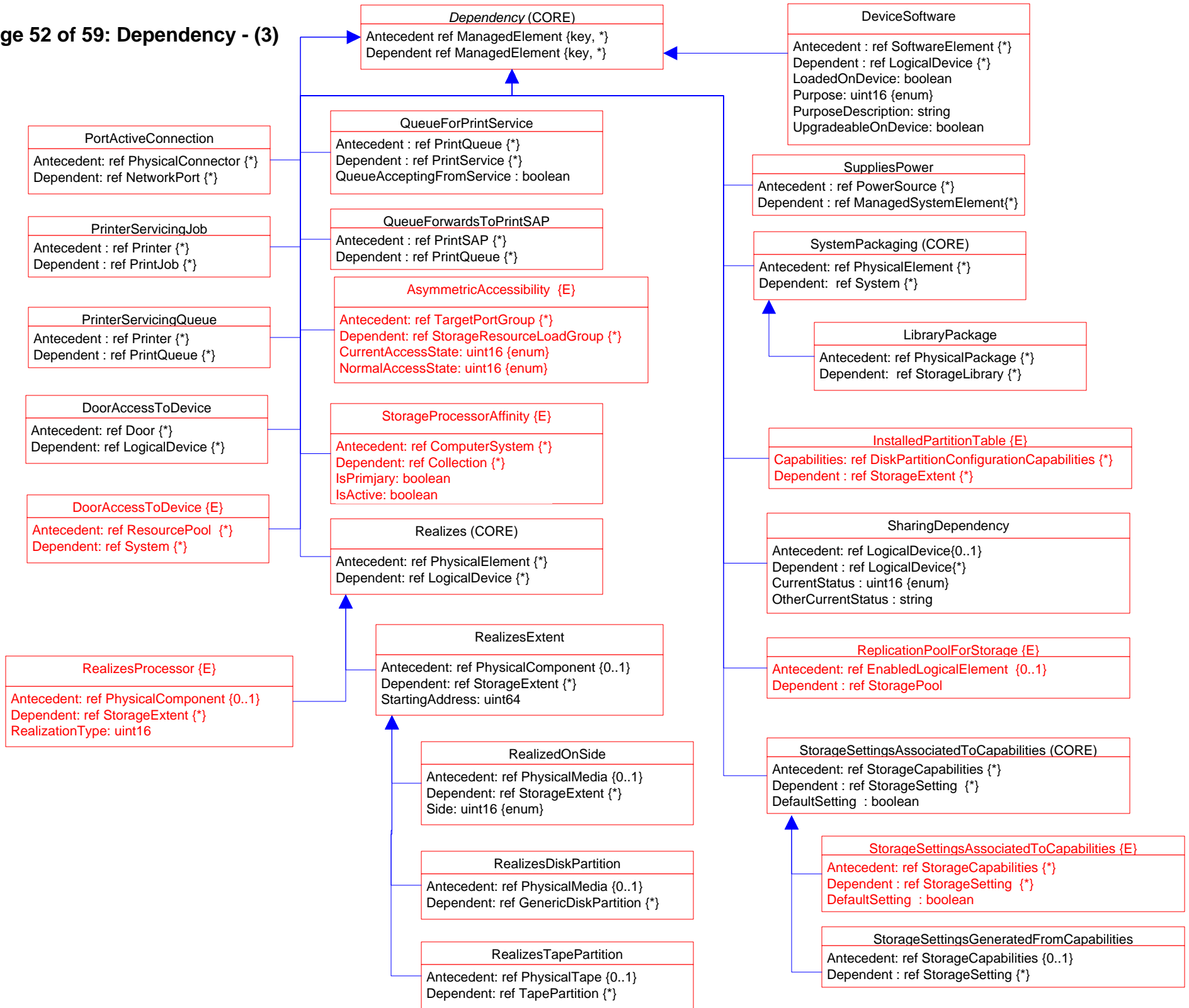


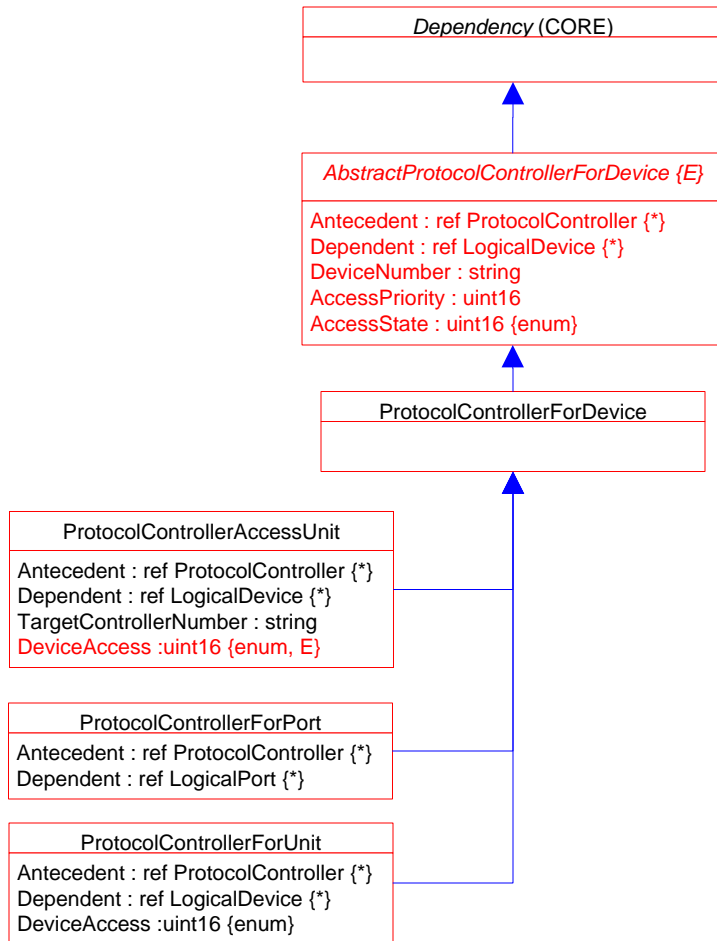




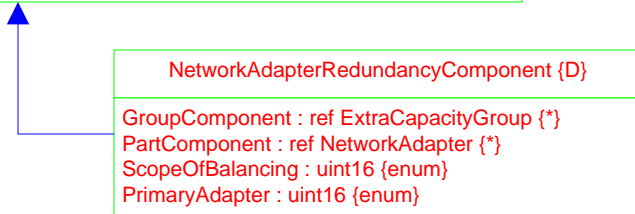
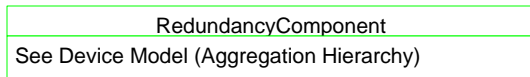
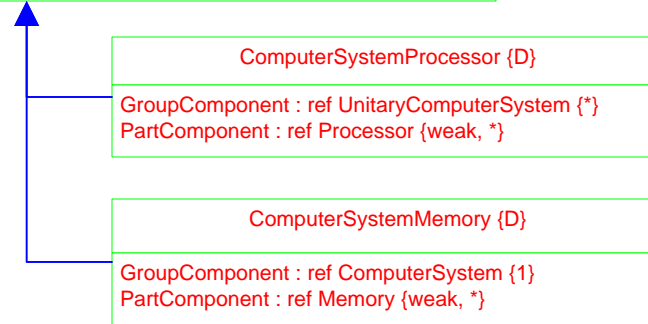
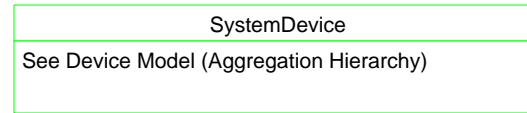
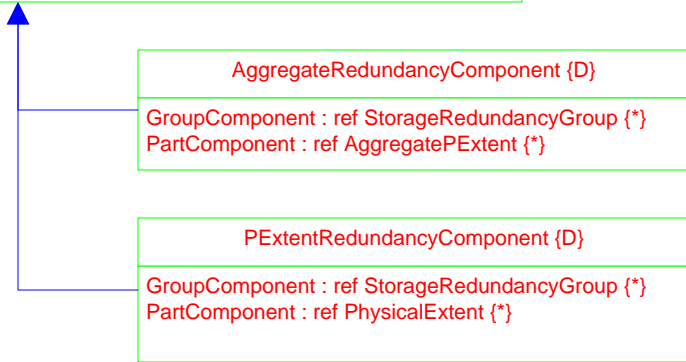
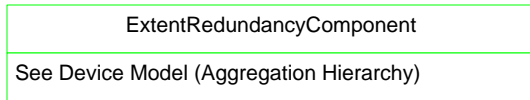




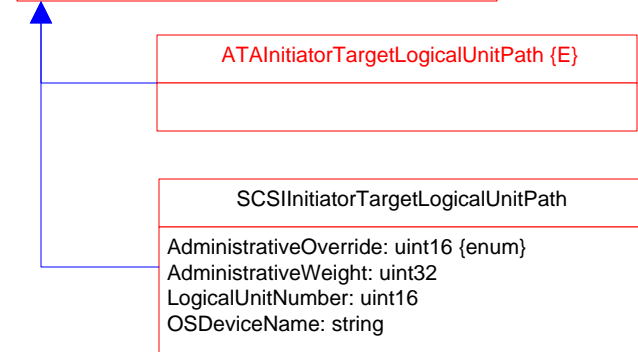
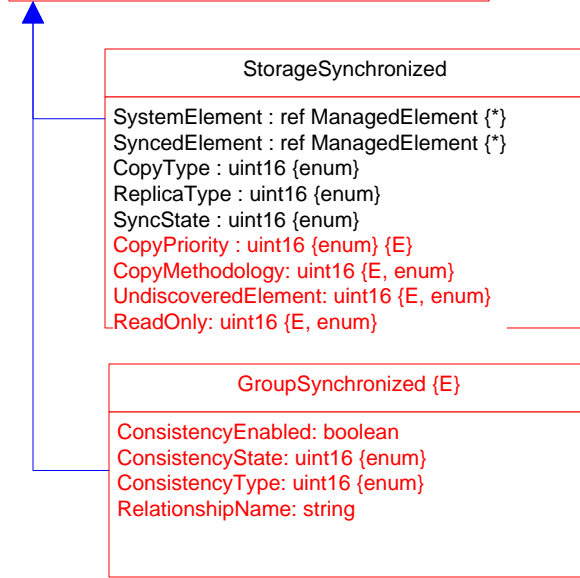
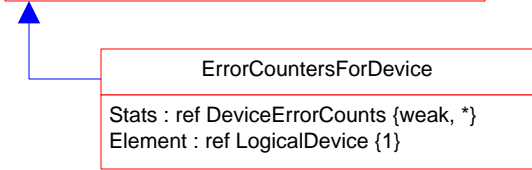
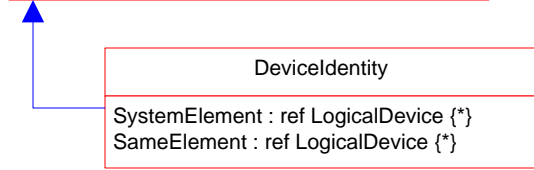
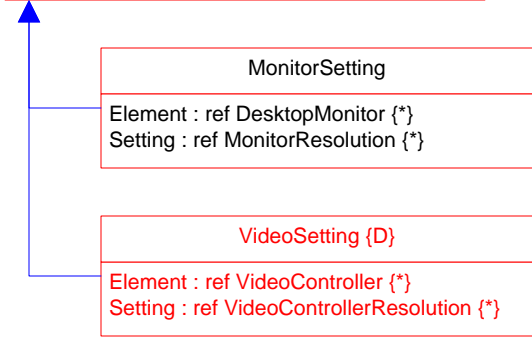
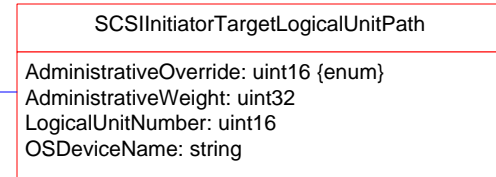
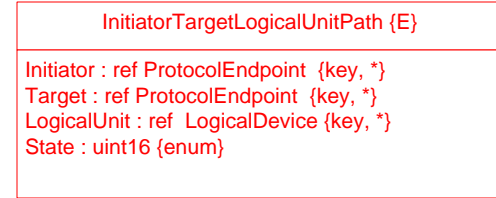
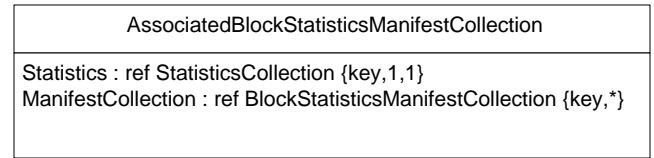
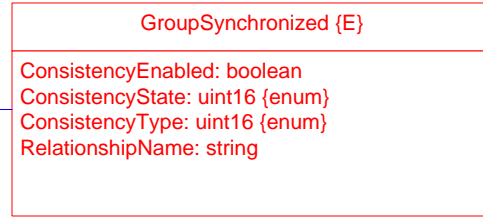
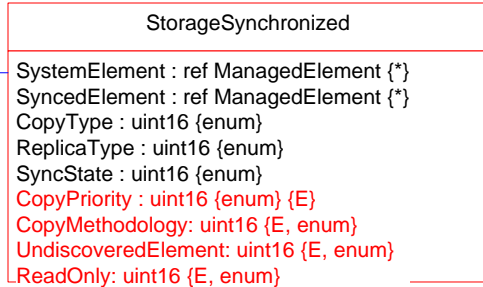
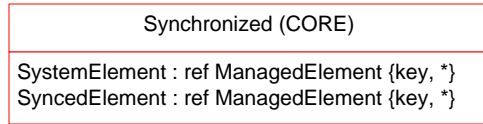
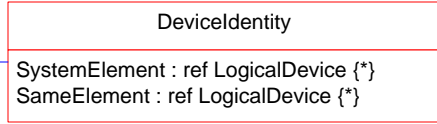
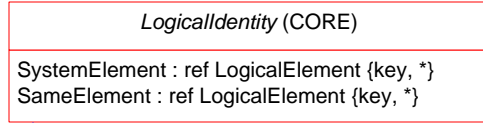
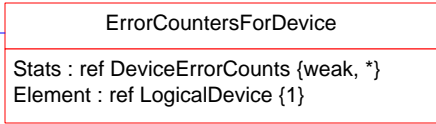
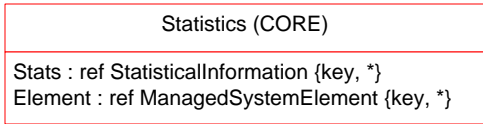
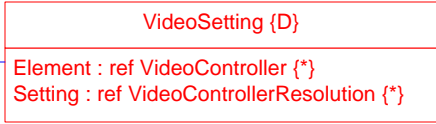
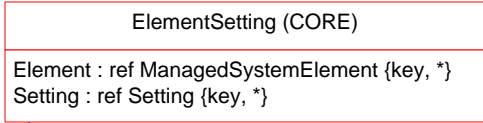


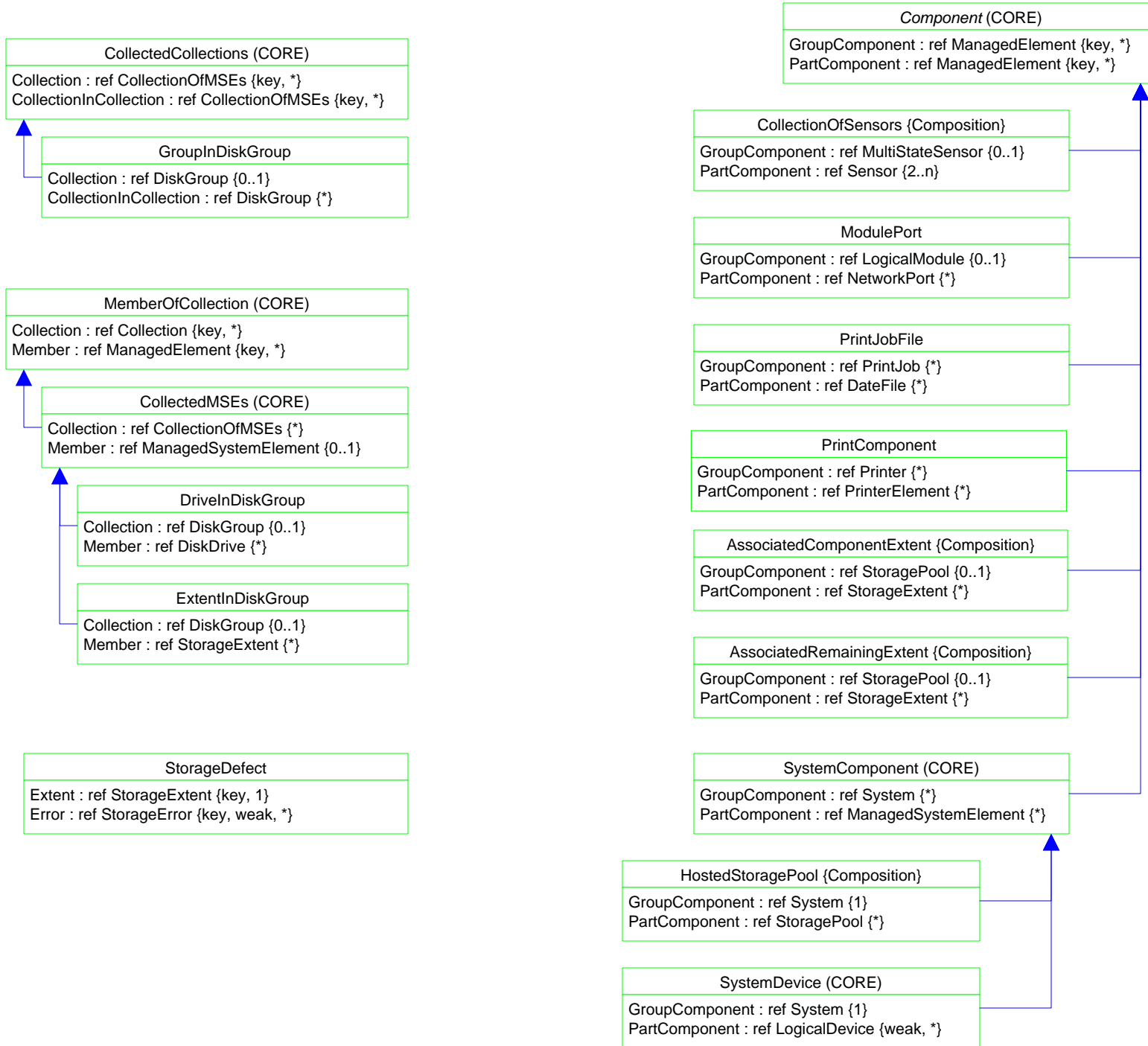


## Page 54 of 59: Aggregation Deprecation



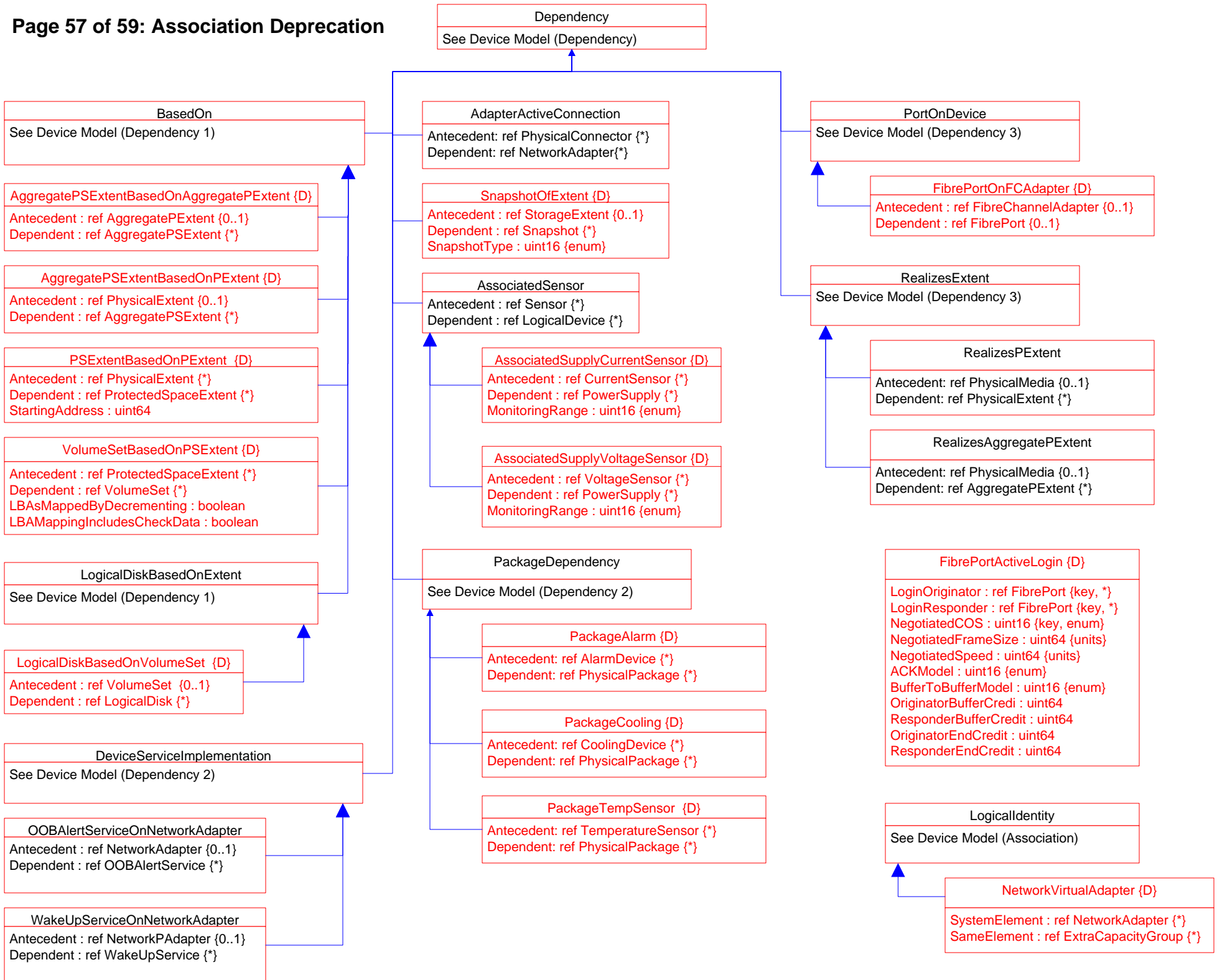
# Page 55 of 59: Association Hierarchy

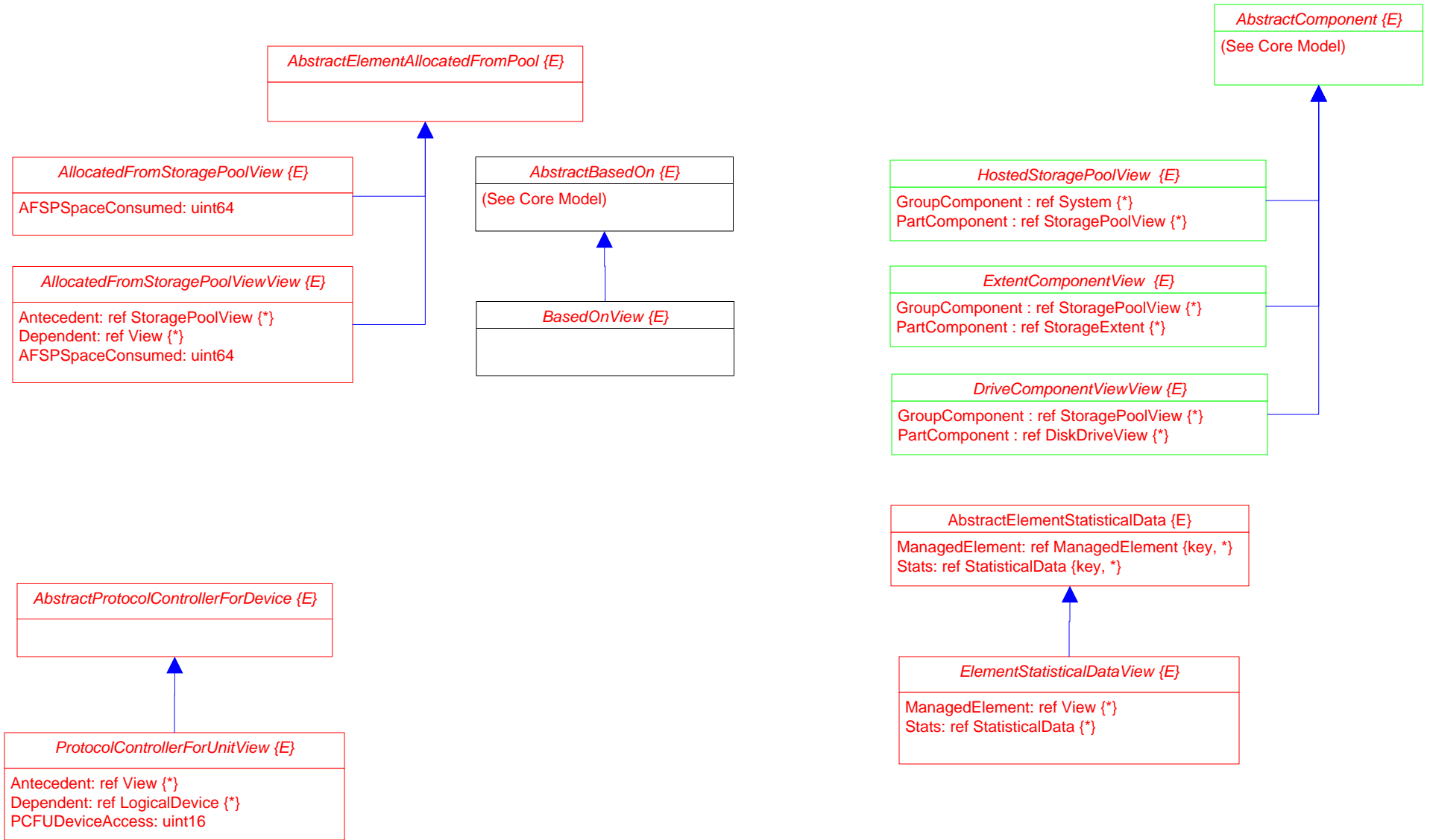






# Page 57 of 59: Association Deprecation





*MaskingMappingExposedDeviceView {E}*

ProtocolEndpoint: ref ProtocolEndpoint {\*}  
LogicalDevice: ref LogicalDevice {\*}  
SPCSystemCreationClassName: string  
SPCSystemName: string  
SPCCreationClassName: string  
SPCDeviceID: string  
PCFUDeviceNumber: string  
PCFUDeviceAccess: uint16

*MaskingMapView {E}*

StorageHardwareID: ref StorageHardwareID{\*}  
LogicalDevice: ref LogicalDevice {\*}  
ProtocolEndpoint: ref ProtocolEndpoint{\*}  
SHIDStorageID: string  
SHIDIDType: uint16  
LDDeviceID: string  
SPEPSystemCreationClassName: string  
SPEPCreationClassName: string  
SPEPSystemName: string  
SPEPName: string  
SPEPProtocolIFTType:  
SPEPOtherTypeDescription: string  
SPEPConnectionType:  
SPEPRole: uint16  
APIInstanceID: string  
APPPrivilegeGranted:  
APActivities[]: uint16  
APElementName: string  
SPCSystemCreationClassName: string  
SPCCreationClassName: string  
SPCSystemName: string  
SPCDeviceID: string  
PCFUDeviceNumber: string  
PCFUDeviceAccess: uint16