

Title : Device Specification 2.43.0

Filename : CIM_Device.vsd

Author : DMTF Core Schema WG

Date : 12 Dec 2014

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 24,25,26,27,28 – Storage Services 1,2,3

Page 29 – Storage Tiers 1

Page 30 – Storage Tiers 2

Page 31 – Storage Protection

Page 32 – Storage Groups

Page 33 - 38 – Storage Capabilities 1 - 5

Page 39 – Storage Settings

Page 40,41 – Storage Statistics 1,2

Page 42 – Storage Library

Page 43,44 – Storage Views 1,2

Page 45 – User Devices (Keyboards, Mouse)

Page 46 – Displays

Page 47 – Memory

Page 48 – Modems

Page 49,50,51 – Printing 1,2,3

Page 52 – Sensors & Alarm

Page 53 – 7 USB

Page 54 – Disk Group

Page 55 – Device Sharing

Page 56 – LED

Page 57 – WiFi Services

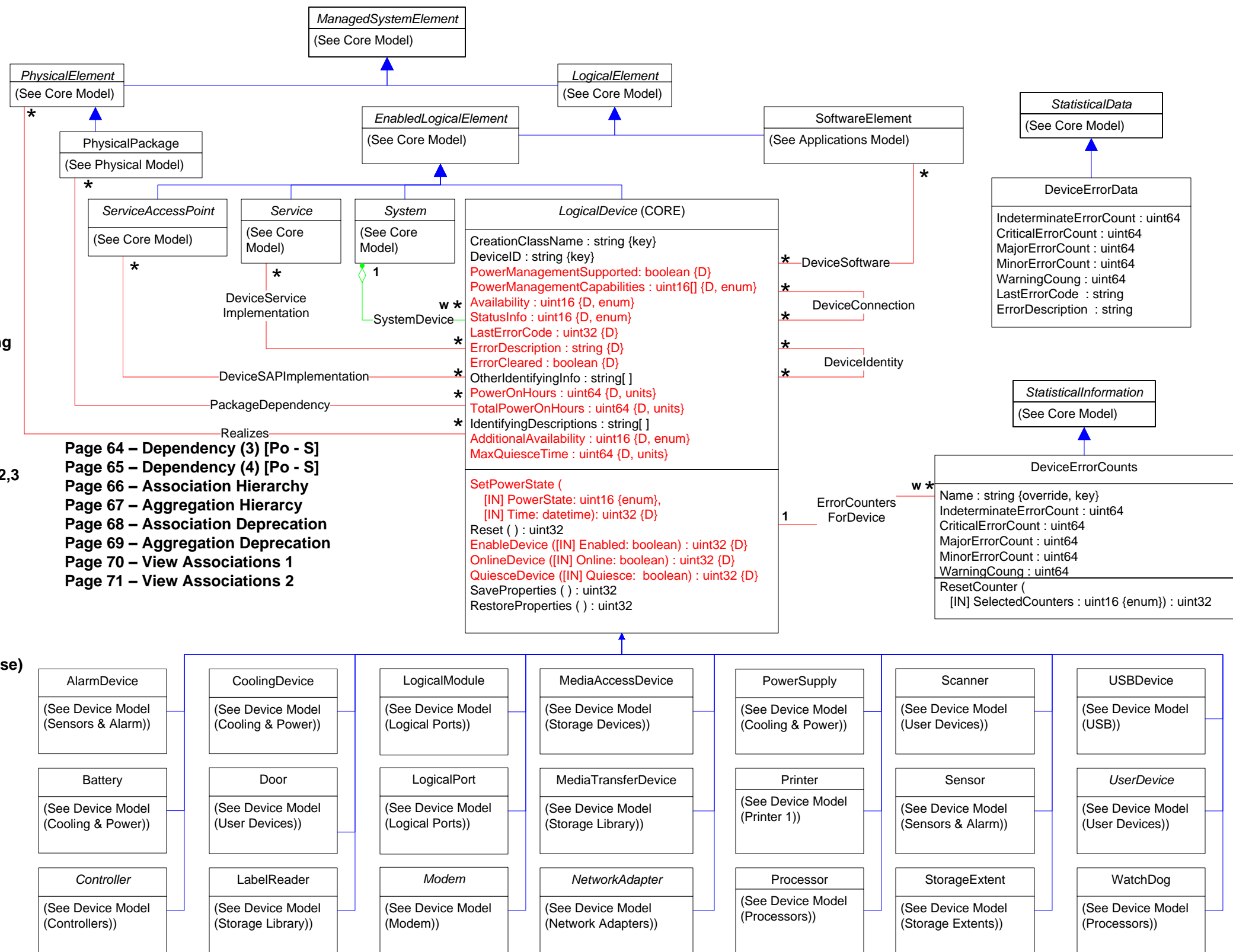
Page 58,59 – VTL 1,2

Page 60, Partition Library, Tape Copy

Page 61 – Operational Power







Page 62 – Dependency (1) [A - Ba]

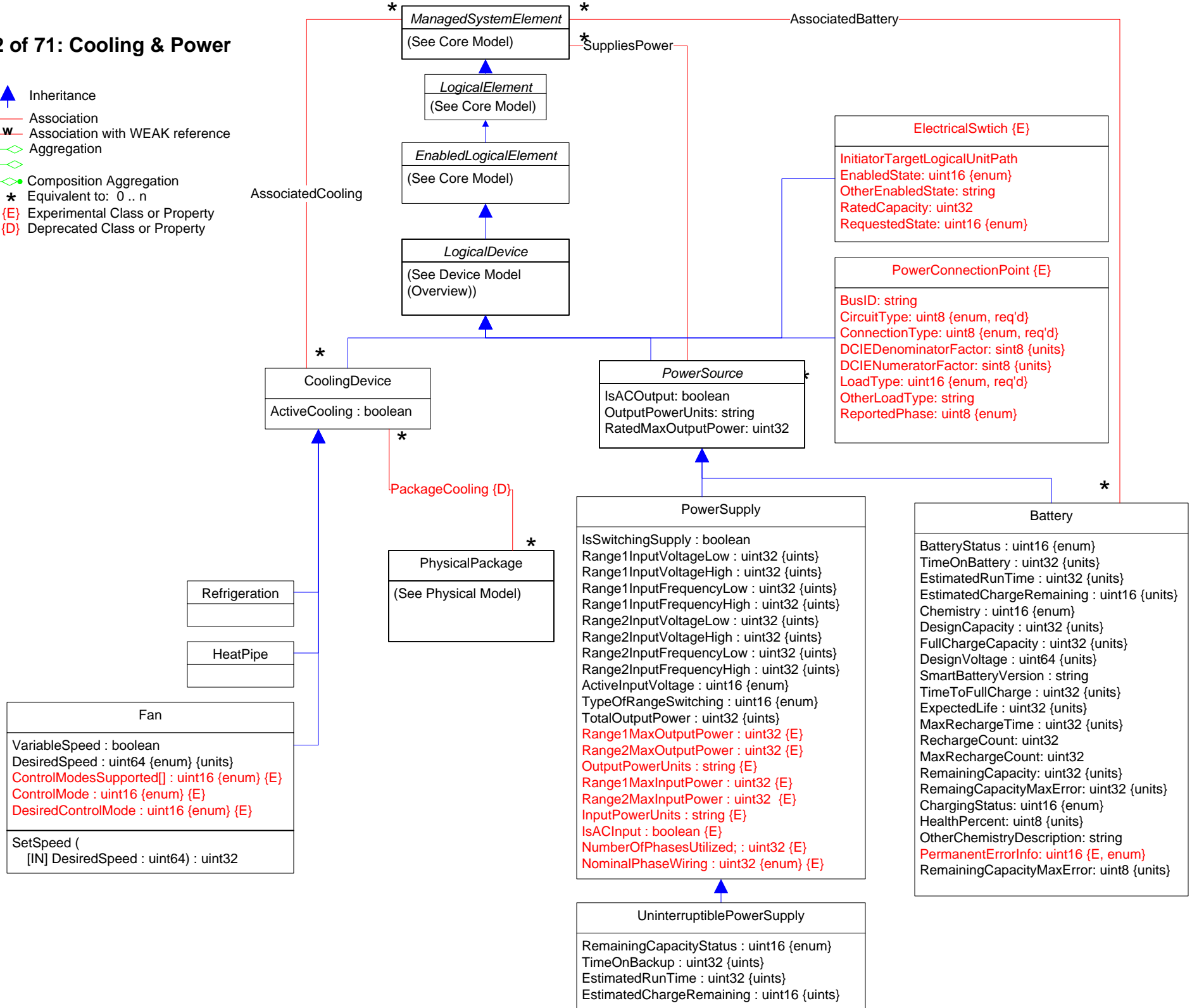
Page 63 – Dependency (2) [D - Pi]

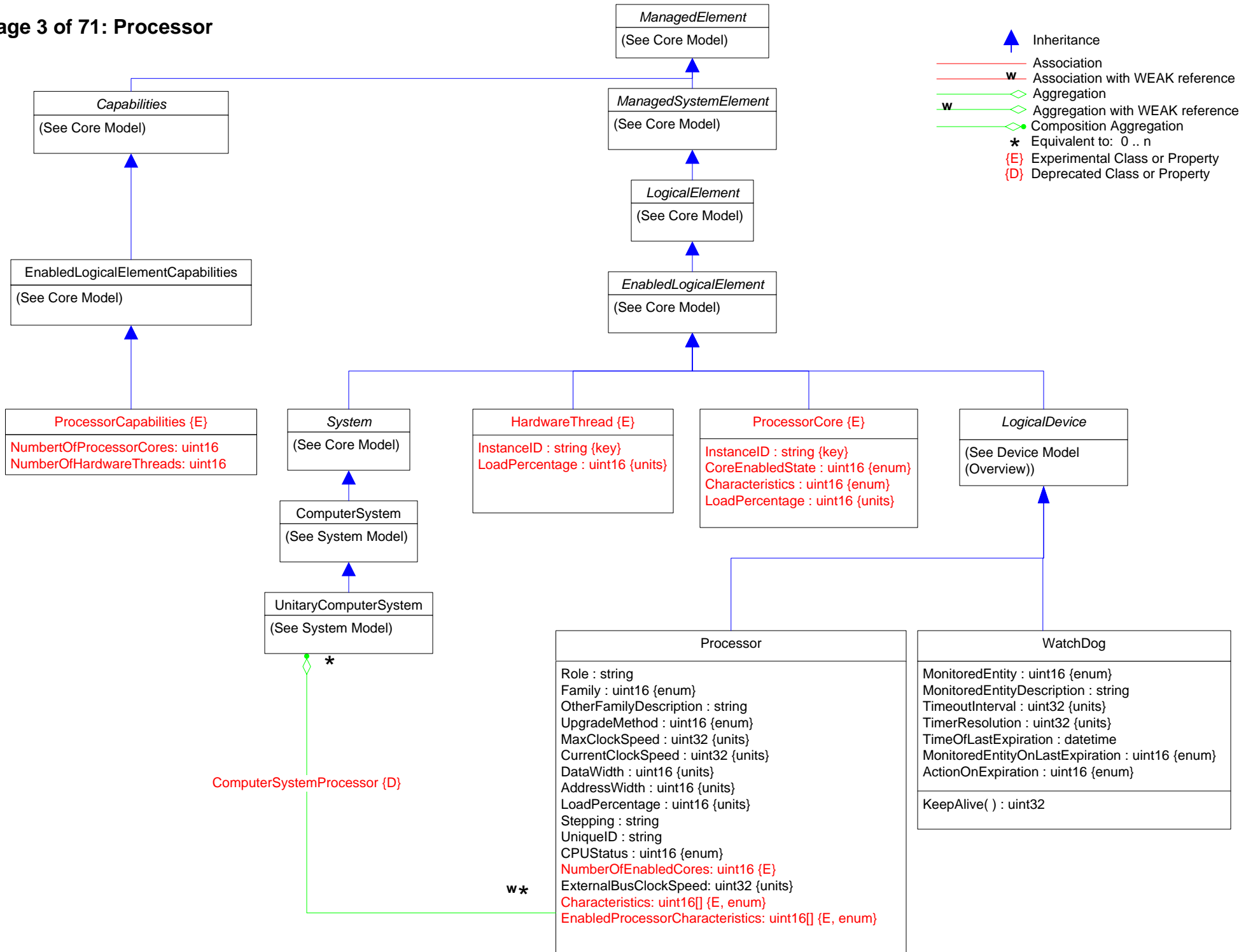


- Page 64 – Dependency (3) [Po - S]
- Page 65 – Dependency (4) [Po - S]
- Page 66 – Association Hierarchy
- Page 67 – Aggregation Hierarchy
- Page 68 – Association Deprecation
- Page 69 – Aggregation Deprecation
- Page 70 – View Associations 1
- Page 71 – View Associations 2










Page 2 of 71: Cooling & Power

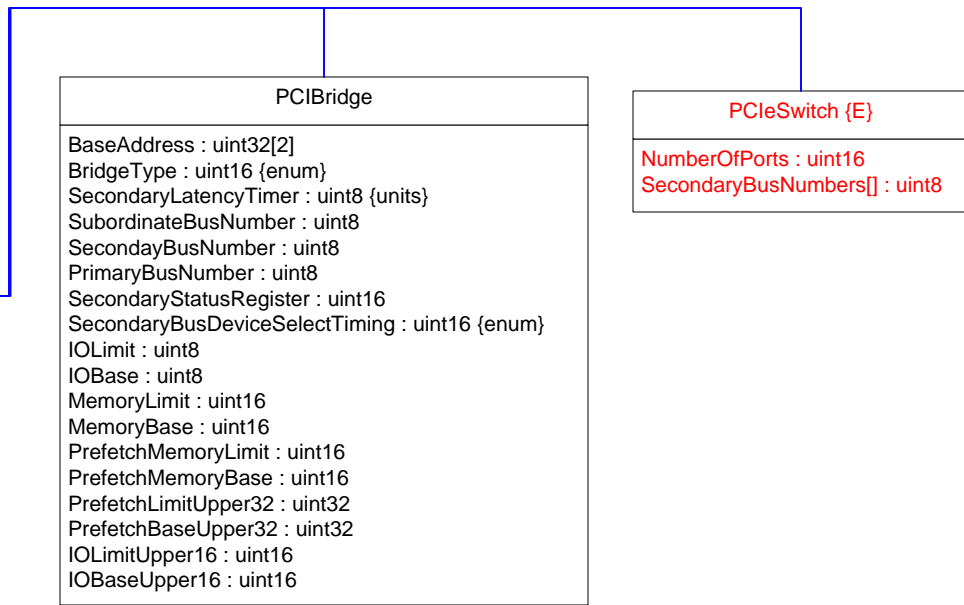
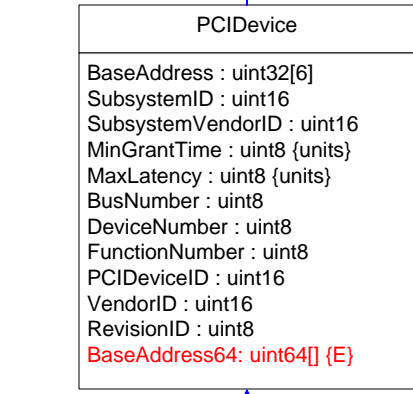
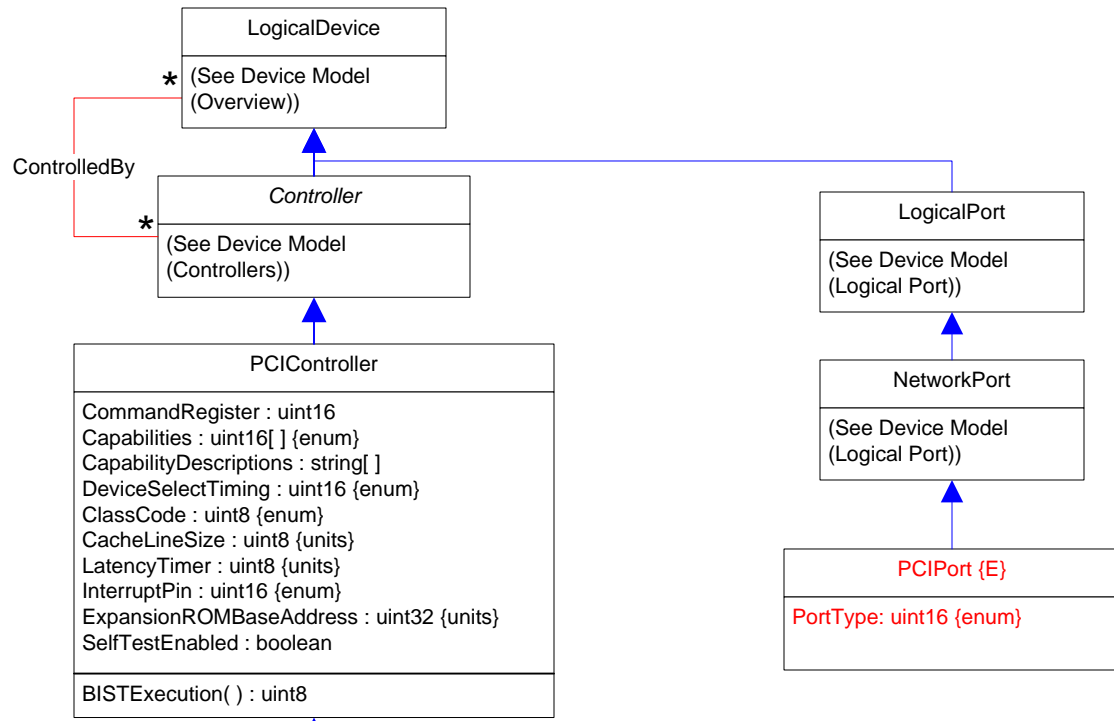
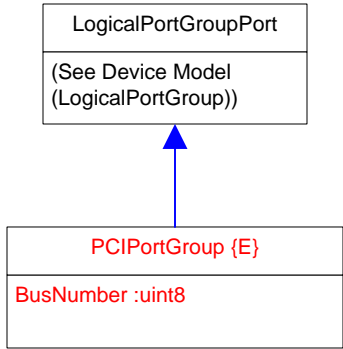
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Composition Aggregation
-  Equivalent to: 0..n
- (E) Experimental Class or Property
- (D) Deprecated Class or Property

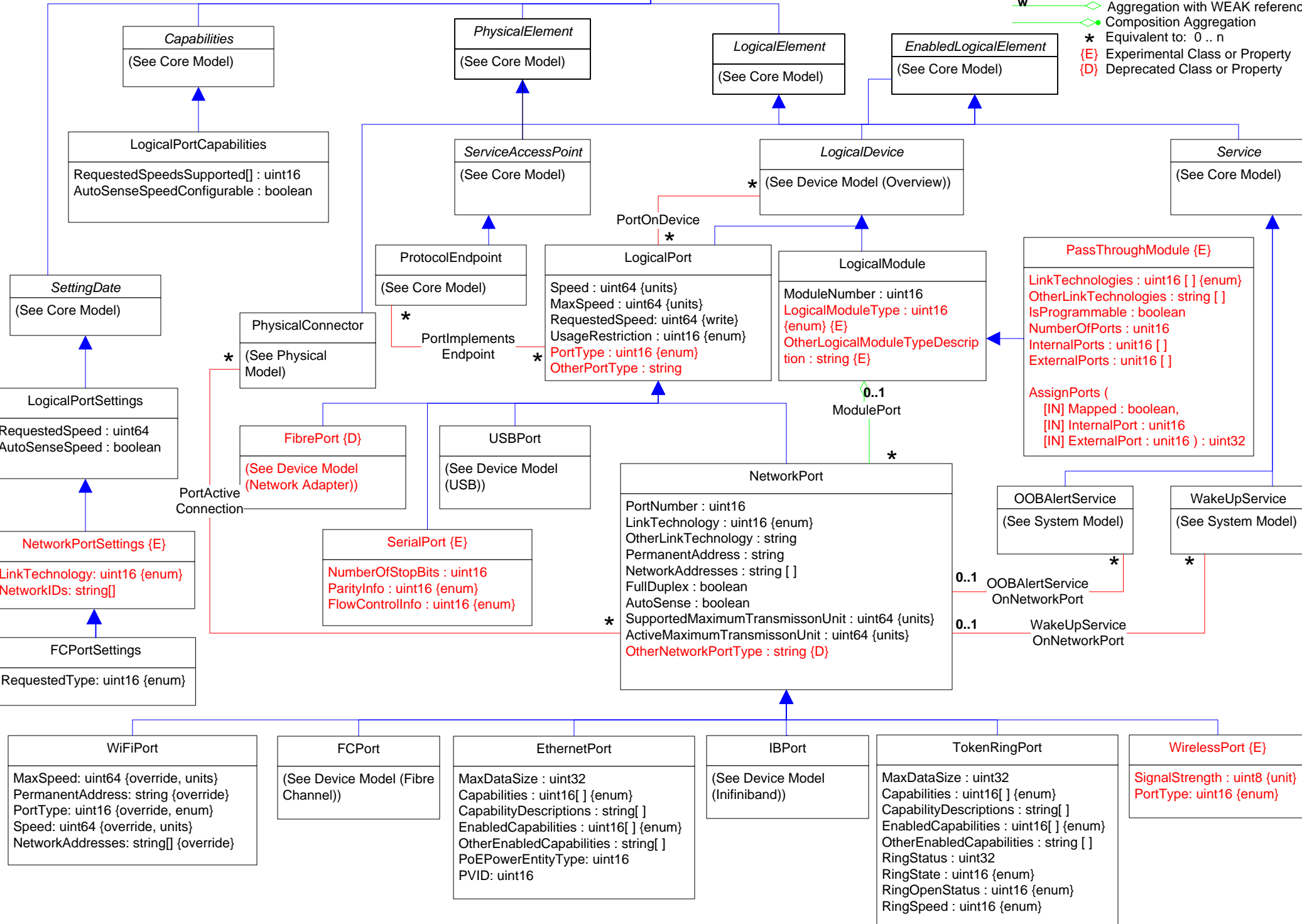
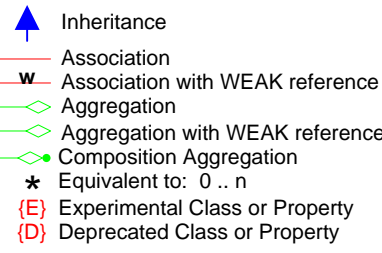
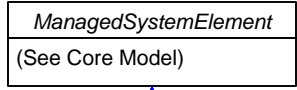




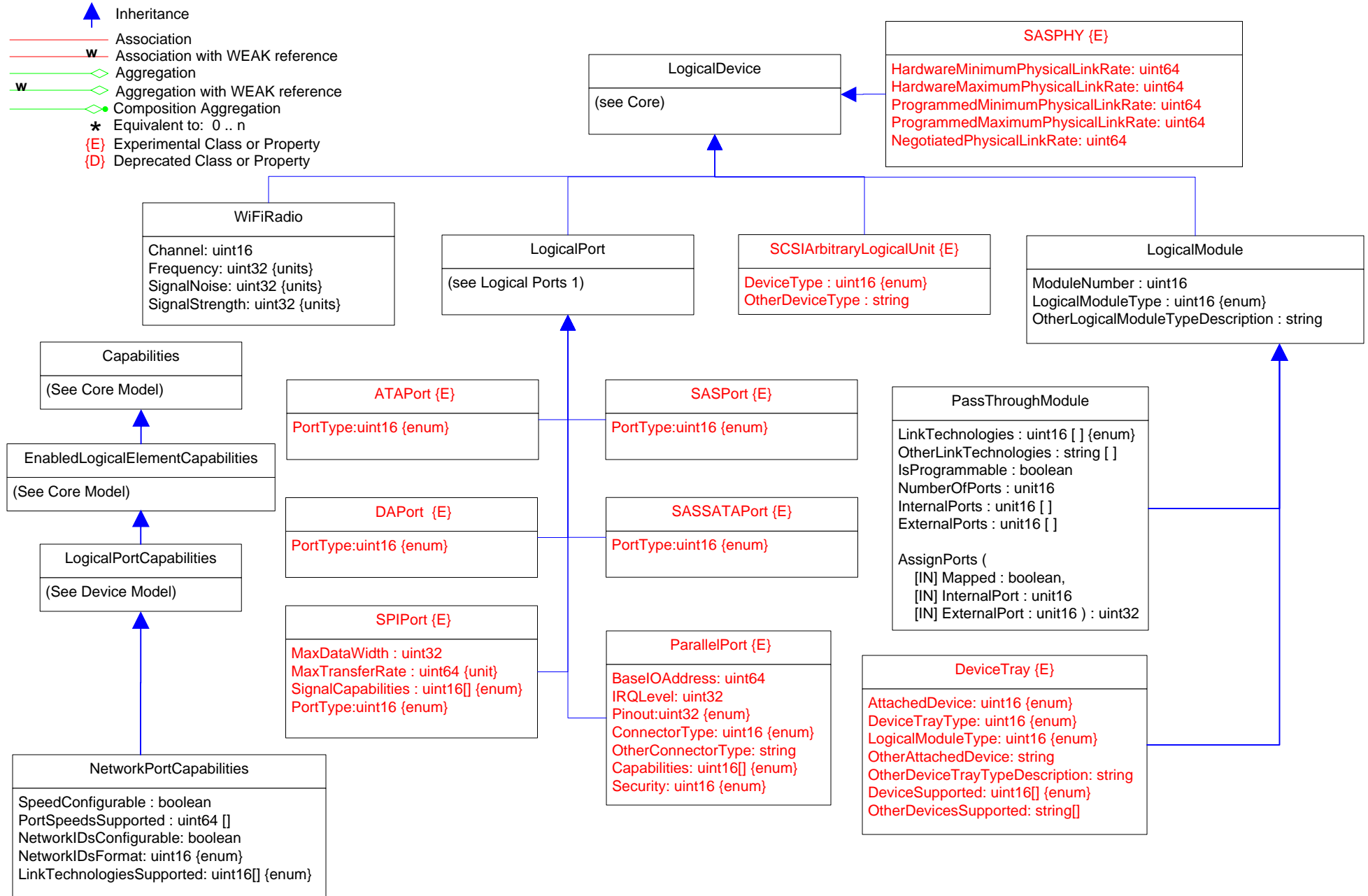
Page 6 of 71: PCI Controllers










-  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

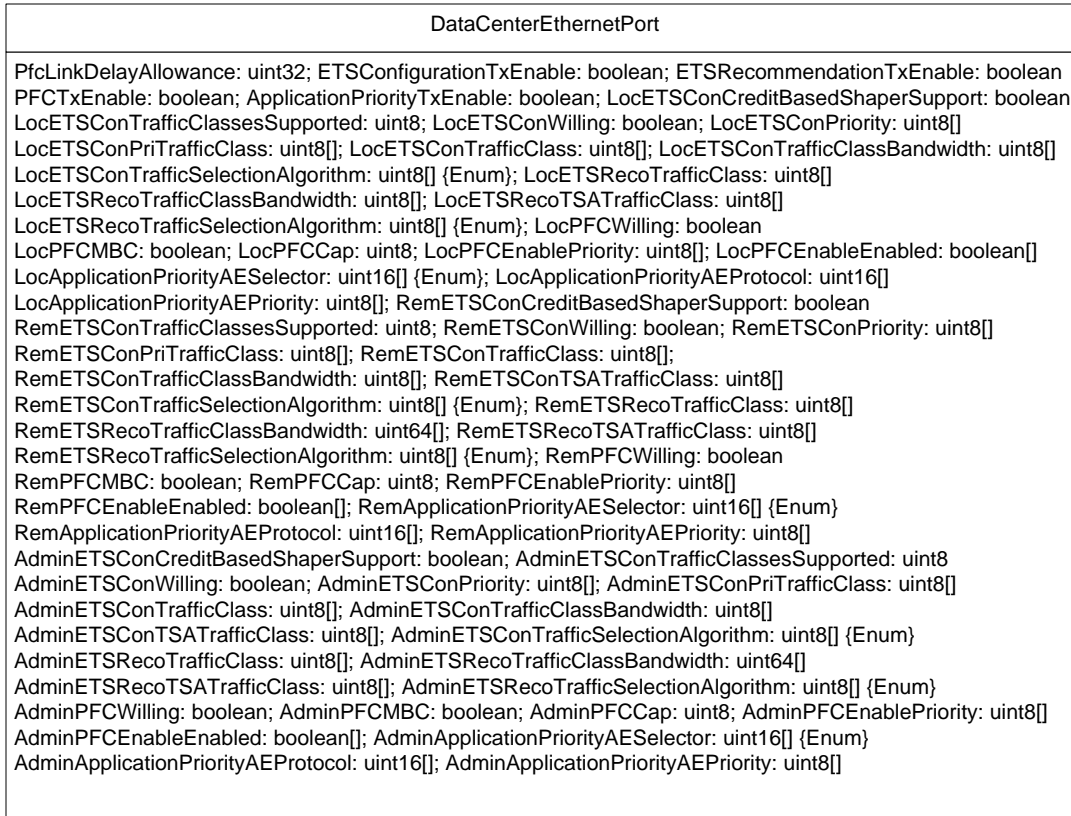
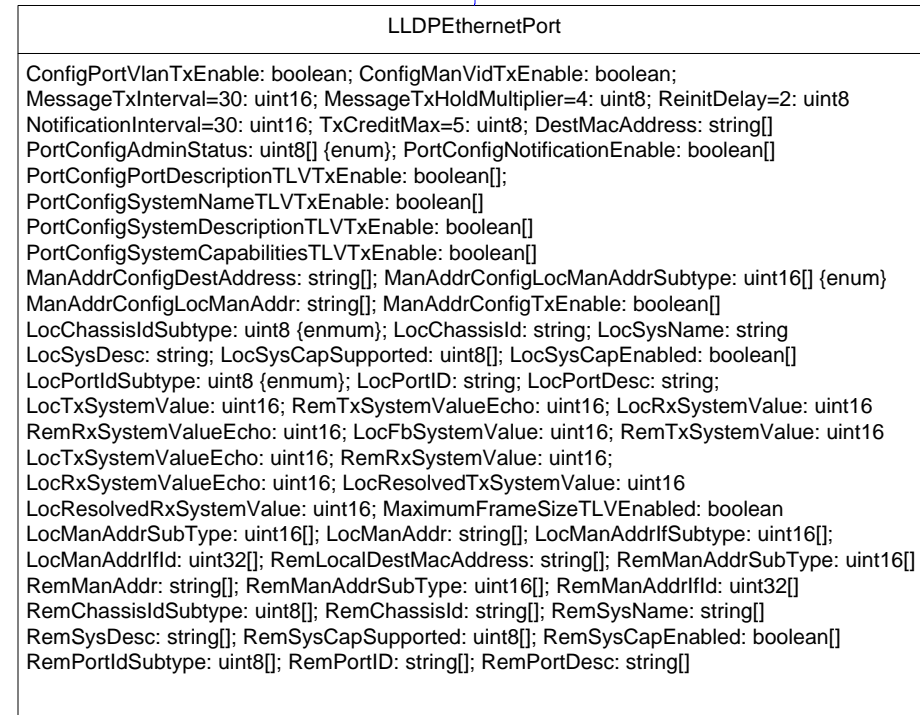
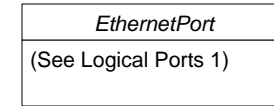


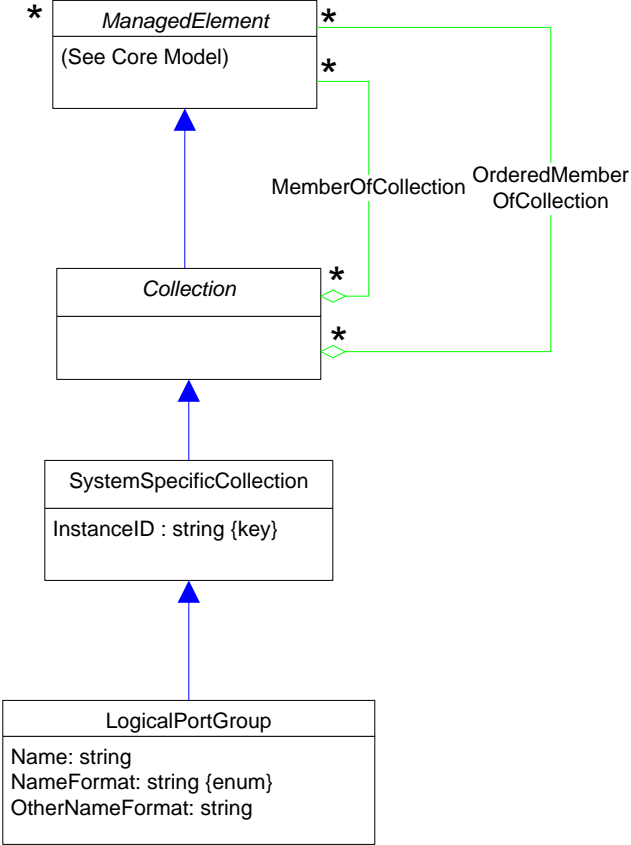


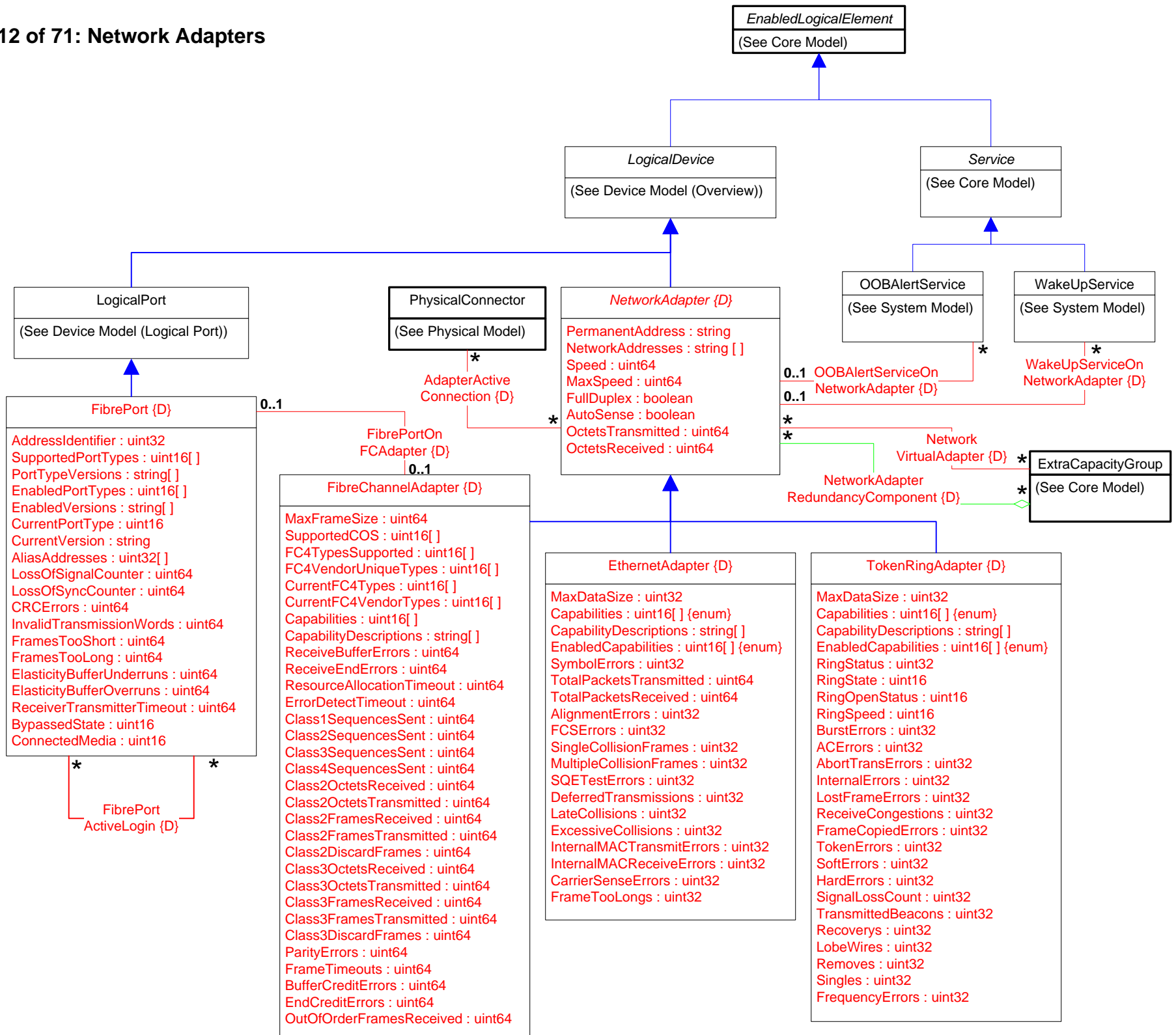
Page 8 of 71: Logical Ports 2

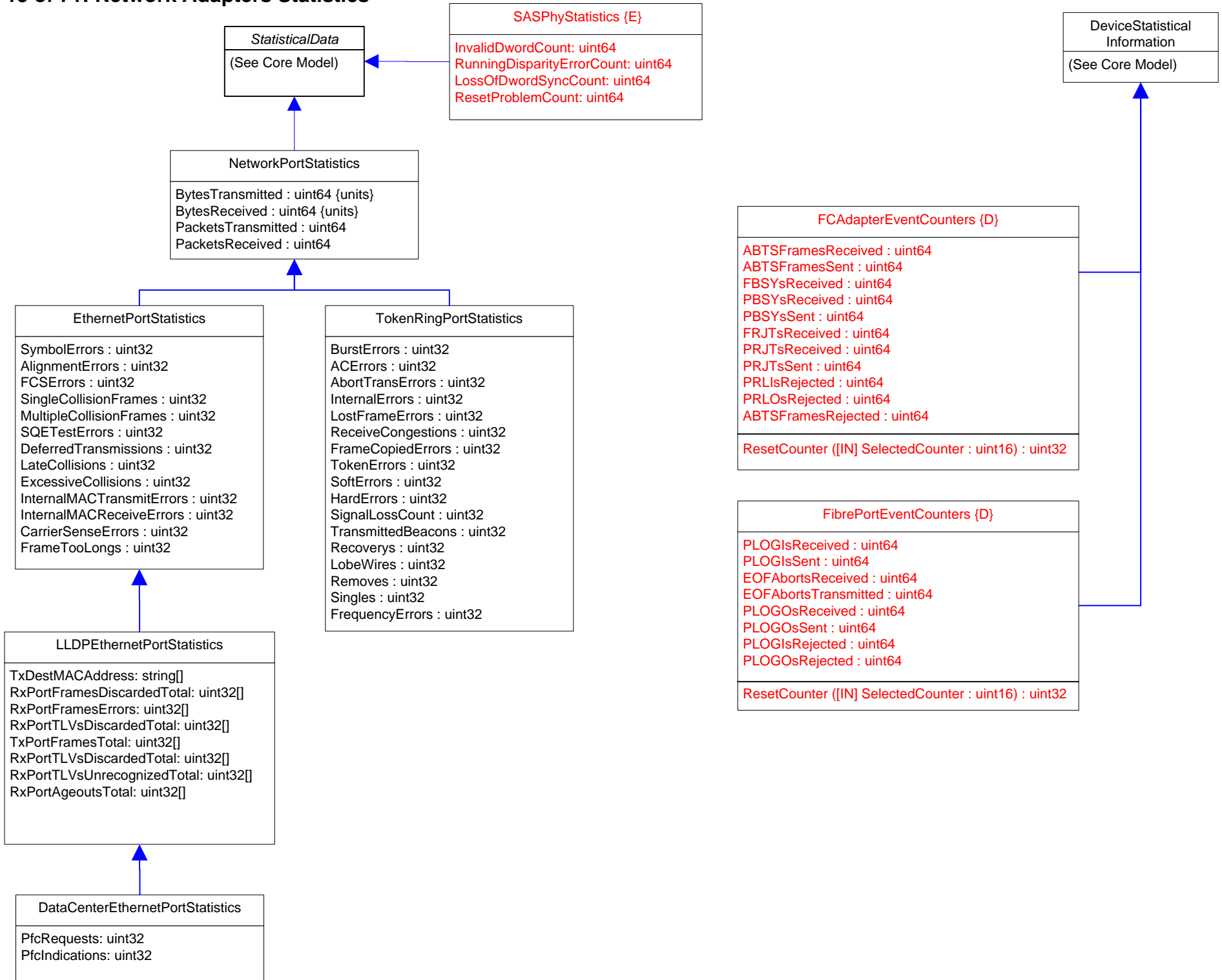











-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

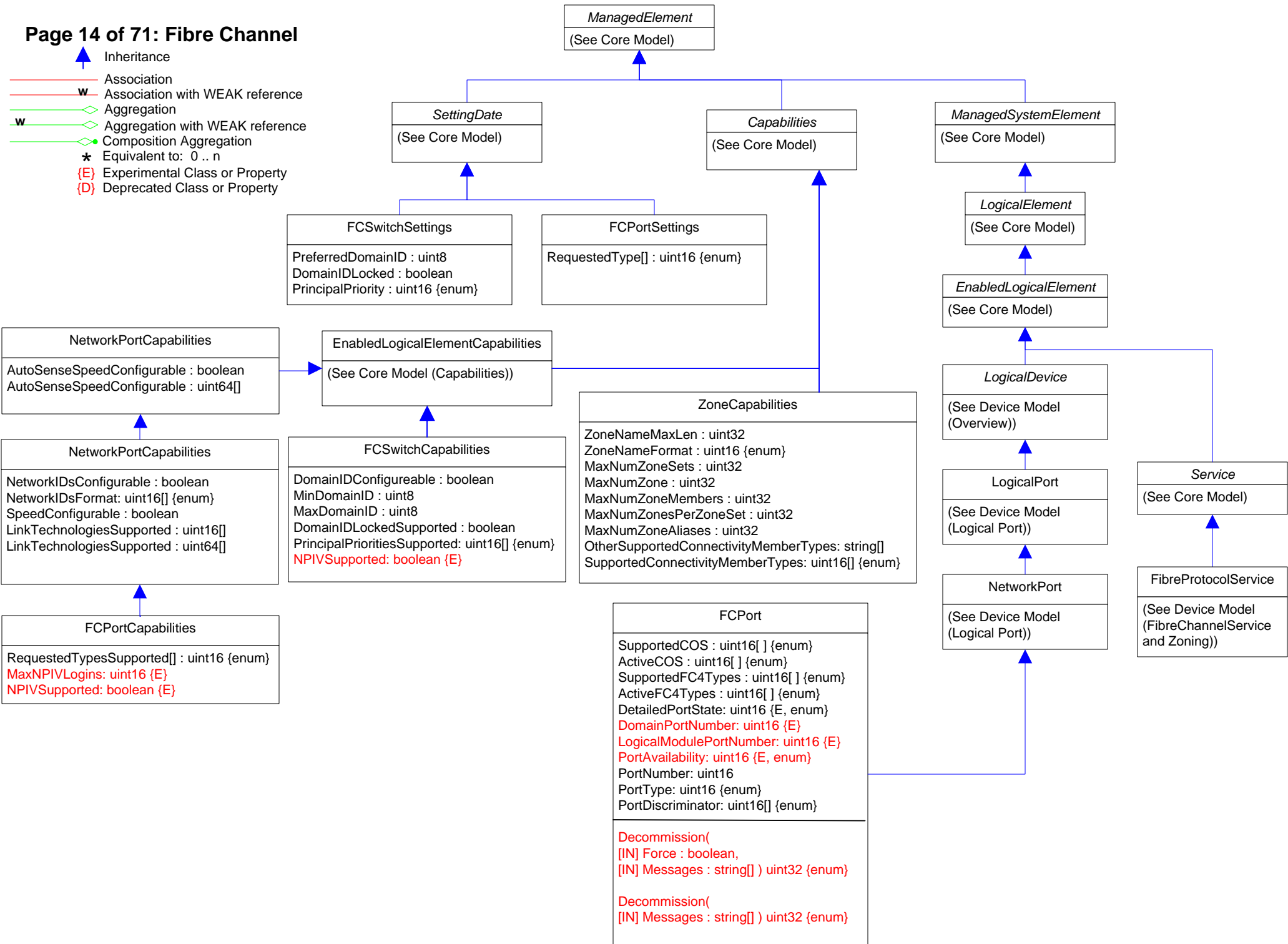


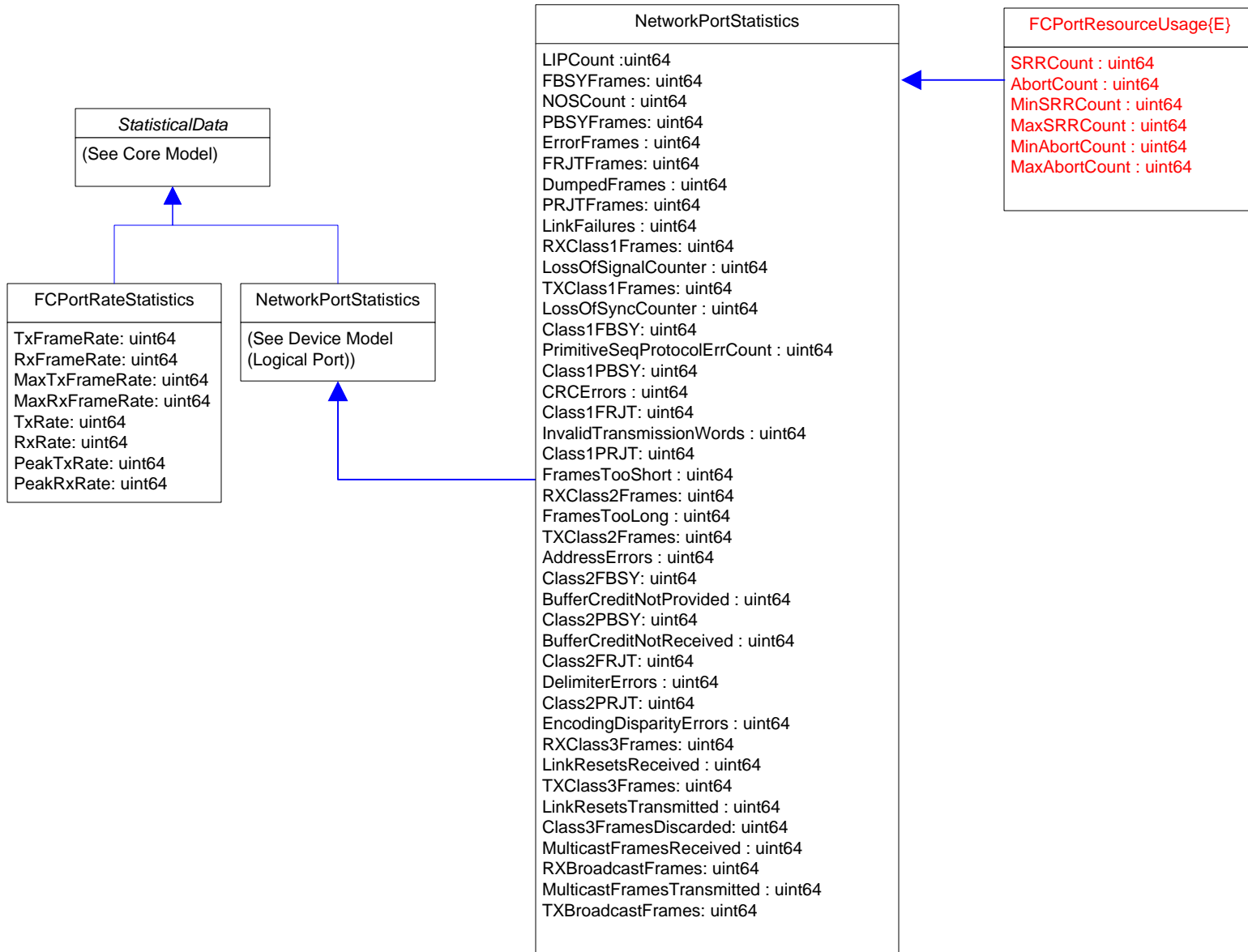













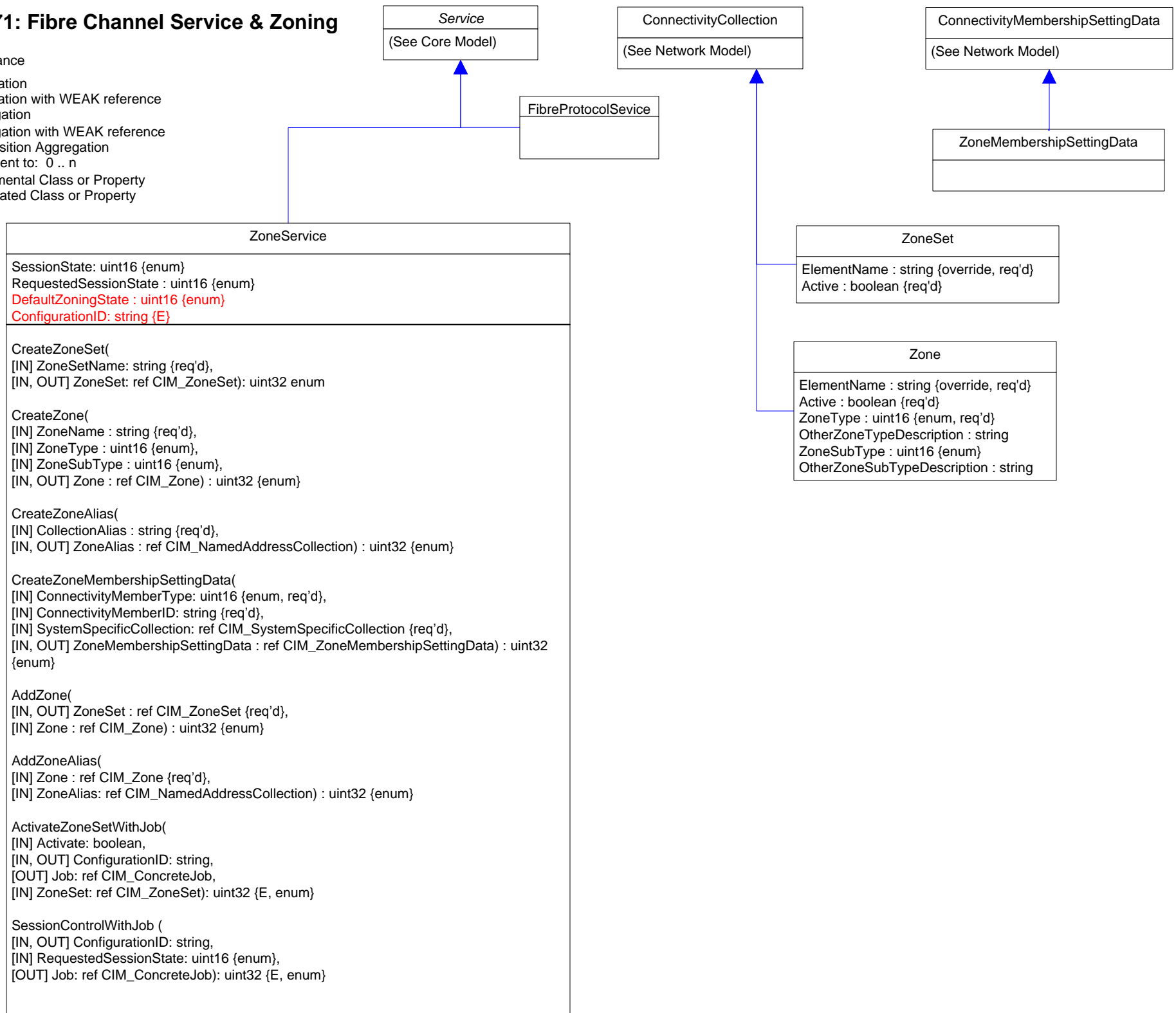











-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

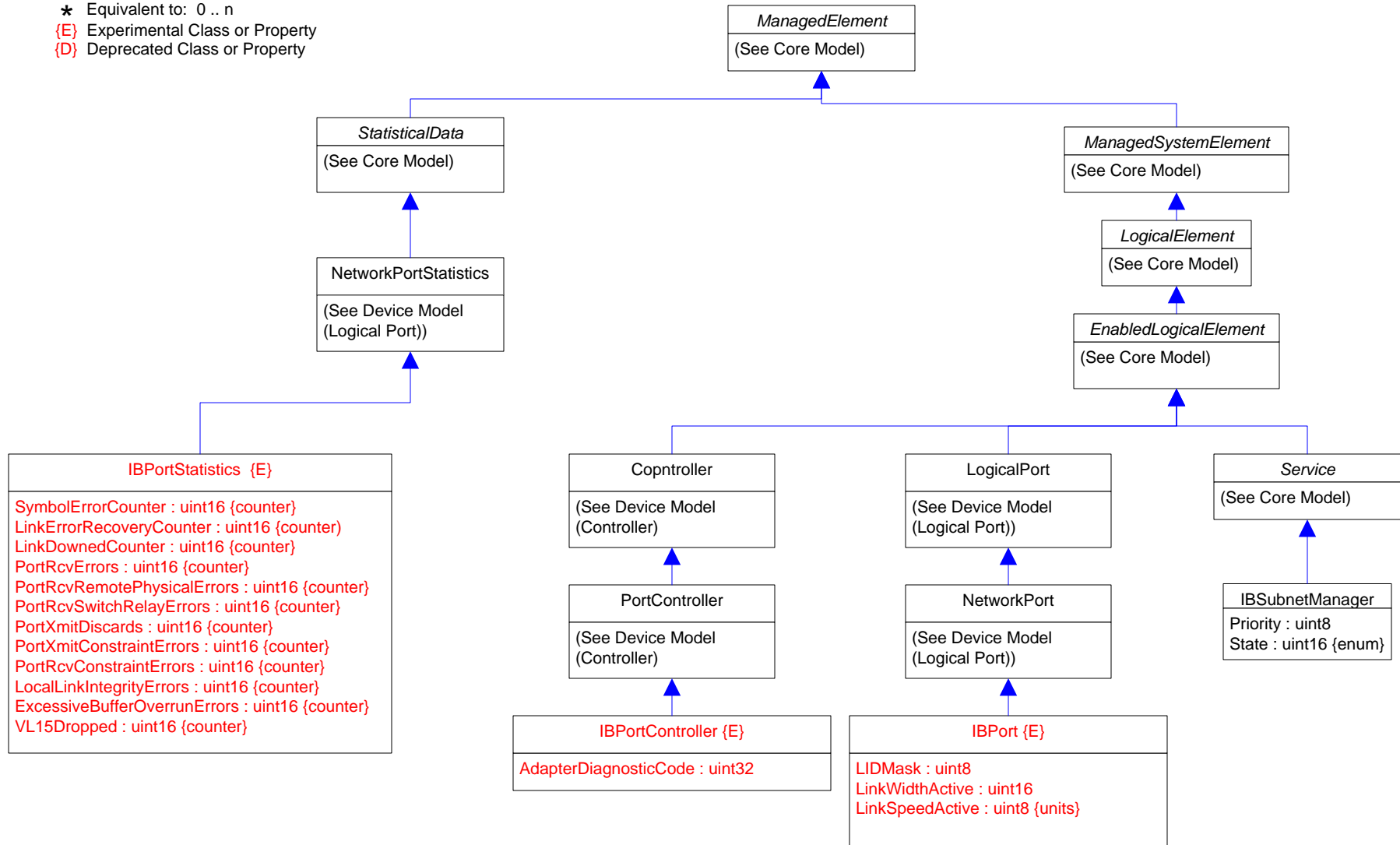













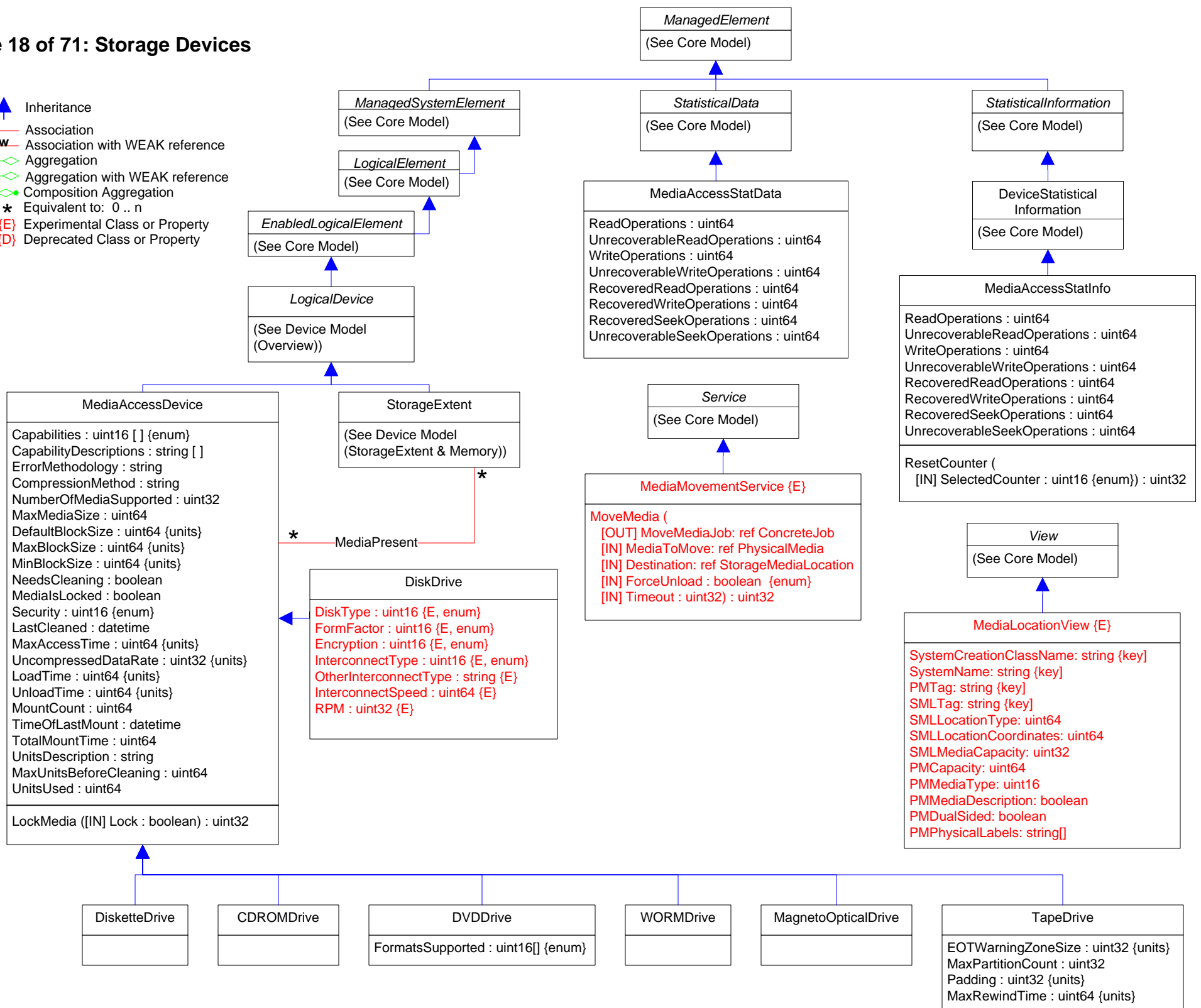
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property




-  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 71: 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

SystemSpecificCollection
(See Core Model)

SCSITargetPortGroup

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

Service
(See Core Model)

SCSIPathConfigurationService

SetTPGAccess (
 [IN] LogicalUnit : ref LogicalDevice
 [IN] TargetPortGroups : ref SCSITargetPortGroup []
 [IN] AccessStates {enum}
) : uint32 {enum}
 SetLoadBalanceAlgorithm (
 [IN] LogicalDevice : 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}

Capabilities
(See Core Model)

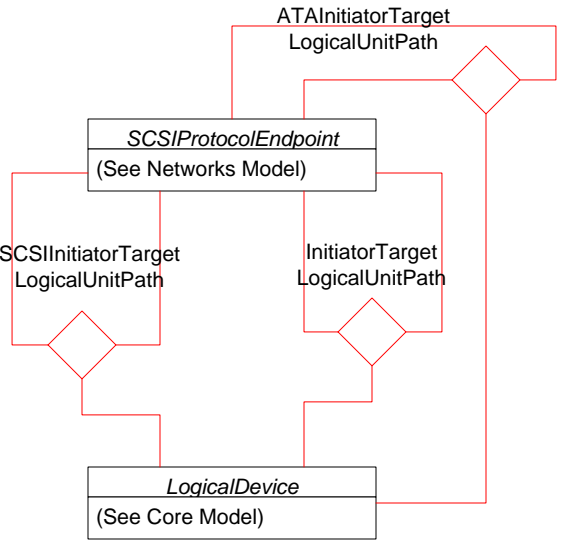
SCSIMultipathConfigurationCapabilities










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}

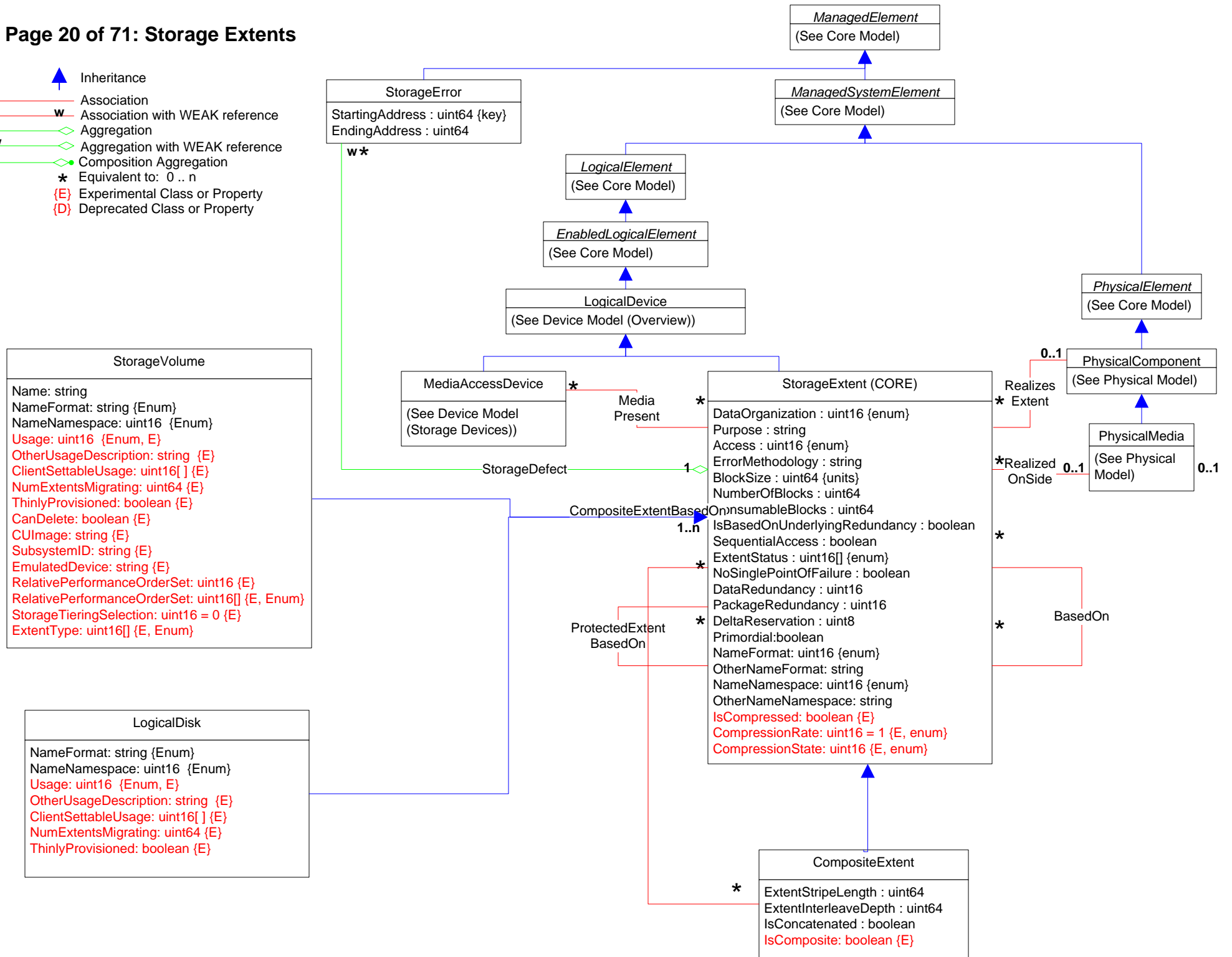
SettingData
(See Core Model)

SCSIMultipathSettings










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

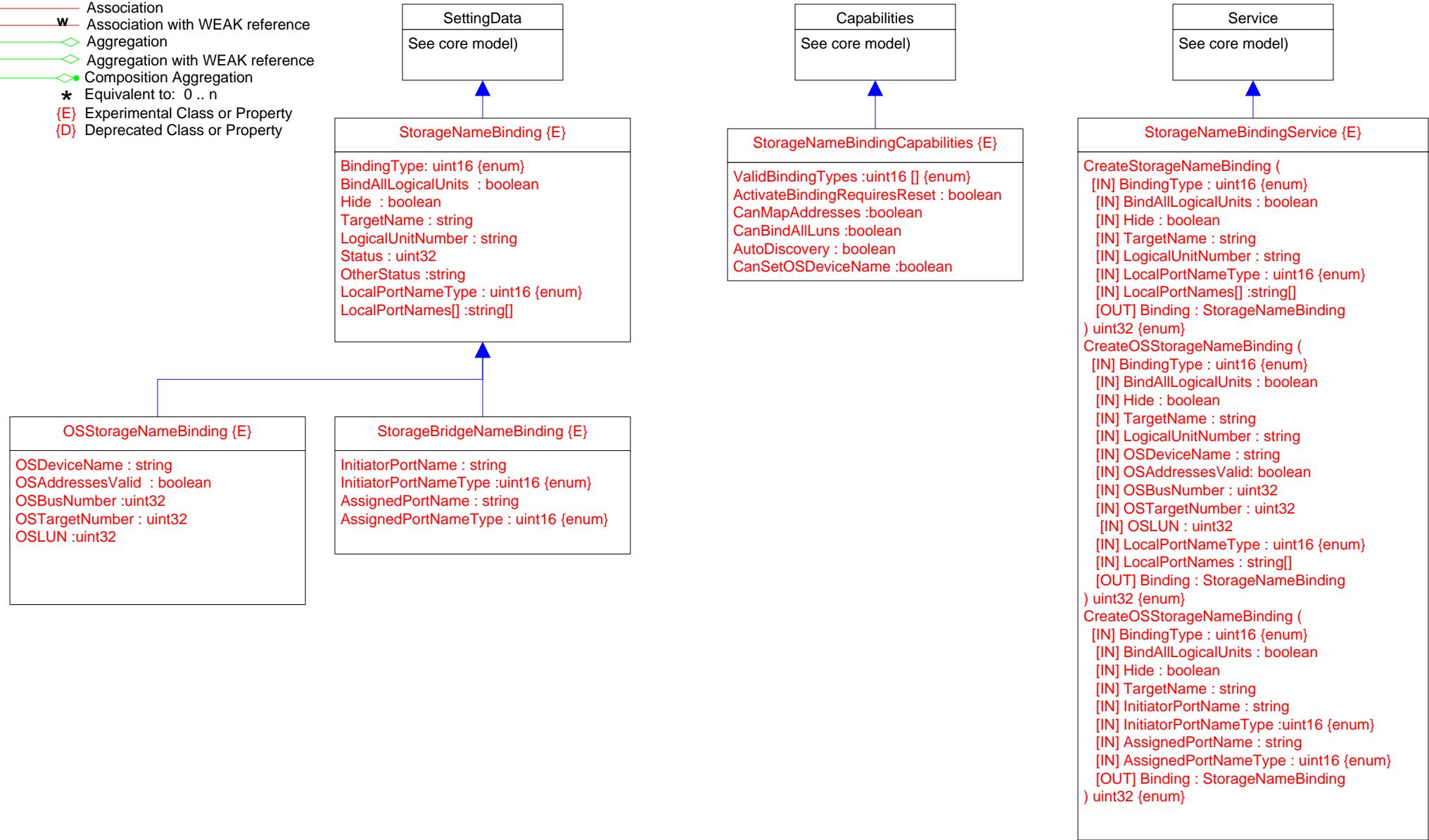


-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property



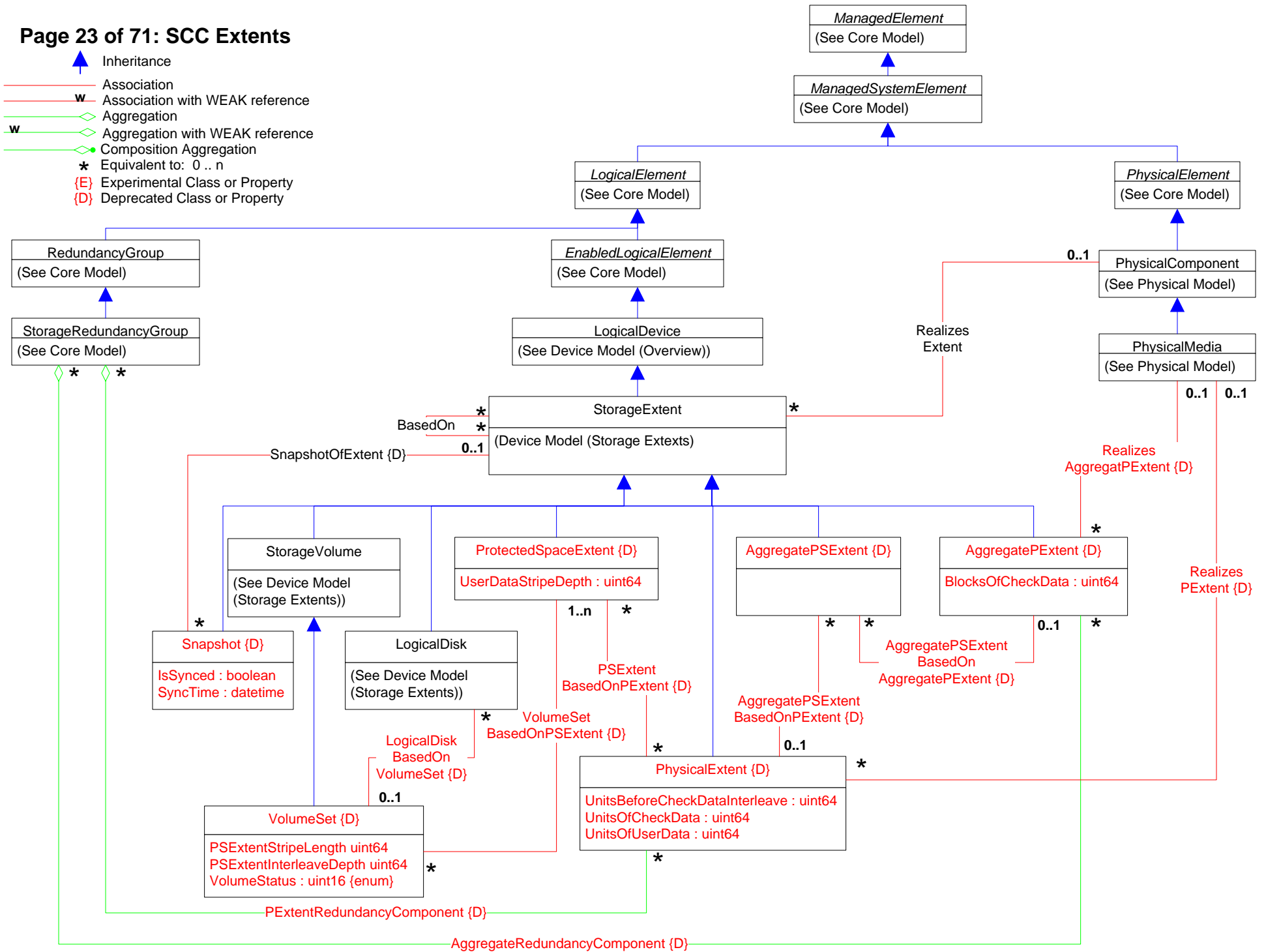
Page 22 of 71: StorageNameBinding

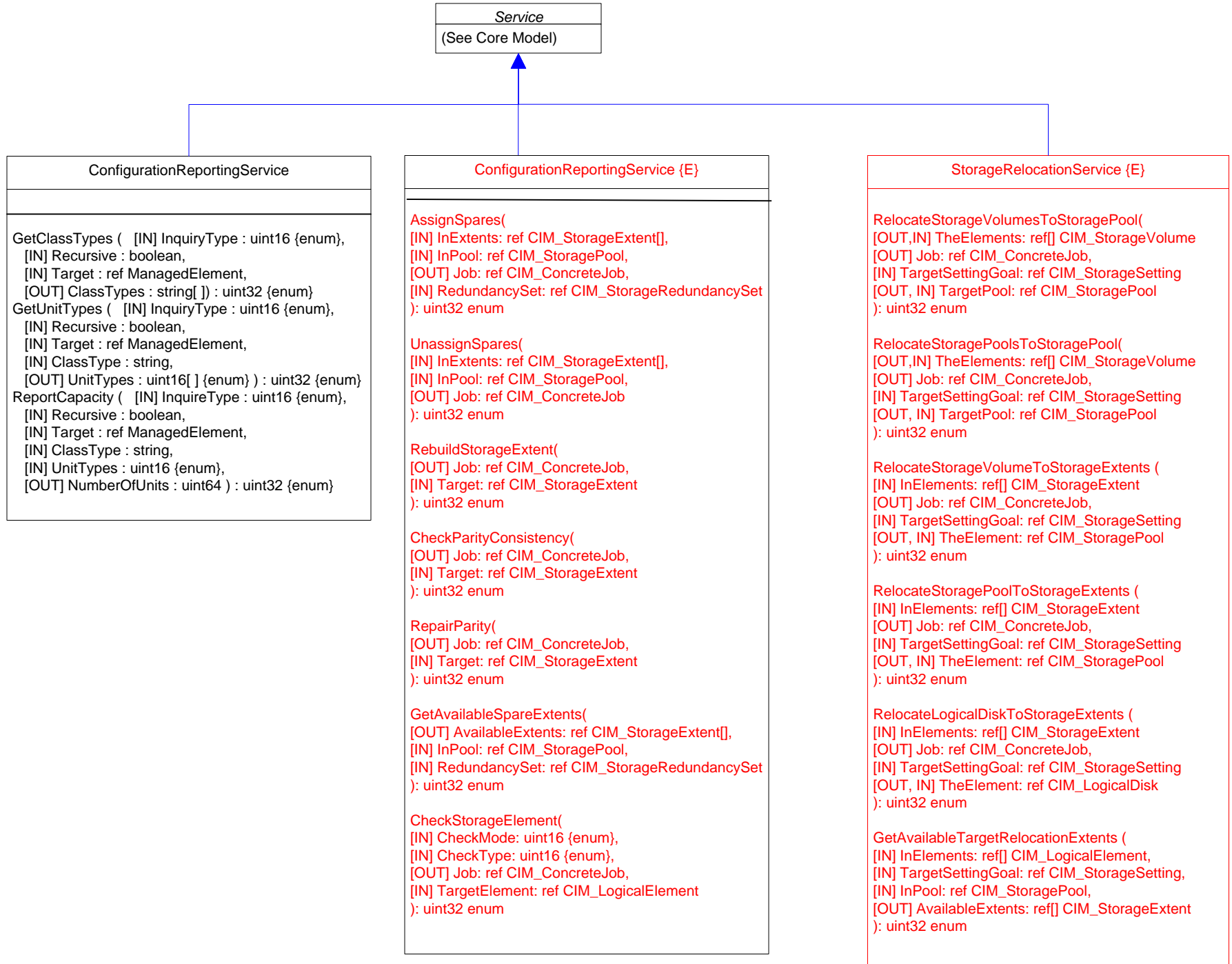
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  Experimental Class or Property
-  Deprecated Class or Property

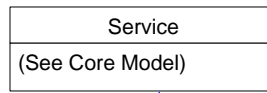


Page 23 of 71: SCC Extents

- ▲ 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





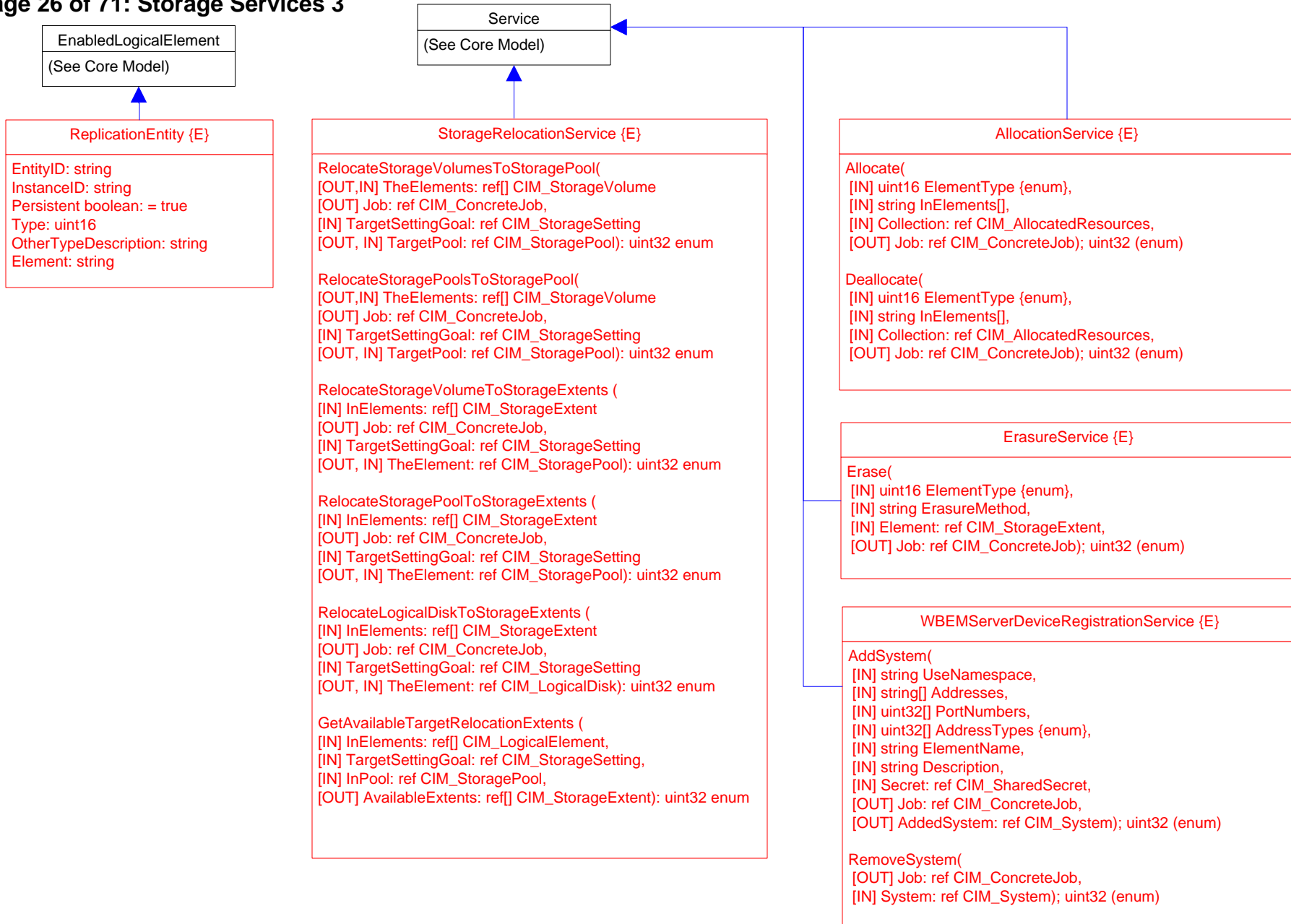


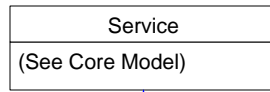
StorageConfigurationService {E}

```

CreateOrModifyStoragePool(
  [IN] string ElementName, [OUT] CIM_ConcreteJob ref Job, [IN] CIM_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: 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_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)

```





ReplicationService {E}

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_ServiceAccessPoint): uint32 enum

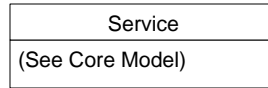
GetReplicationRelationships([IN] Type: uint16 (enum),[IN] SyncType: uint16 (enum),[IN] Mode: uint16 (enum),[IN] Locality: uint16 (enum),[IN] CopyState: uint16 (enum),[OUT] Job: ref CIM_ConcreteJob,[OUT] Synchronizations: ref[] CIM_Synchronized, [IN] ReplicationSettingData: string): uint32 enum

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 {E} (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_ReplicationGroup [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] TargetPools: 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] RelationshipName: 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

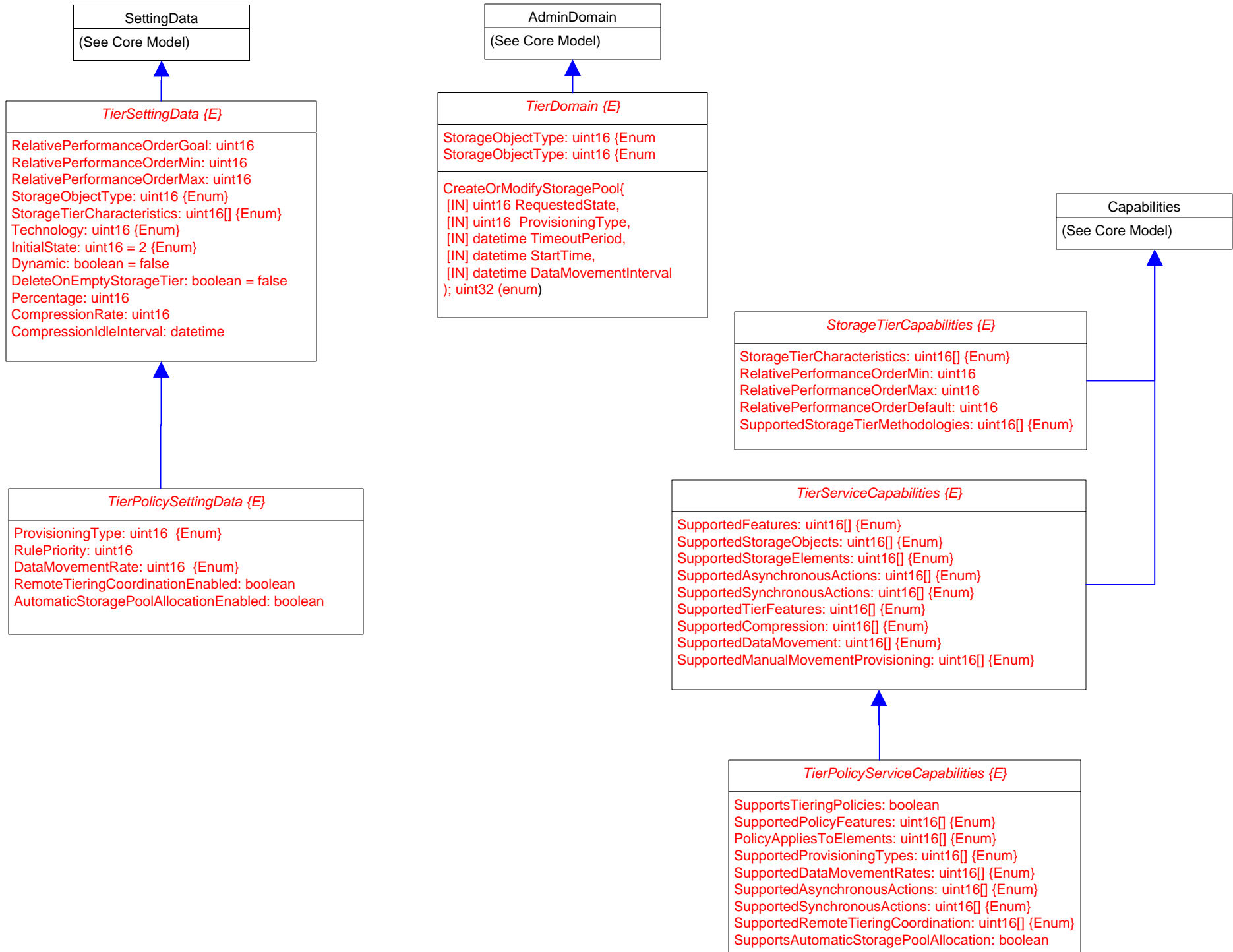
GetSynchronizationAspects([IN] SyncType: uint16, [IN] Mode: uint16, [IN] Locality: uint16, [IN] SyncState: uint16, [OUT] Job: ref CIM_ConcreteJob, [IN] CachedData: boolean, [IN] ReplicationSettingData: string, [OUT] SynchronizationAspects: ref[] CIM_SynchronizationAspect,): uint32 enum

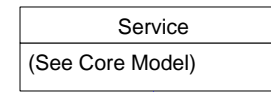
GetSynchronizationAspectInstances([IN] SyncType: uint16, [IN] Mode: uint16, [IN] Locality: uint16, [IN] SyncState: uint16, [OUT] Job: ref CIM_ConcreteJob, [IN] CachedData: boolean, [IN] ReplicationSettingData: string, [OUT] SynchronizationAspects: string,): uint32 enum

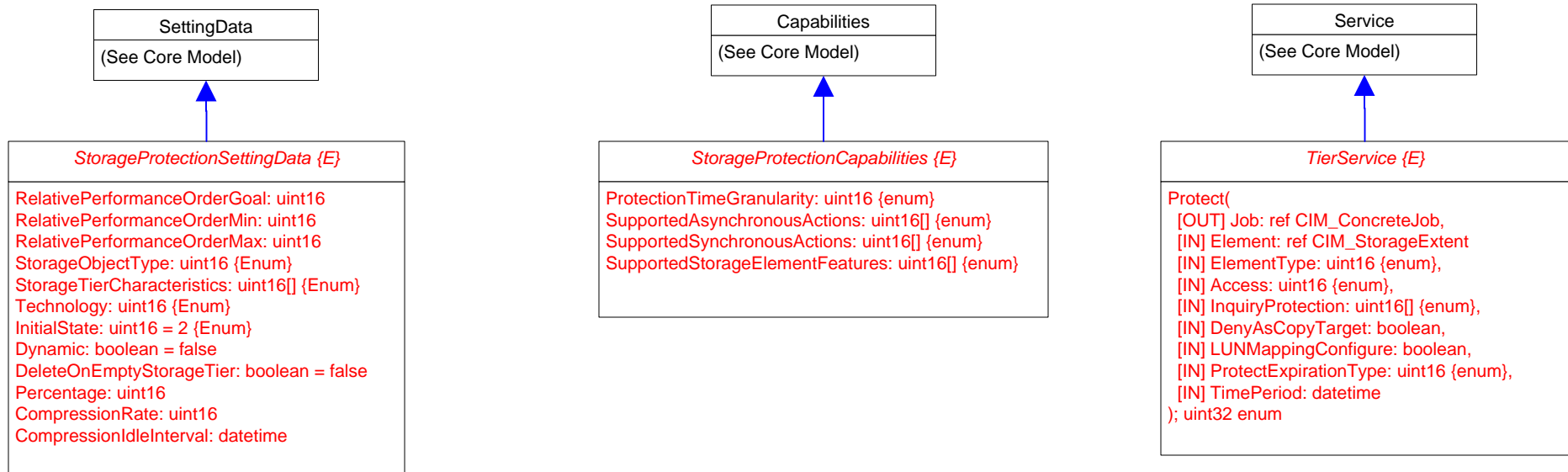
CreateGroupReplicaFromElementSynchronizations([IN] Synchronized ref CIM_Synchronized, [IN] SourceElements ref[] CIM_LogicalElement, [IN] TargetElements ref[] CIM_LogicalElement, [IN] SourceAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetGroupName: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

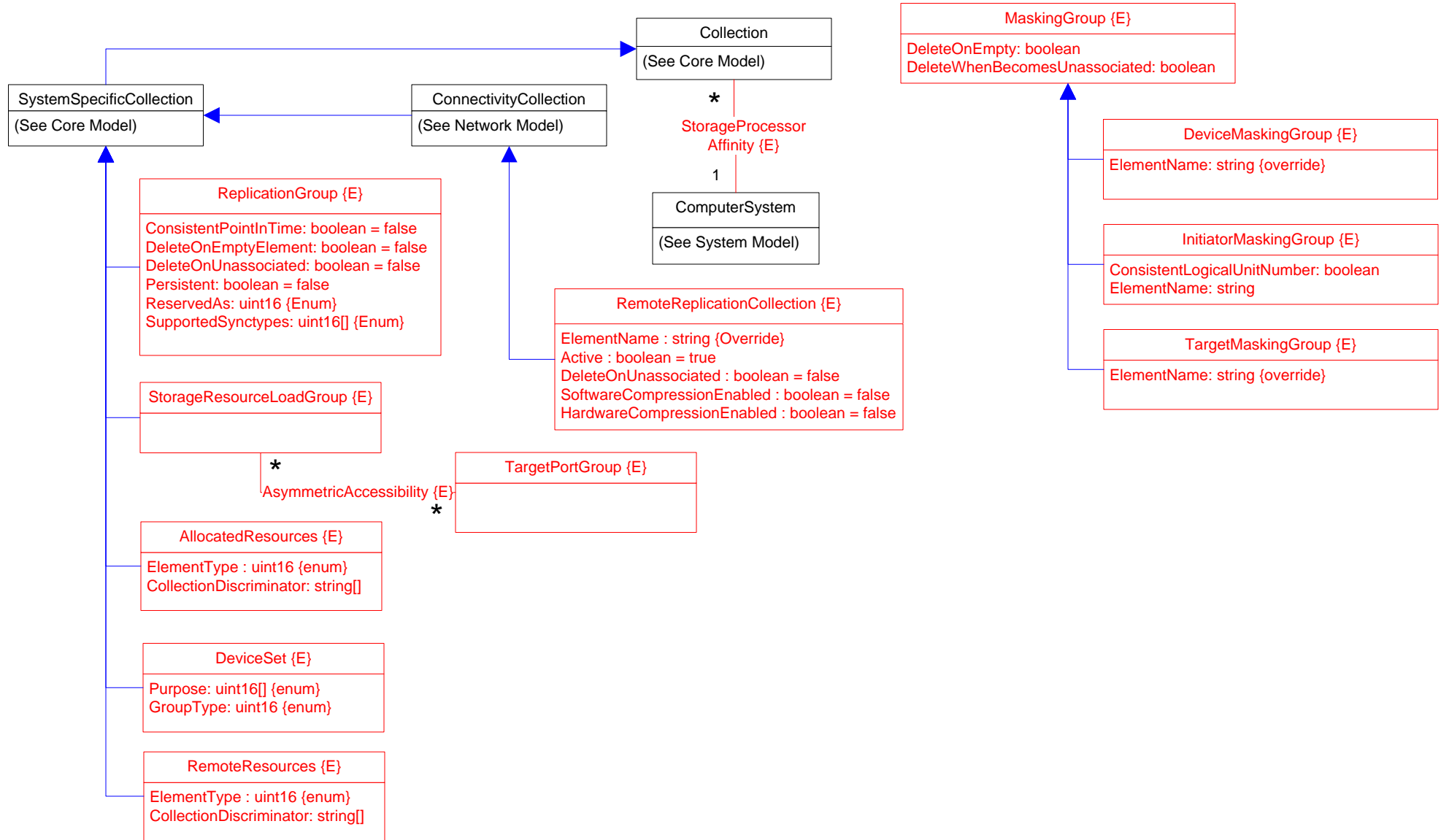
ConfirmTargetData([IN] Synchronized ref CIM_Synchronized, [IN] SourceAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetAccessPoint ref CIM_ServiceAccessPoint, [IN] TargetGroupName: uint16, [IN] ReplicationSettingData: string, [OUT] Job: ref CIM_ConcreteJob, [IN] ConnectivityCollection ref CIM_ConnectivityCollection,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

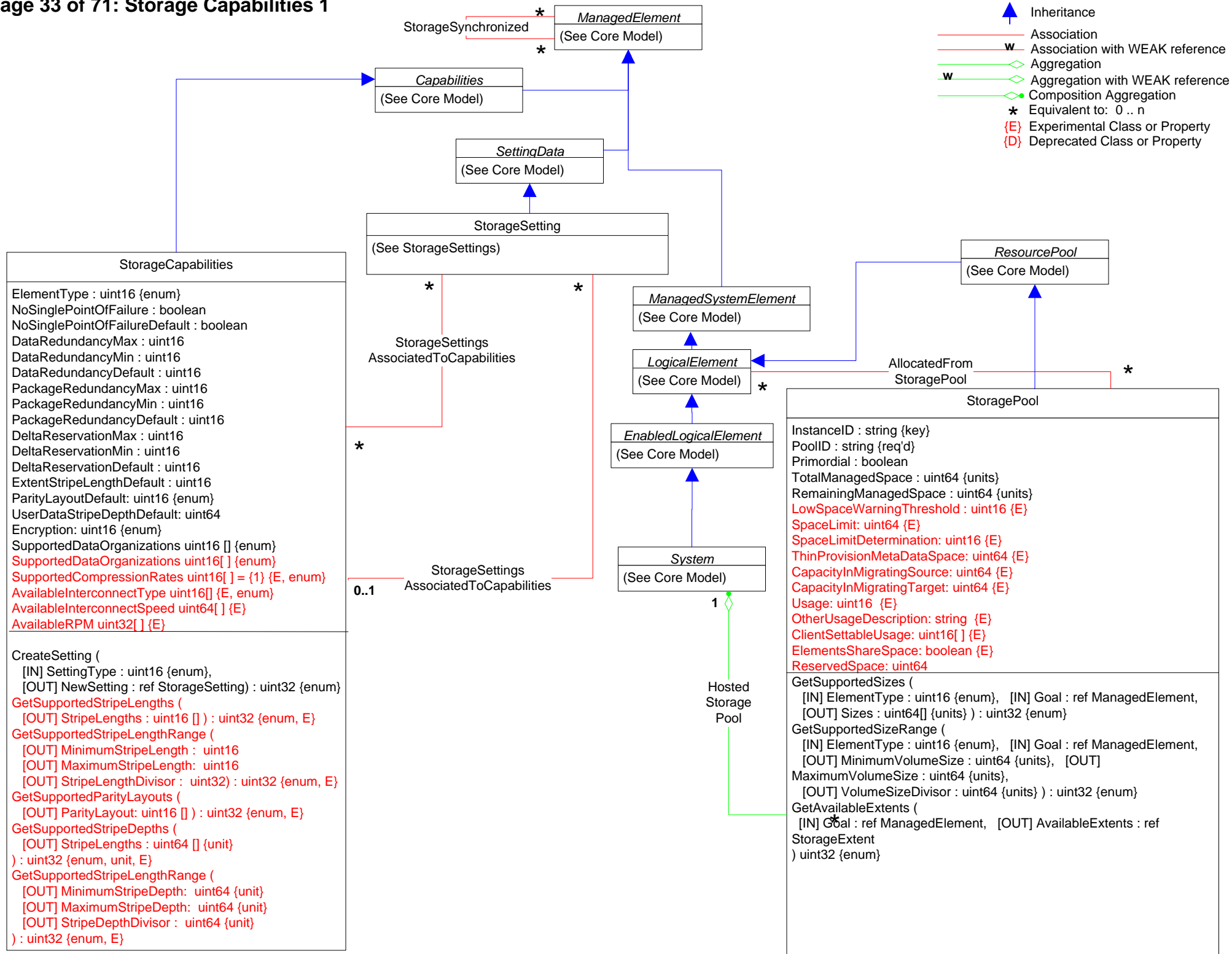
CreateListSynchronizationAspect([IN] Names: string[],[IN] SyncType: uint16,[IN] Mode: uint16,[IN] SourceElements ref[] ManagedElement,[IN] SourceAccessPoint ref ServiceAccessPoint,[IN] Consistency: uint16,[IN] ReplicationSettingData: string,[OUT] Job ref ConcreteJob,[OUT] SettingsStates ref[] SettingsDefineState)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

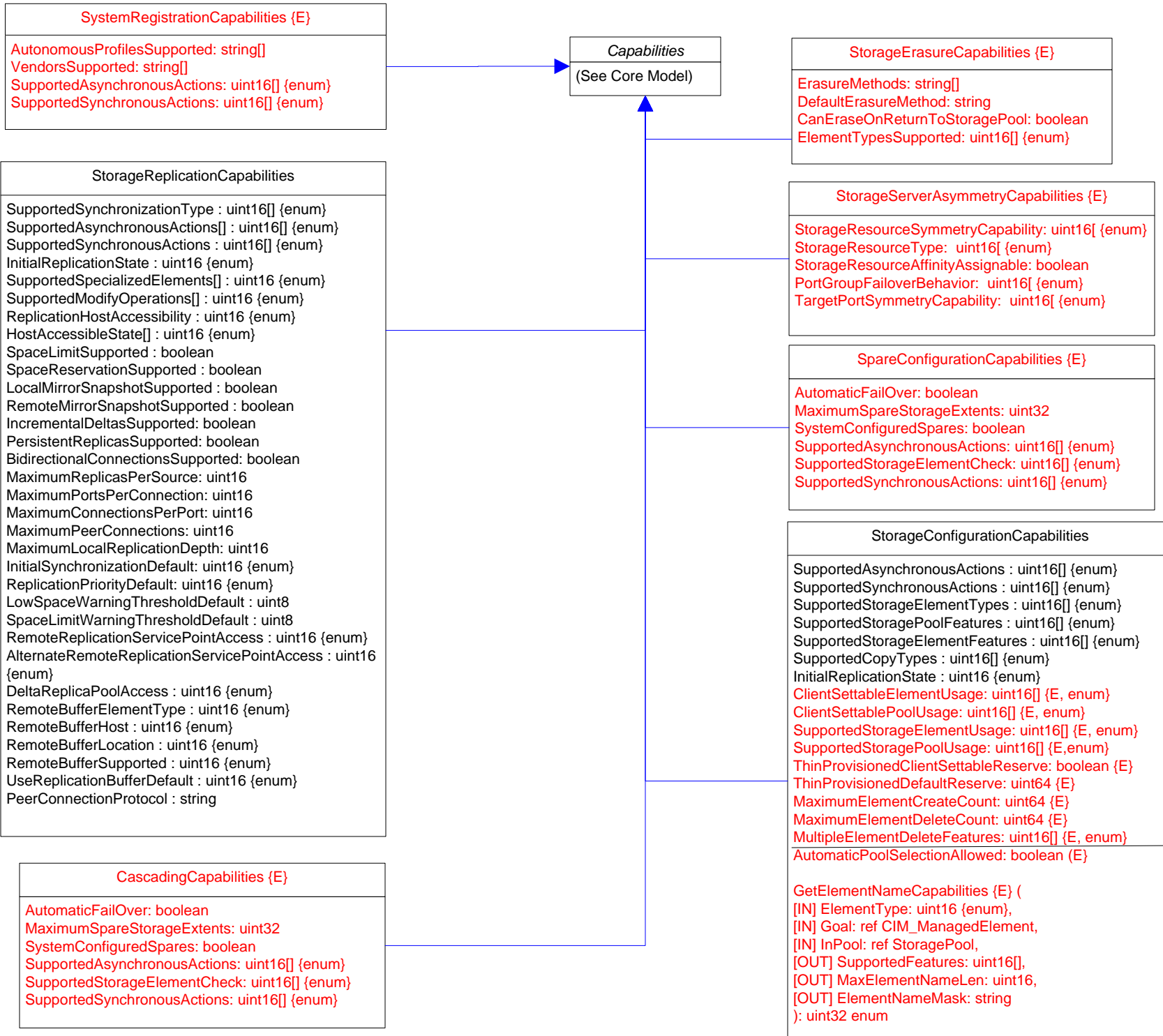


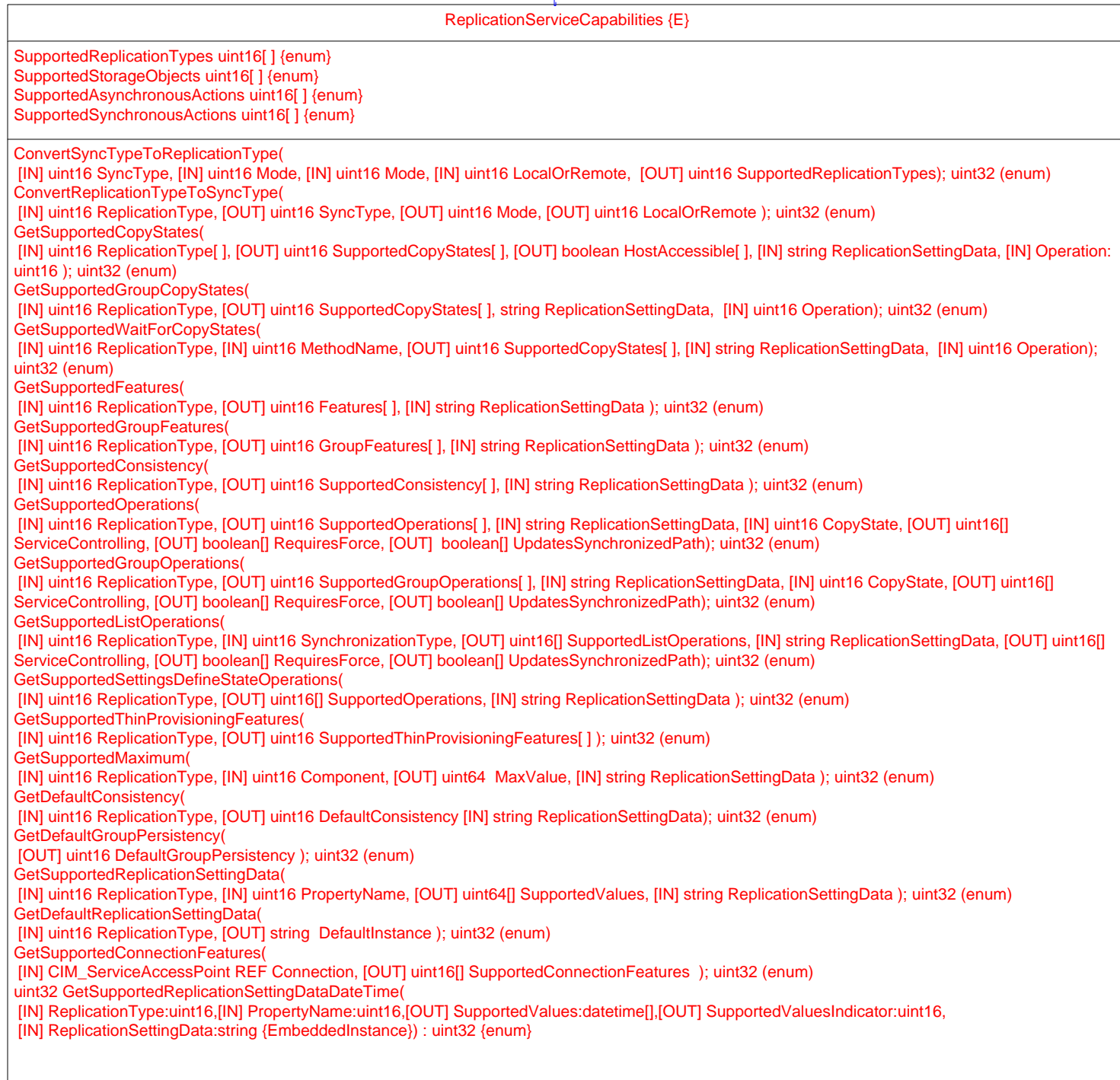
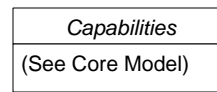


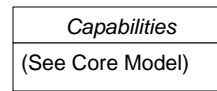




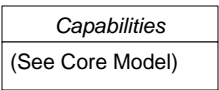








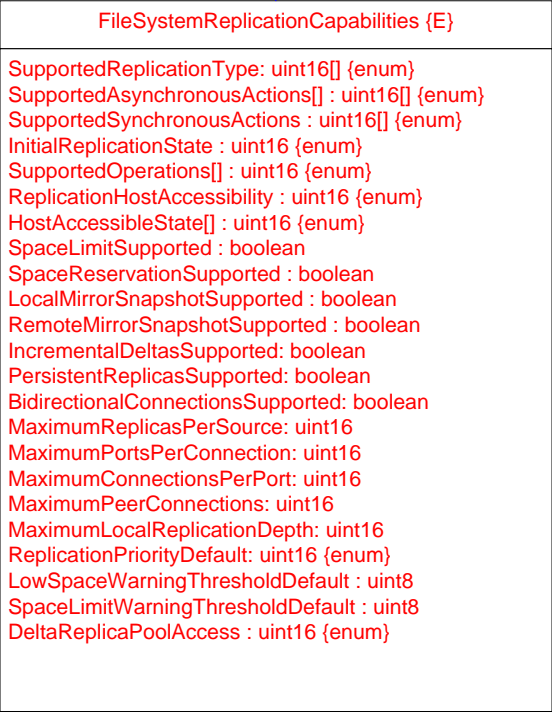
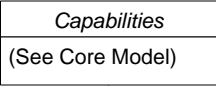
ReplicationServiceCapabilities {E} (continued)
GetSynchronizationSupported([IN] CIM_LogicalElement REF LocalElement, [IN] CIM_LogicalElement REF OtherElement, [IN] CIM_ServiceAccessPoint REF OtherElementAccessPoint, [IN] uint16 MethodName, [IN] string ReplicationSettingData, [OUT] uint16 SyncTypes[], [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)

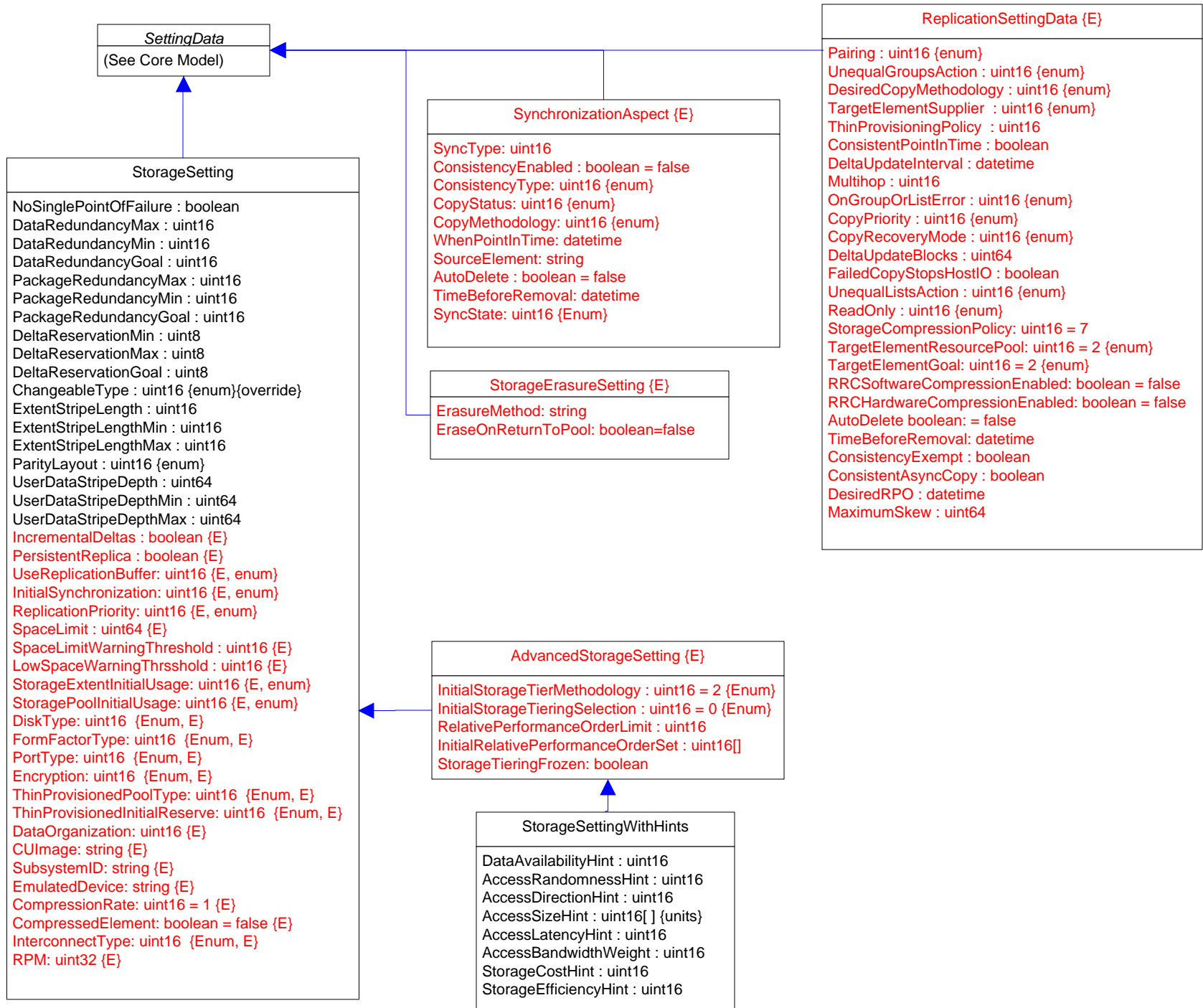











FileSystemReplicationServiceCapabilities {E}

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)
 GetDefaultGroupPersistence(
 [IN,OUT] uint16 DefaultGroupPersistence); 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)





-  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

ManagedElement
(See Core Model)

Collection
(See Core Model)

SystemSpecificCollection
(See Core Model)

StatisticsCollection {E}
(See Core Model)

BlockStatisticsManifestCollection
IsDefault : boolean

QueryStatisticsCollection {E}

Query : string
 QueryLanguage : uint16 {enum}
 SelectEncoding : uint16 {enum}
 SelectedNames : string
 SelectedTypes : string
 SelectedValues : string
 SelectedRateNames : string
 SelectedRateTypes : string
 SelectedRateValues : string

BlockStorageStatisticalData

ElementType : uint16
 TotalIOs : uint64 {counter}
 KBytesTransferred : uint64 {counter, unit}
 KBytesWritten : uint64 {counter, unit}
 IOTimeCounter : uint64 {counter}
 ReadIOs : uint64 {counter}
 ReadHitIOs : uint64 {counter}
 ReadIOTimeCounter : uint64 {counter}
 ReadHitIOTimeCounter : uint64 {counter}
 KBytesRead : uint64 {counter, unit}
 WriteIOs : uint64 {counter}
 WriteHitIOs : uint64 {counter}
 WriteIOTimeCounter : uint64 {counter}
 WriteHitIOTimeCounter : uint64 {counter}
 IdleTimeCounter : uint64 {counter}
 MaintOp : uint64 {counter}
 MaintTimeCounter : uint64 {counter}
 RateElementType : uint16 {enum, E}
 TotalIOsRate : real32 {E}
 KBytesTransferredRate : real32 {E}
 KBytesWrittenRate : real32 {E}
 ReadIOsRate : real32 {E}
 ReadHitIOsRate : real32 {E}
 KBytesReadRate : real32 {E}
 WriteIOsRate : real32 {E}
 WriteHitIOsRate : real32 {E}
 MaintOpRate : real32 {E}
 TotalHitIOs : uint64 {E}
 ReadSequentialIOs : uint64 {E}
 ReadSequentialHits : uint64 {E}
 WriteSequentialIOs : uint64 {E}
 WriteSequentialHits : uint64 {E}

StatisticalData
(See core model)

BlockStatisticsManifest

InstanceID : string
 ElementType : uint16 {enum}
 IncludeStartStatisticTime : boolean {enum}
 IncludeStatisticsTime : boolean
 IncludeTotalIOs : boolean
 IncludeKBytesTransferred : boolean
 IncludeIOTimeCounter : boolean
 IncludeReadIOs : boolean
 IncludeReadHitIOs : boolean
 IncludeReadIOTimeCounter : boolean
 IncludeReadHitIOTimeCounter : boolean
 IncludeWriteIOs : boolean
 IncludeWriteHitIOs : boolean
 IncludeWriteHitIOTimeCounter : boolean
 IncludeKBytesWritten : boolean
 IncludeIdleTimeCounter : boolean
 IncludeMaintOp : boolean
 IncludeMaintTimeCounter : boolean
 IncludeKBytesRead : boolean
 IncludeStartStatisticTime : boolean
 InstanceID : string {key}
 IncludeWriteIOTimeCounter : boolean
 IncludeWriteIOTimeCounter : boolean
 CSVSequence[] : string {E}
 RateElementType : uint16 {enum, E}
 CSVRateSequence : string[] {E}
 IncludeRateIntervalStartTime : boolean {E}
 IncludeRateIntervalEndTime : boolean {E}
 IncludeKBytesTransferredRate : boolean {E}
 IncludeReadIOsRate : boolean {E}
 IncludeReadHitIOsRate : boolean {E}
 IncludeKBytesReadRate : boolean {E}
 IncludeWriteHitIOsRate : boolean {E}
 IncludeKBytesWrittenRate : boolean {E}
 IncludeMaintOpRate : boolean {E}
 IncludeTotalHitIOs : boolean {E}
 IncludeReadSequentialIOs : boolean {E}
 IncludeReadSequentialHits : boolean {E}
 IncludeWriteSequentialIOs : boolean {E}
 IncludeWriteSequentialHits : boolean {E}

LogicalPortStatistics {E}

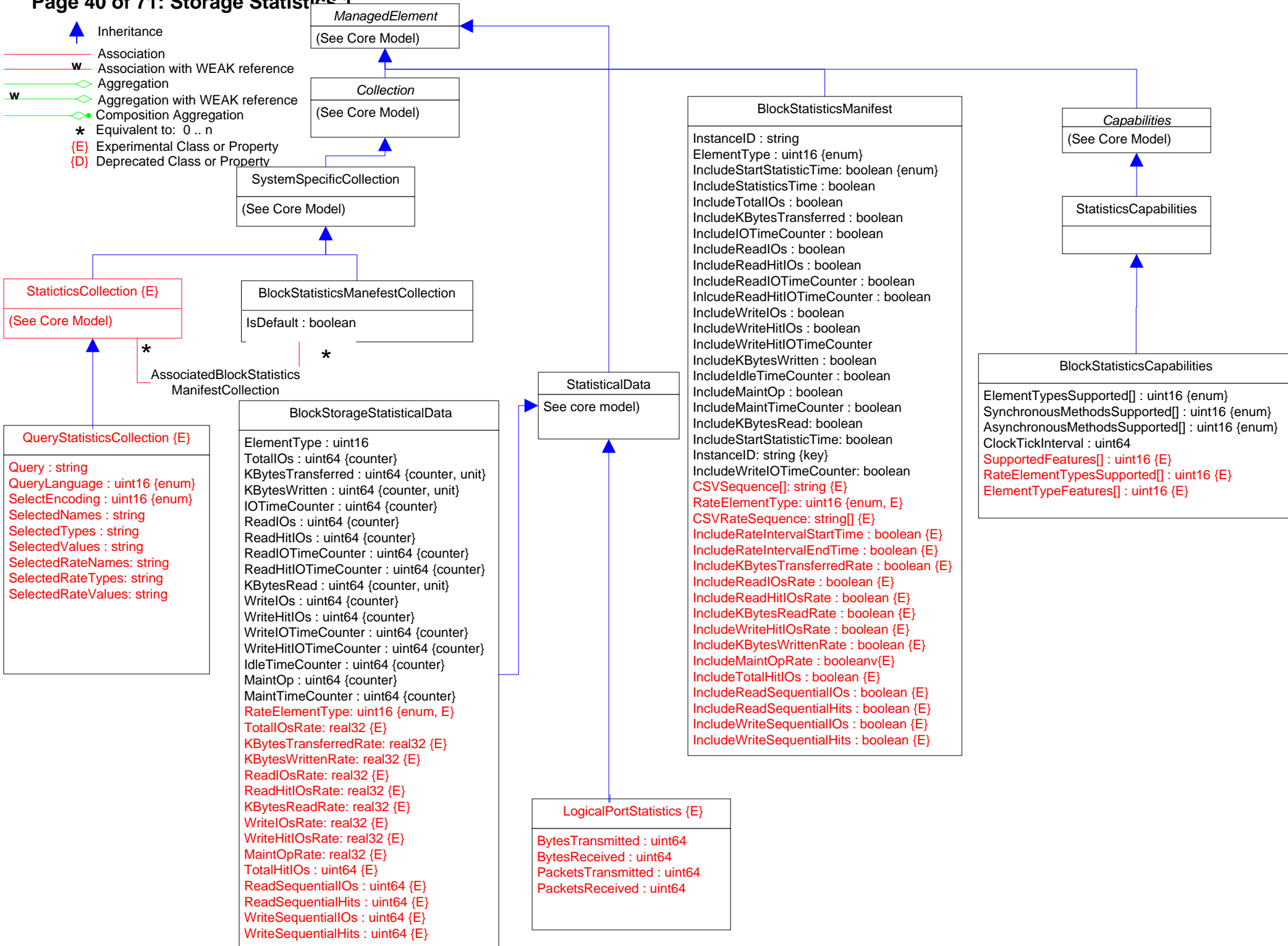
BytesTransmitted : uint64
 BytesReceived : uint64
 PacketsTransmitted : uint64
 PacketsReceived : uint64

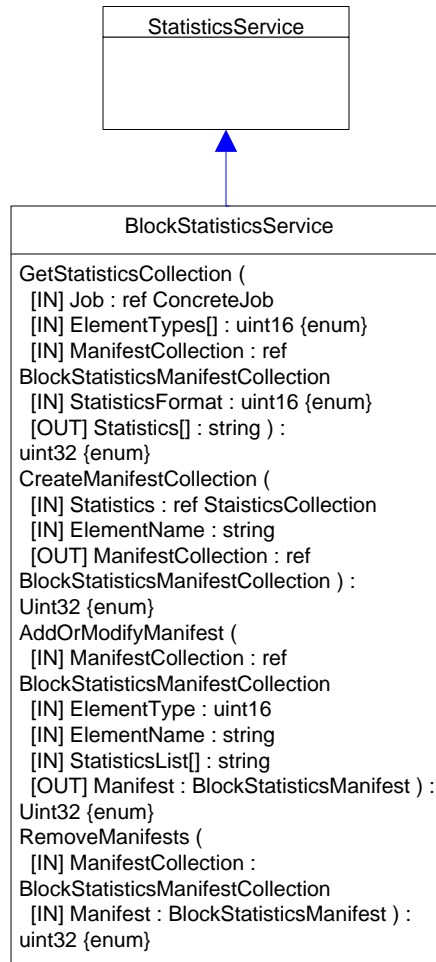
Capabilities
(See Core Model)

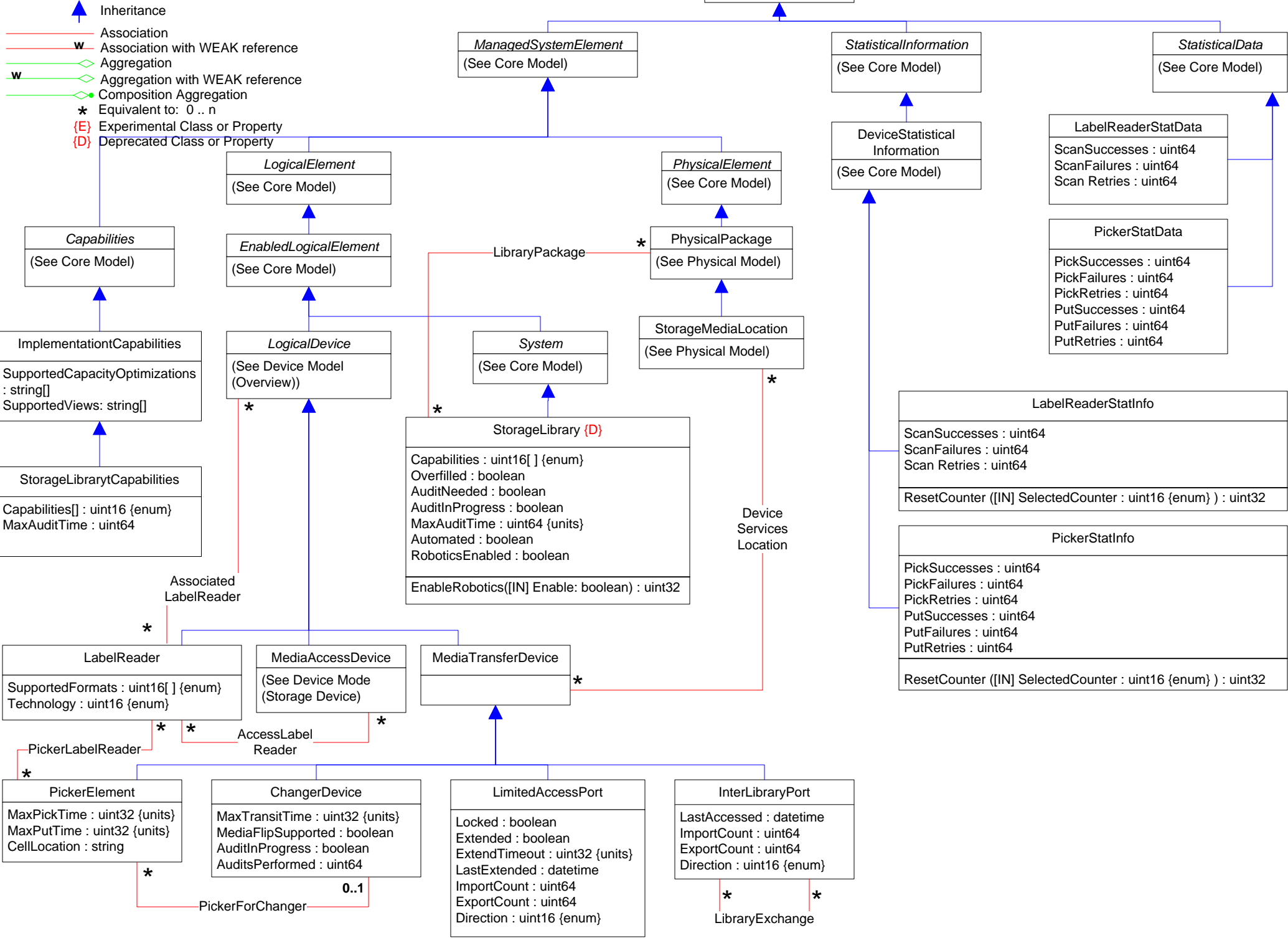
StatisticsCapabilities

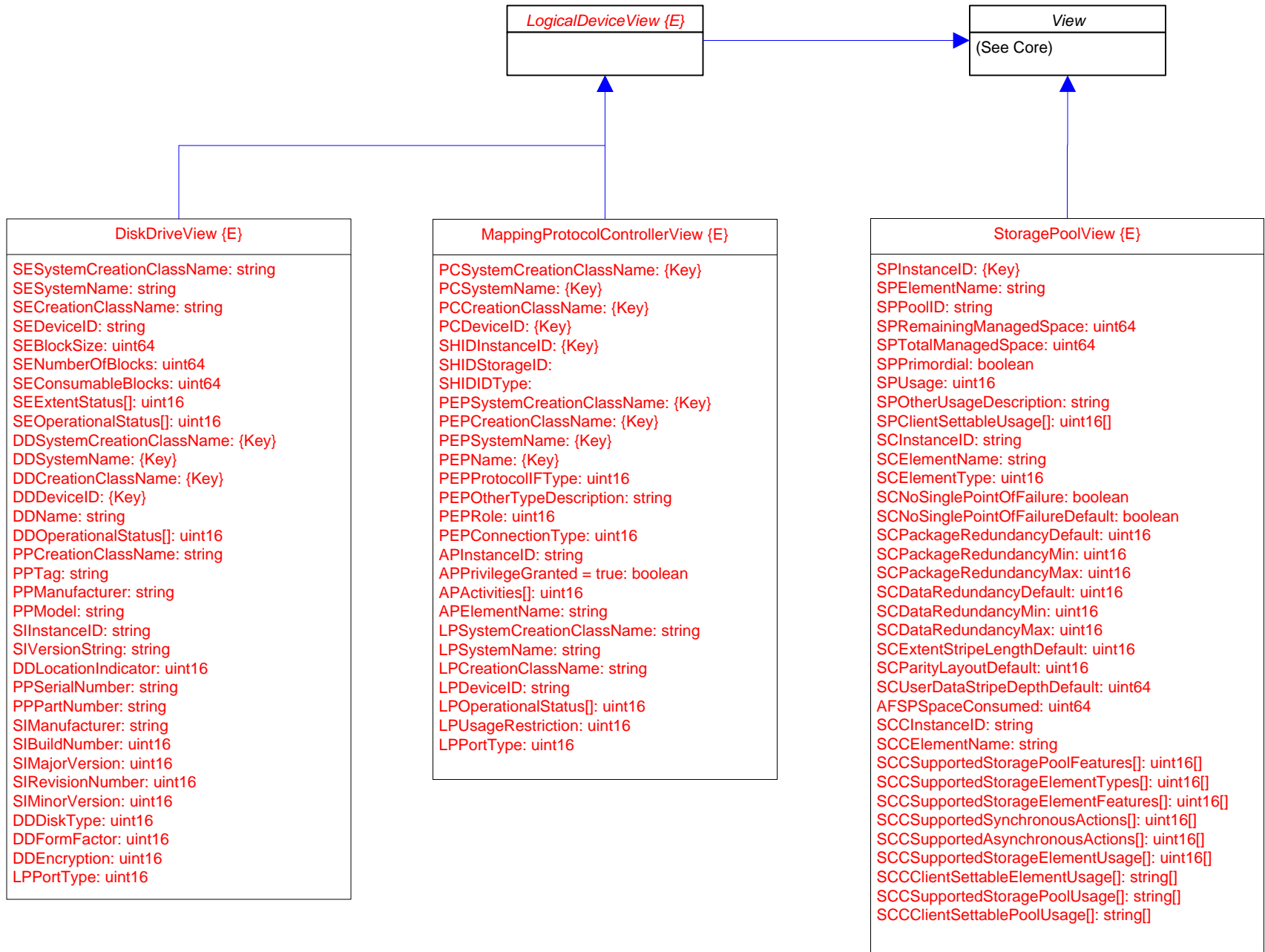
BlockStatisticsCapabilities

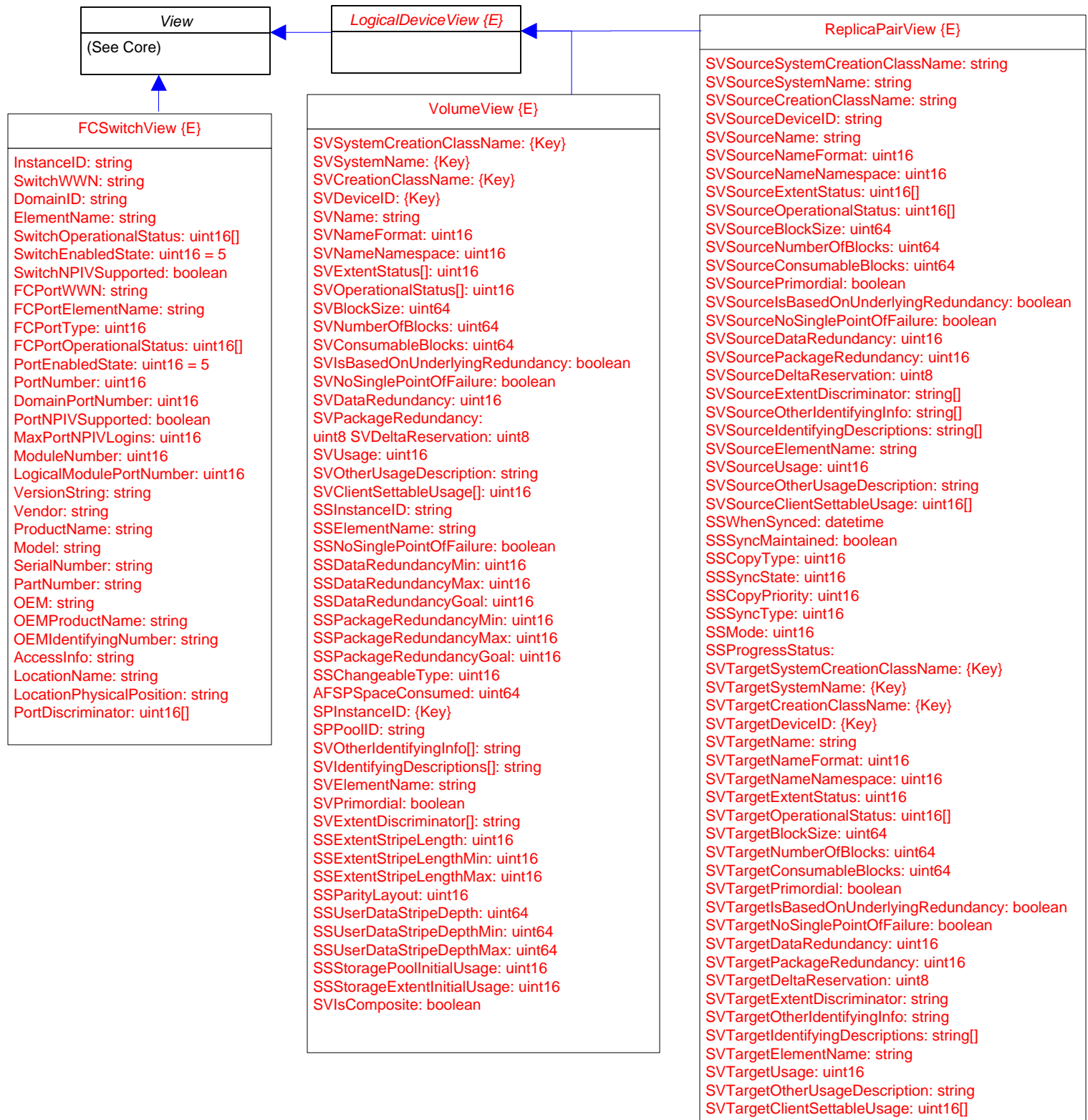
ElementTypesSupported[] : uint16 {enum}
 SynchronousMethodsSupported[] : uint16 {enum}
 AsynchronousMethodsSupported[] : uint16 {enum}
 ClockTickInterval : uint64
 SupportedFeatures[] : uint16 {E}
 RateElementTypesSupported[] : uint16 {E}
 ElementTypeFeatures[] : uint16 {E}





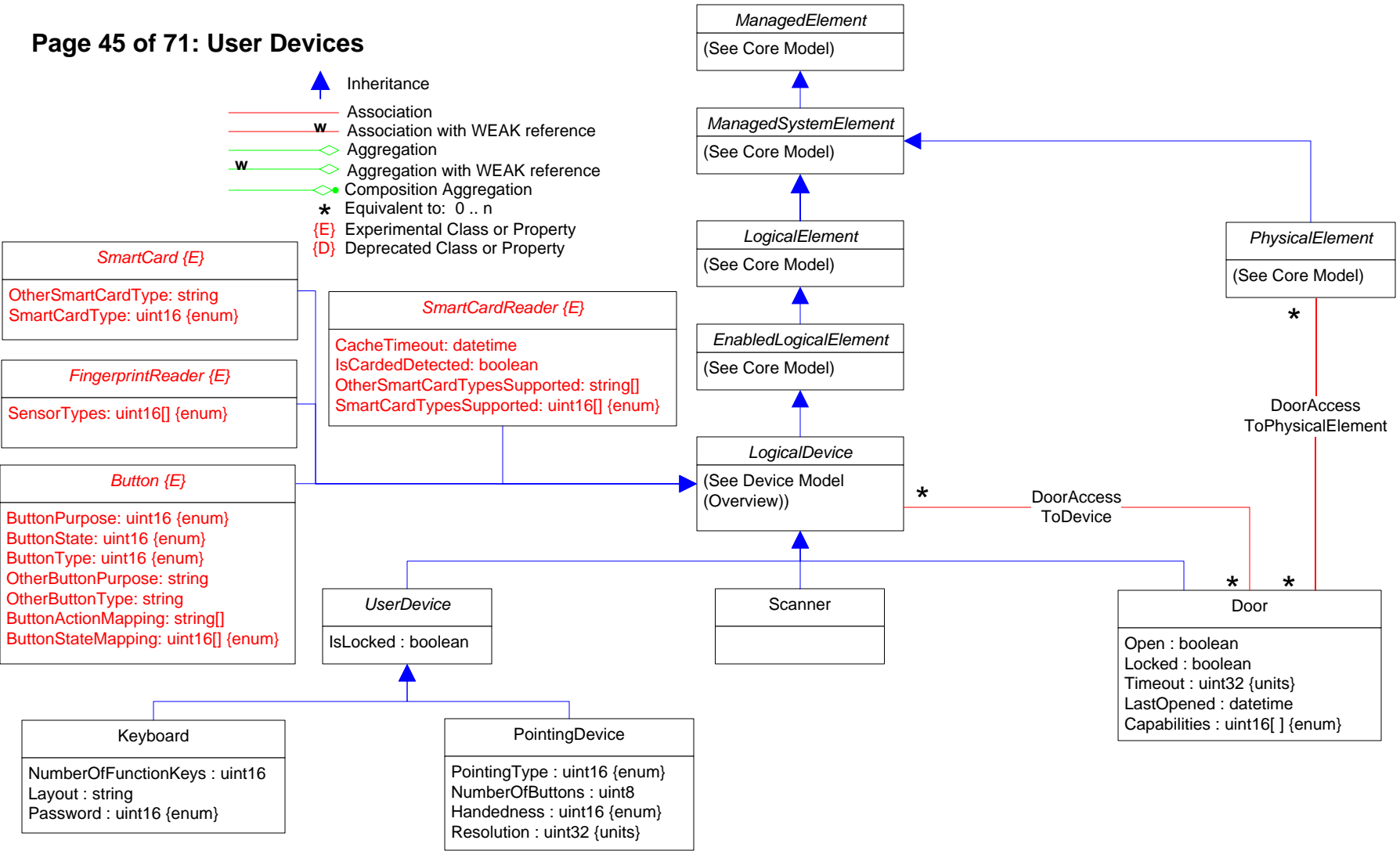







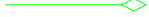
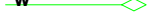




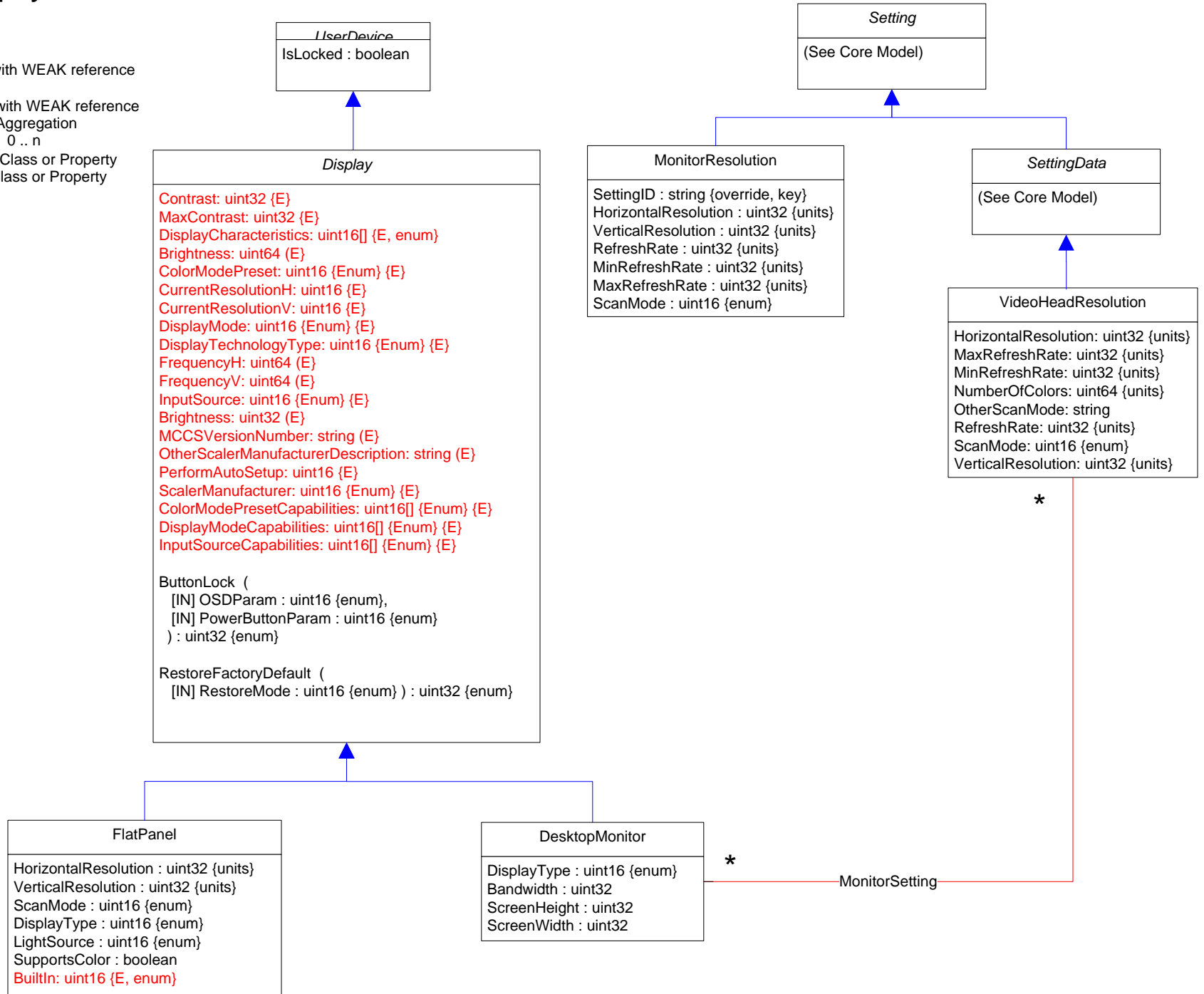
Page 45 of 71: User Devices










- 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

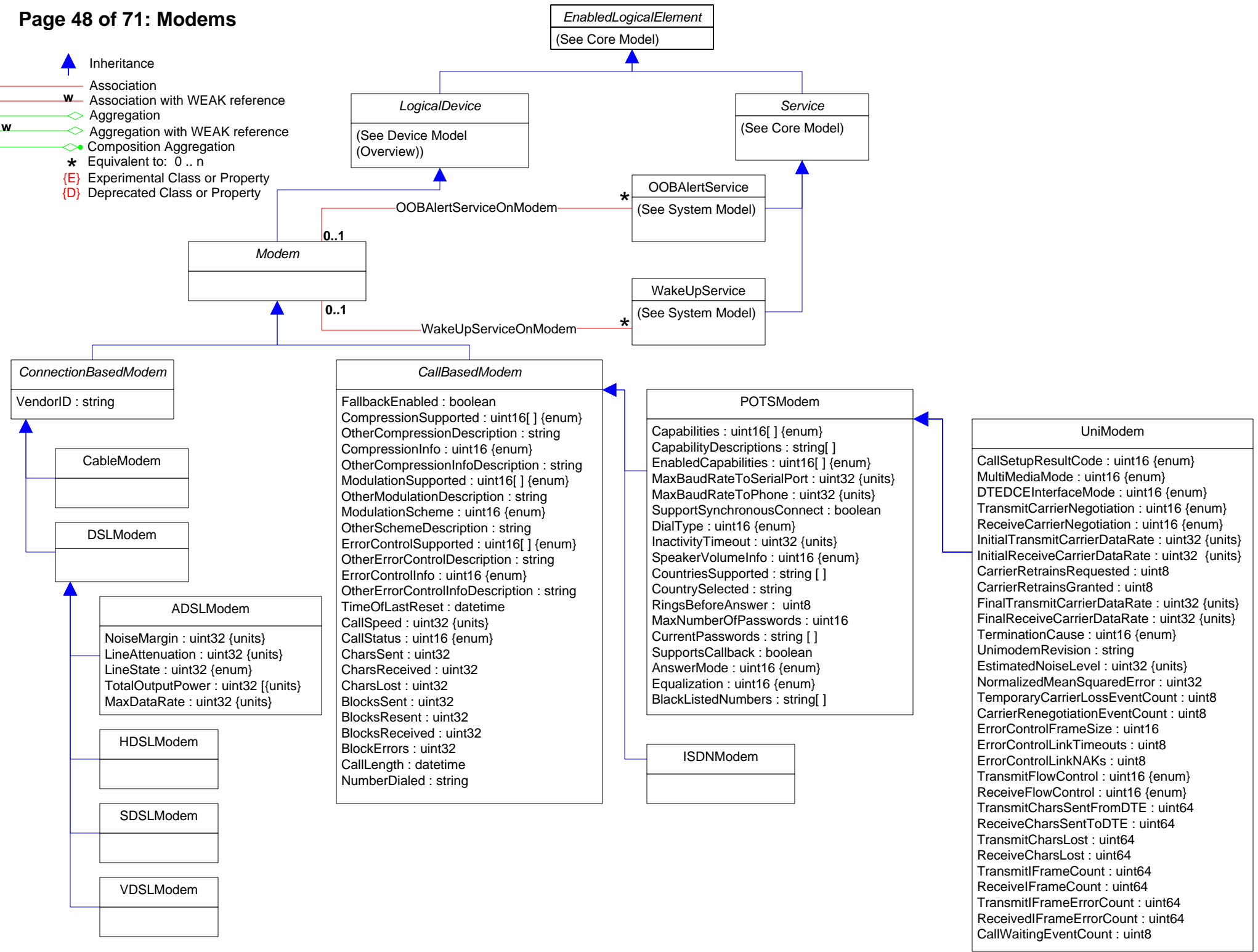


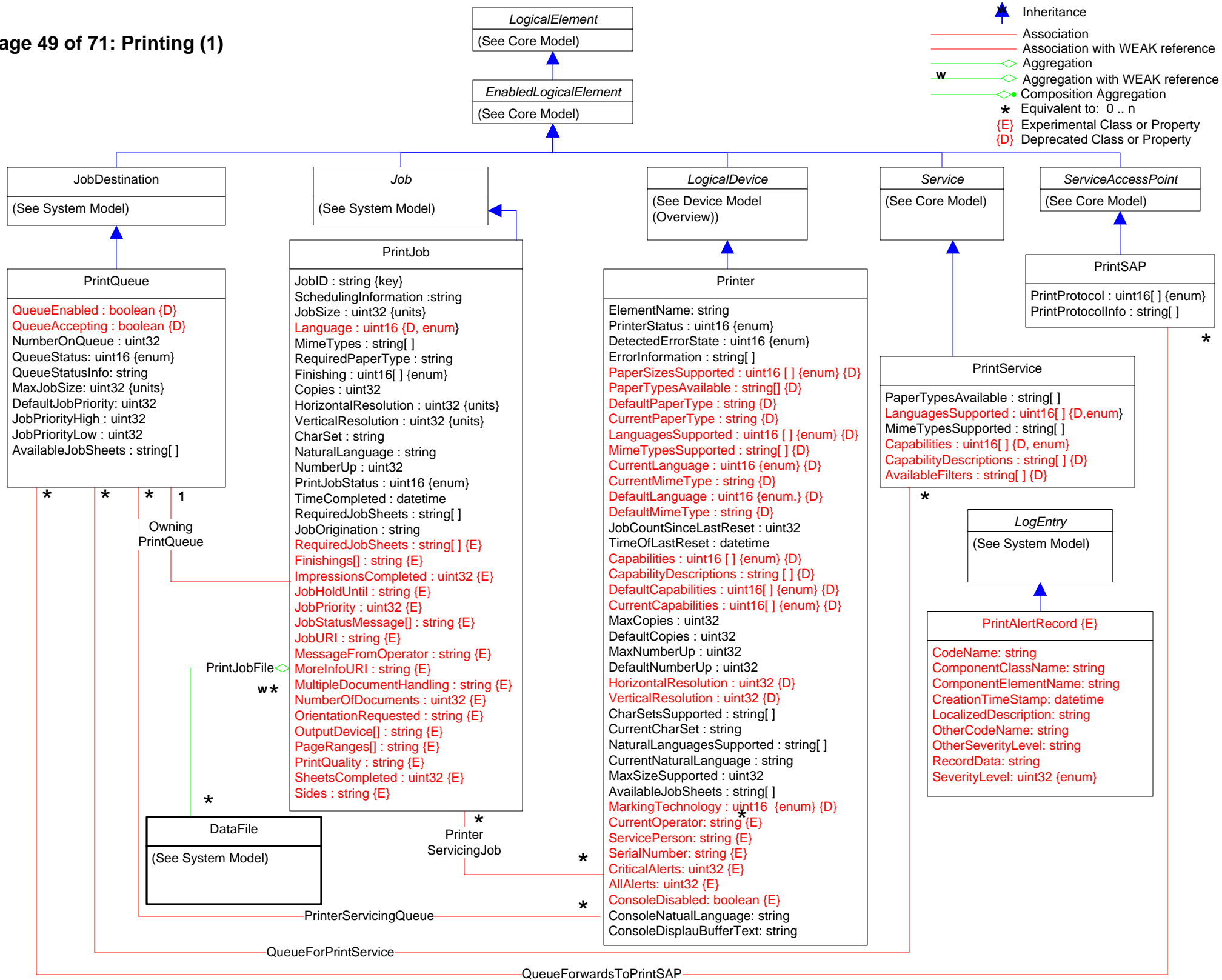
Page 46 of 71: Displays

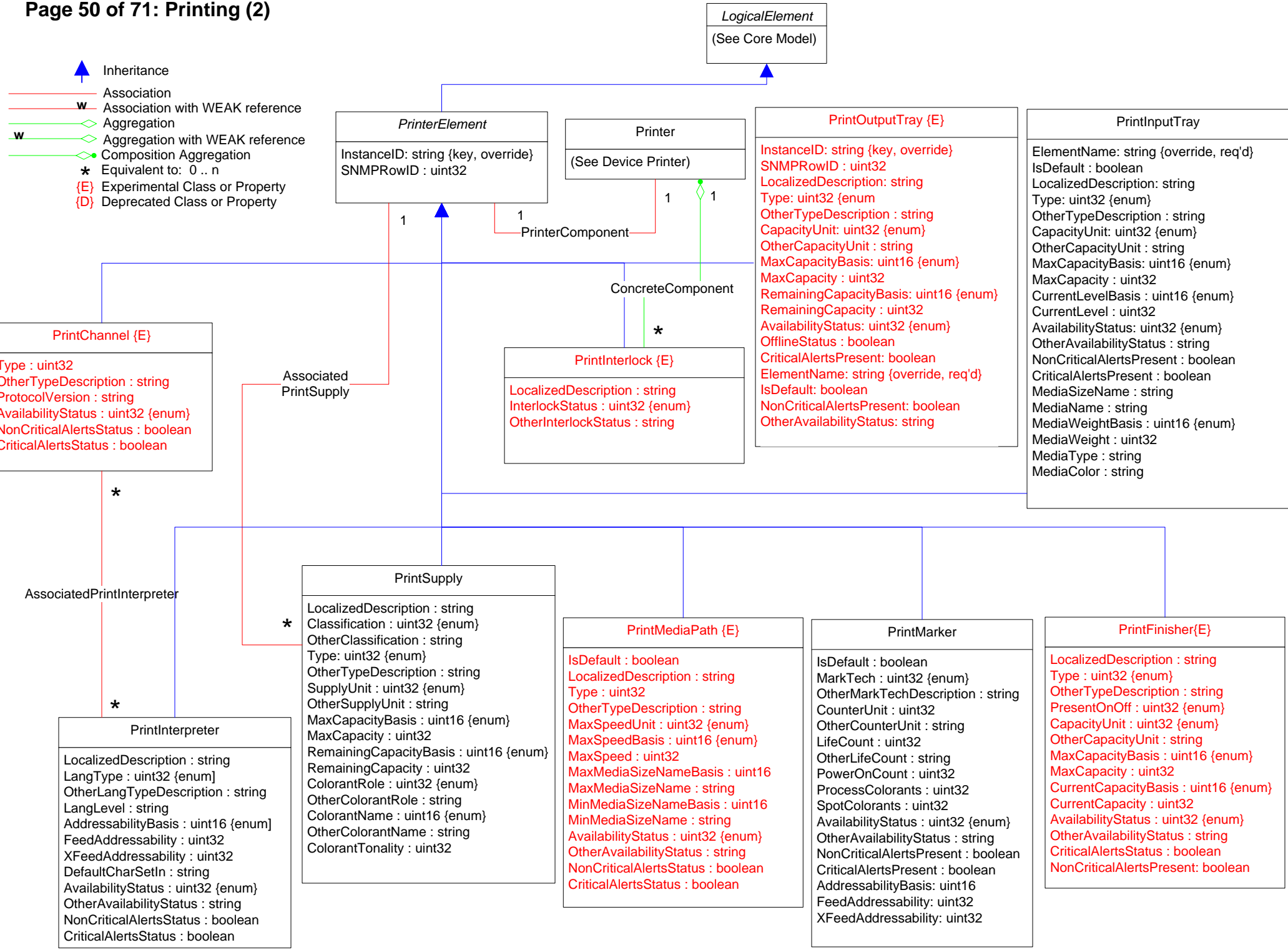
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
- {E} Experimental Class or Property
- {D} Deprecated Class or Property

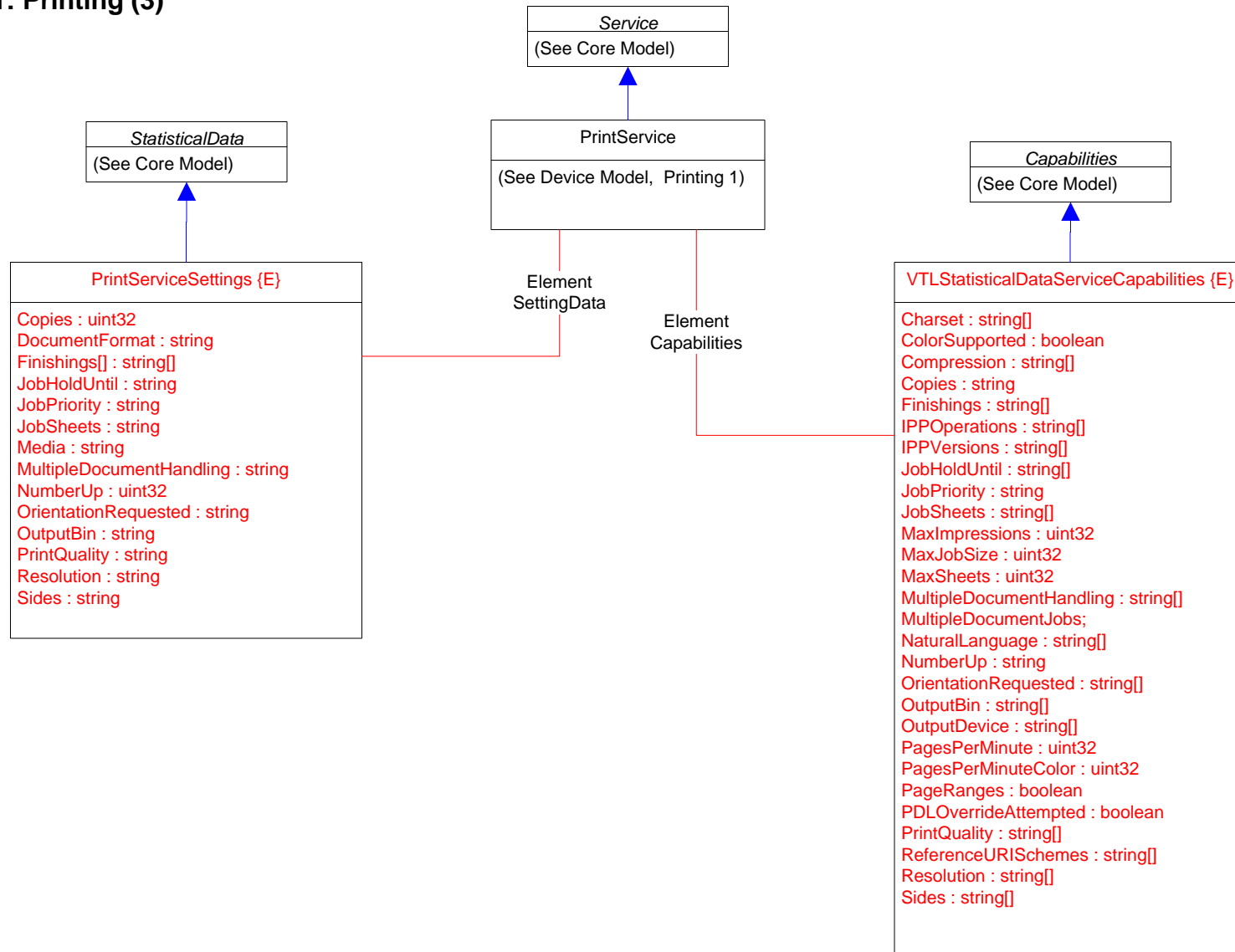











-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n
-  {E} Experimental Class or Property
-  {D} Deprecated Class or Property

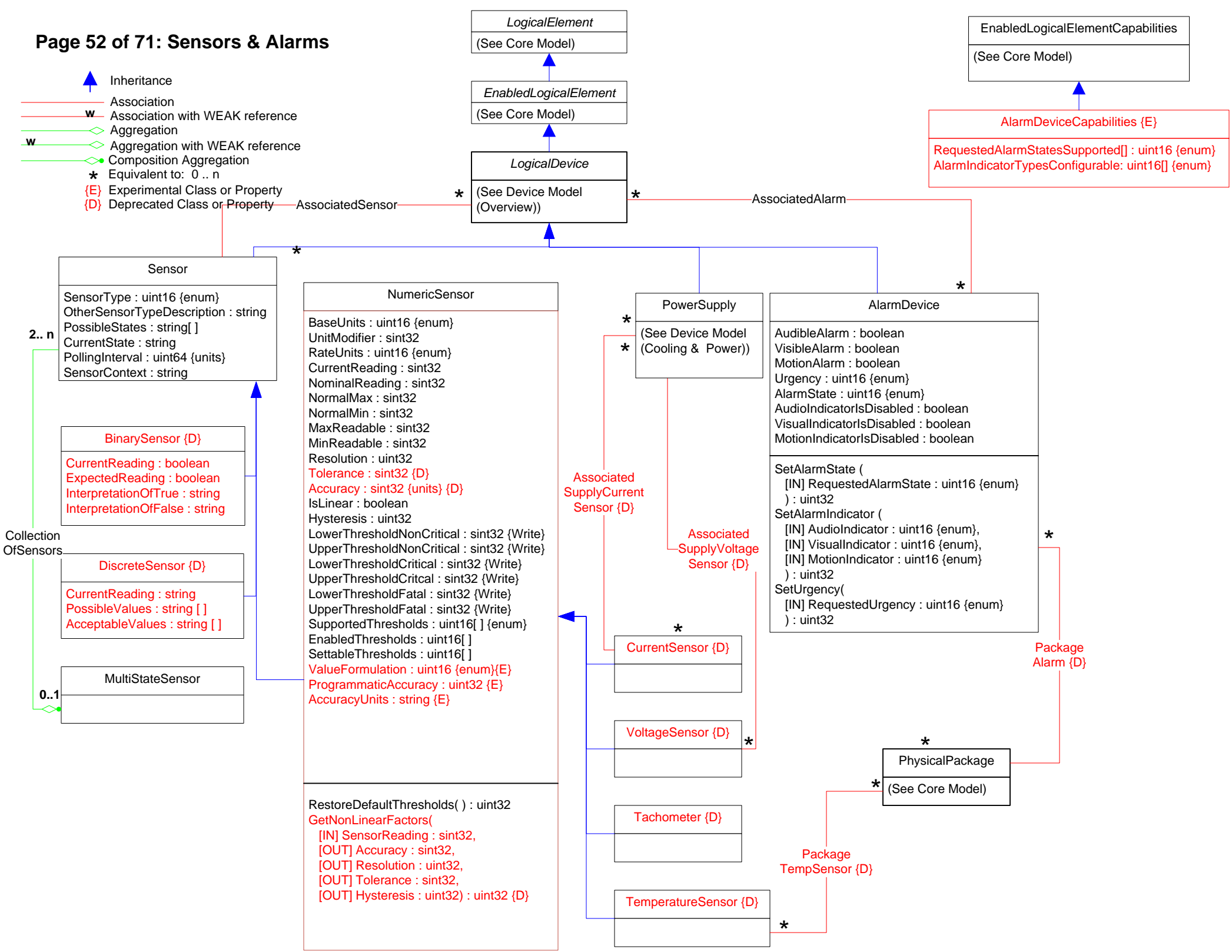











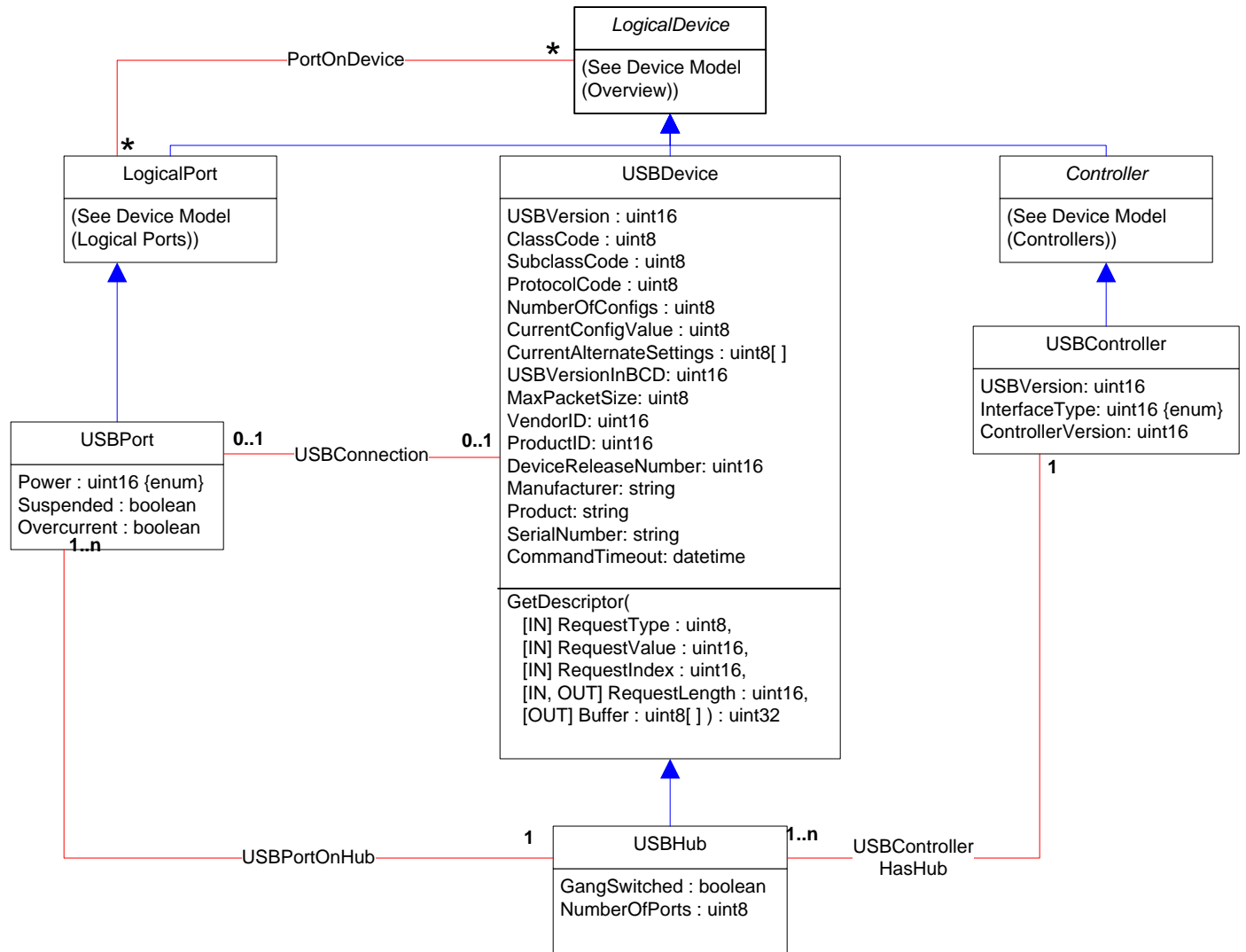





-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

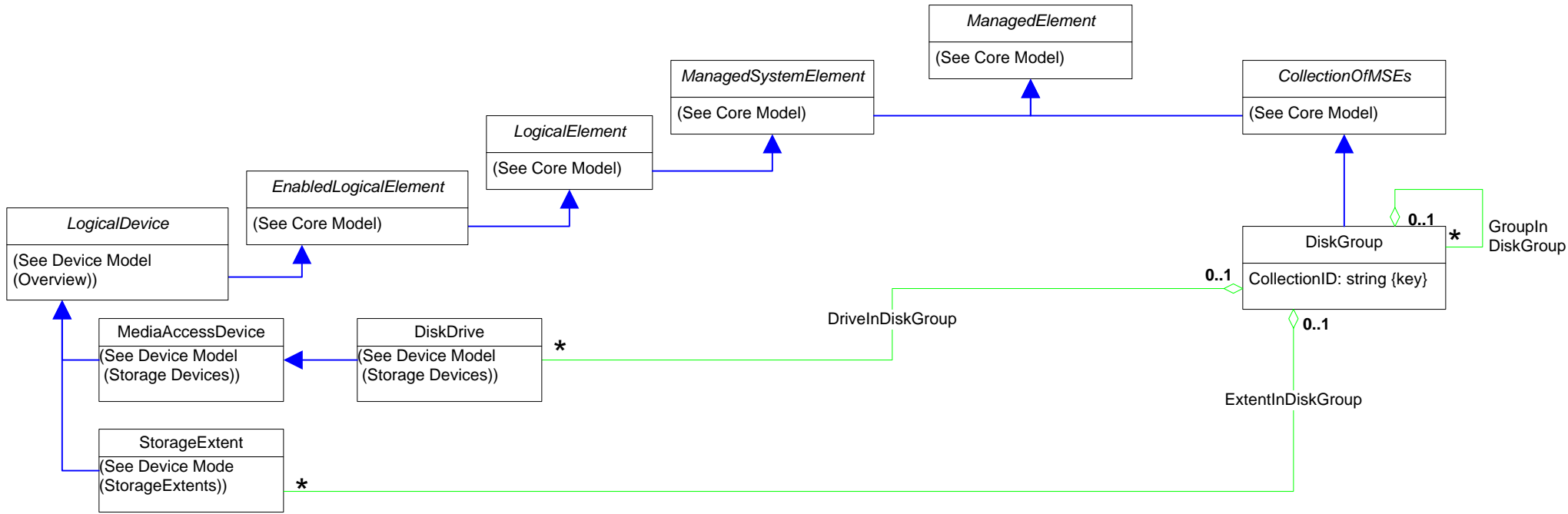


-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n










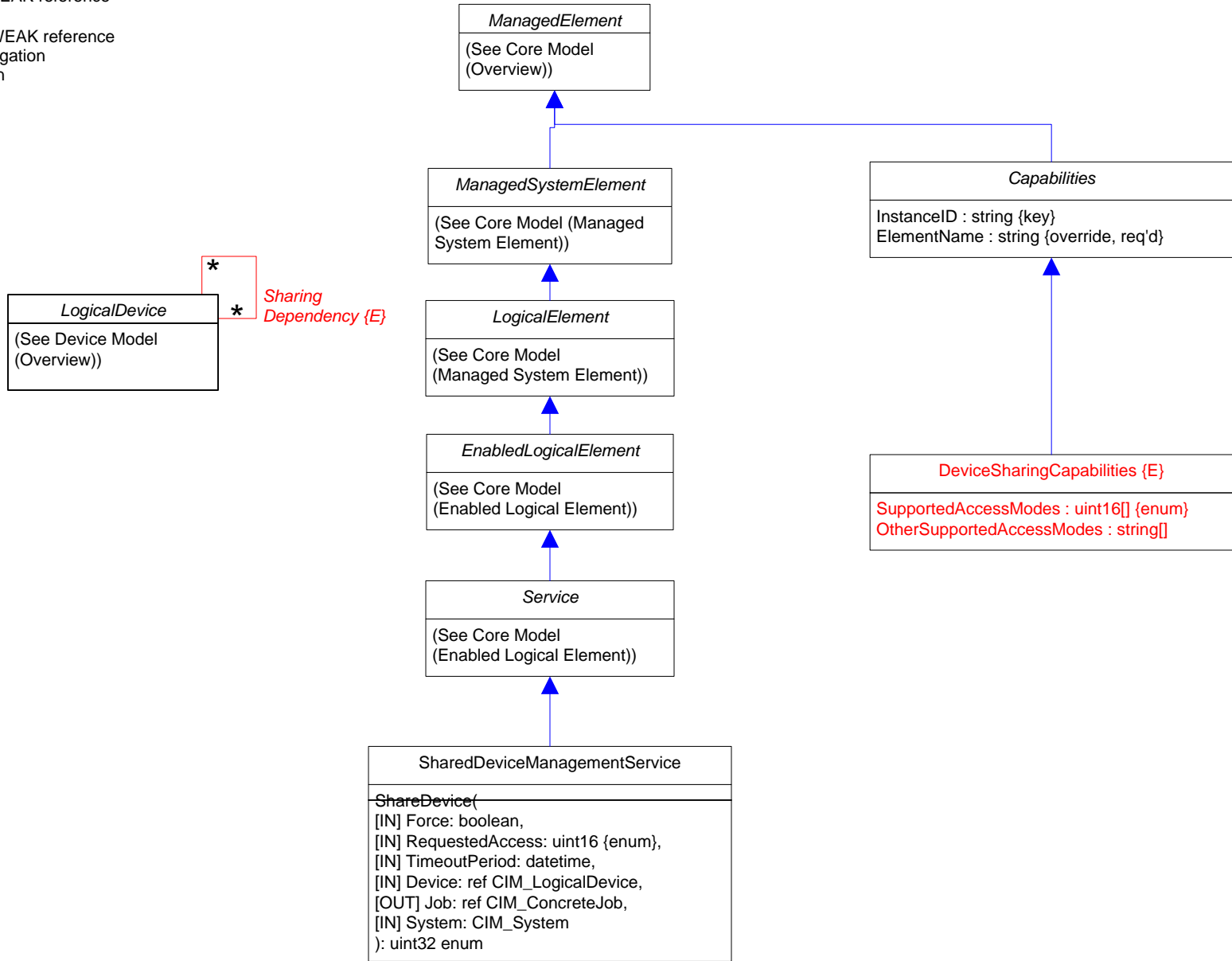
Page 54 of 71: Disk Group





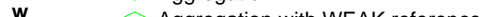
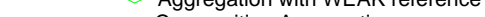

-  Inheritance
- Association
- Association with WEAK reference
- Aggregation
- Aggregation with WEAK reference
- Composition Aggregation
- Equivalent to: 0..n

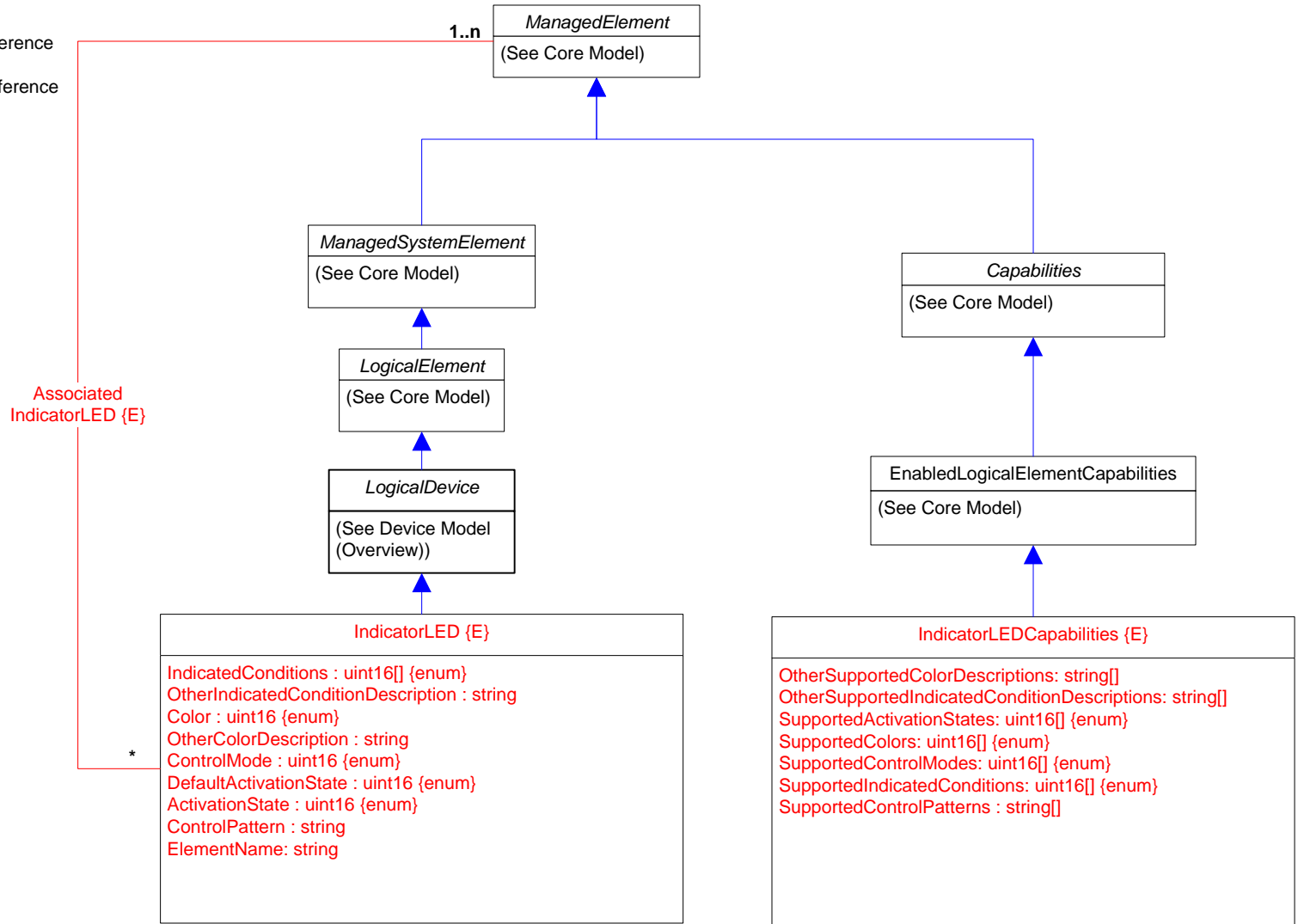











Page 55 of 71: Device Sharing

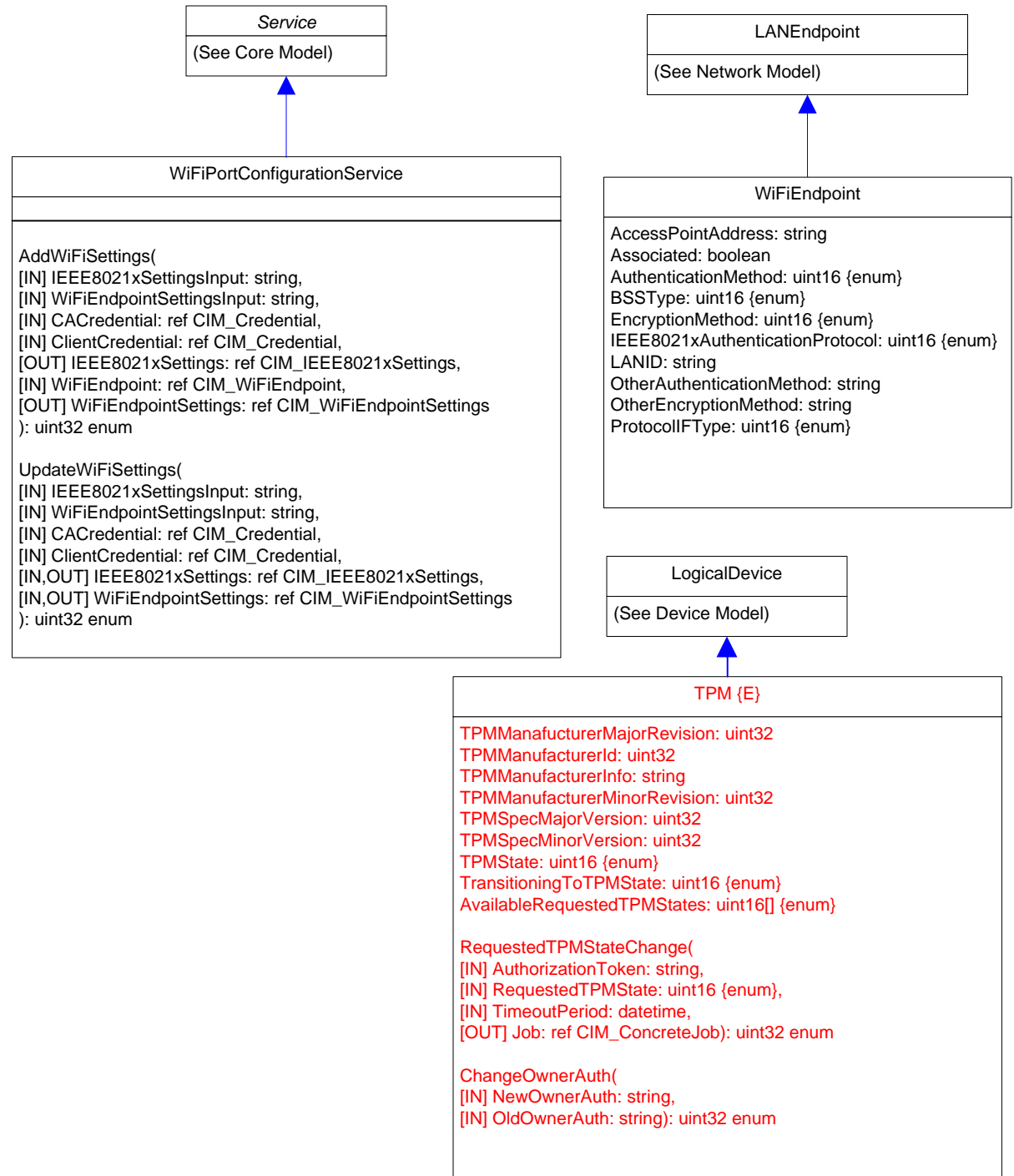
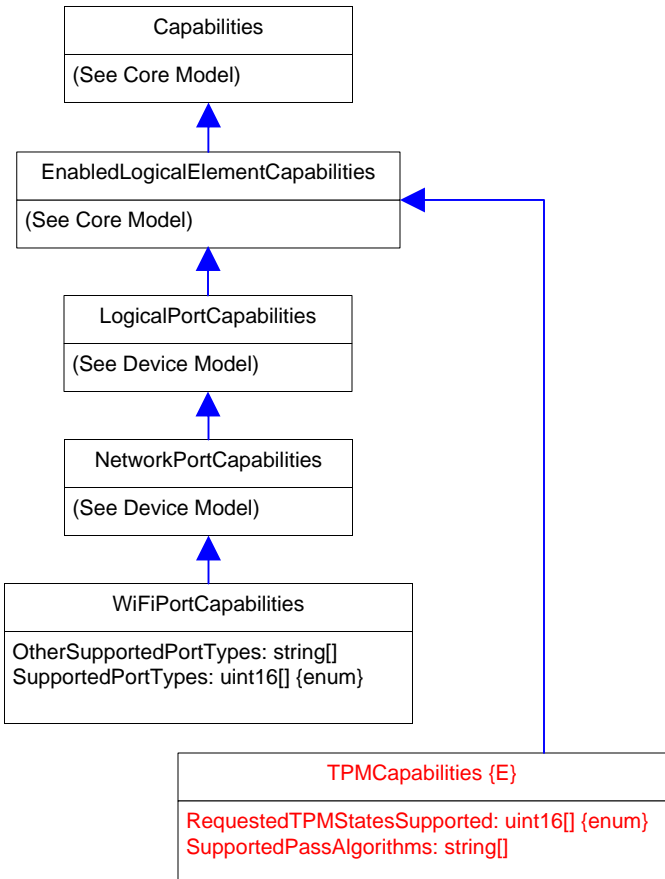
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0..n

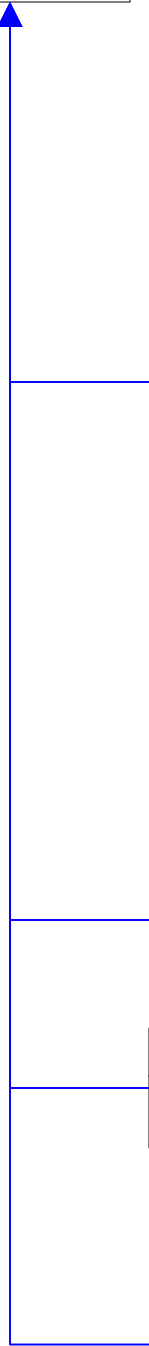
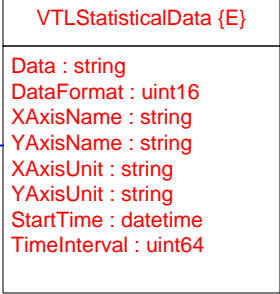
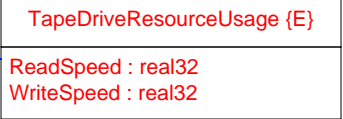
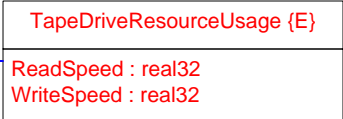
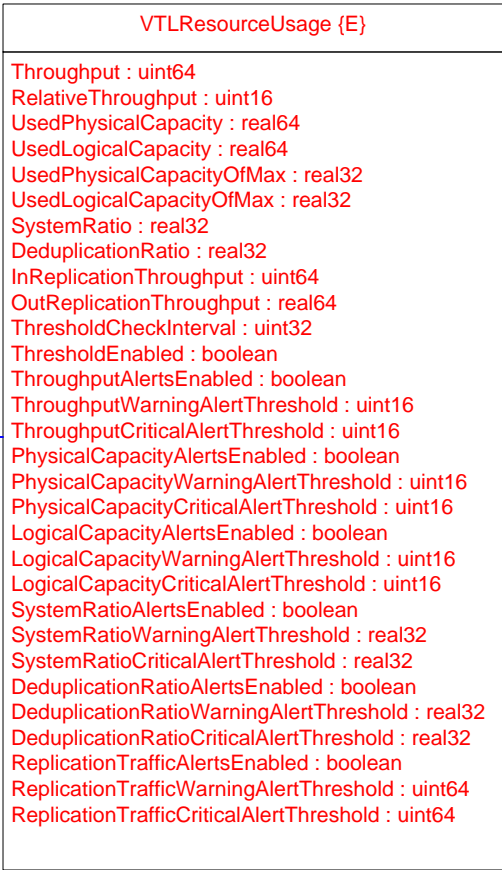
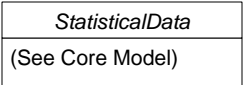
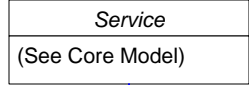


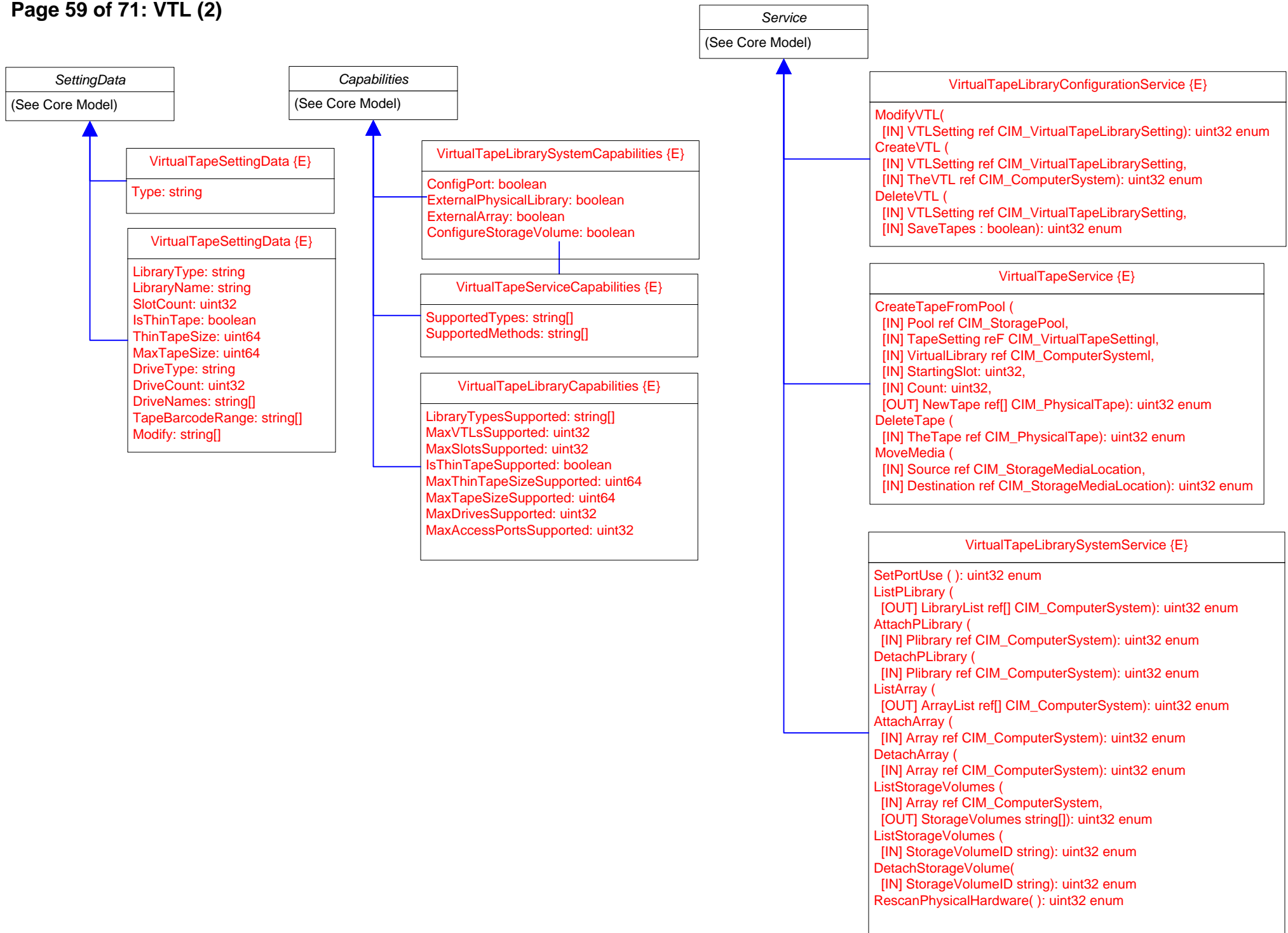
-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n

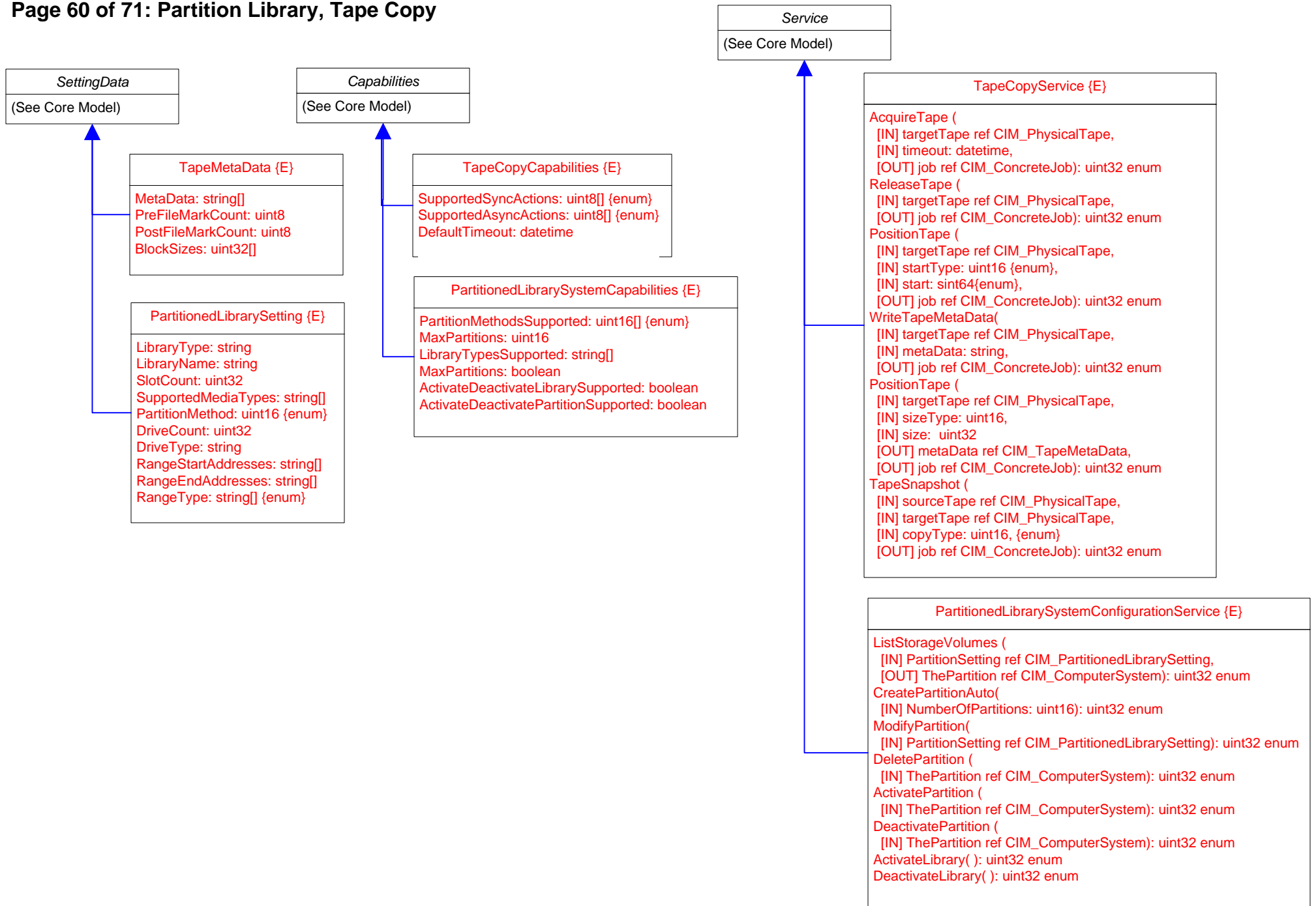


-  Inheritance
-  Association
-  Association with WEAK reference
-  Aggregation
-  Aggregation with WEAK reference
-  Composition Aggregation
-  Equivalent to: 0 .. n
-  Experimental Class or Property
-  Deprecated Class or Property

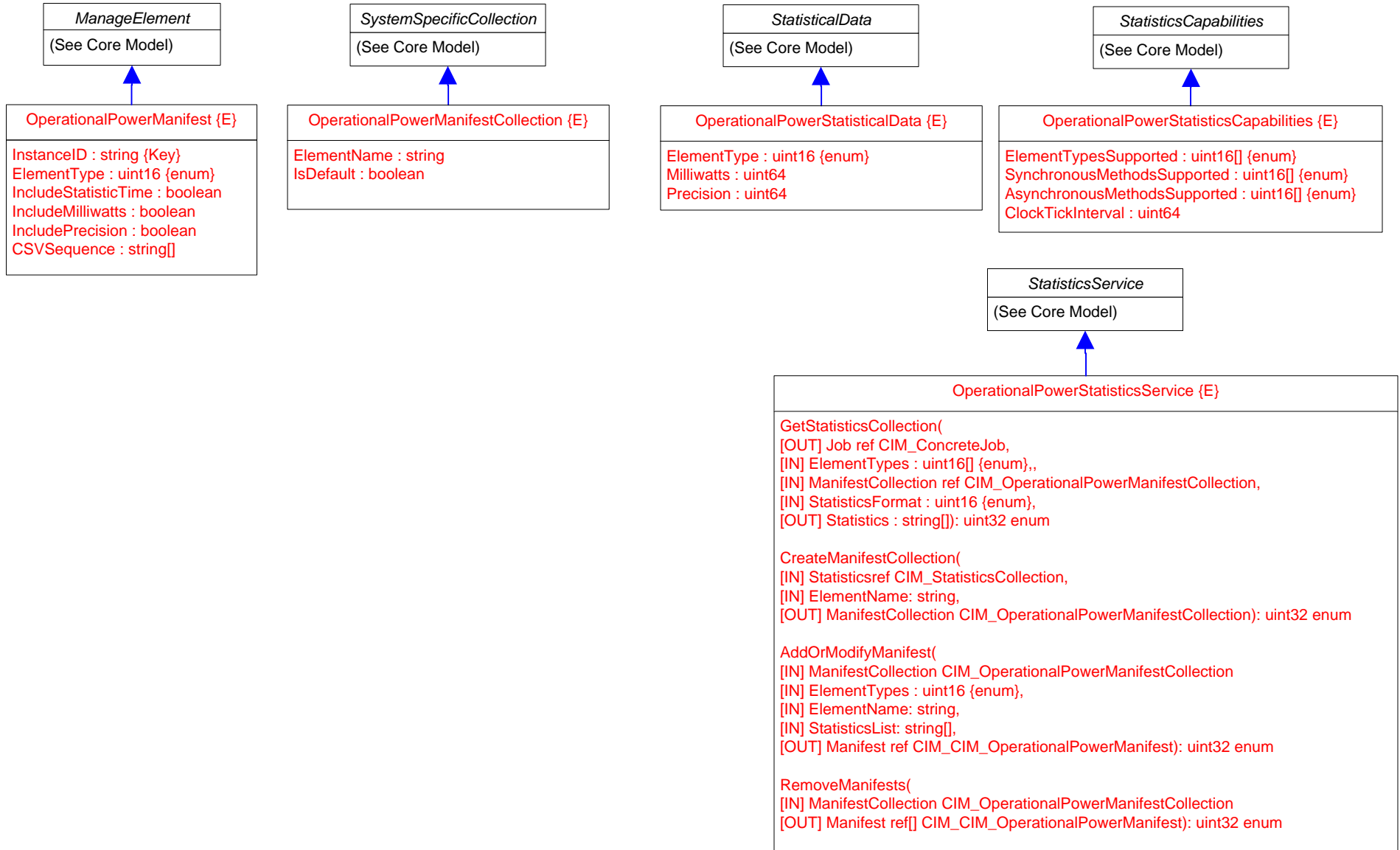




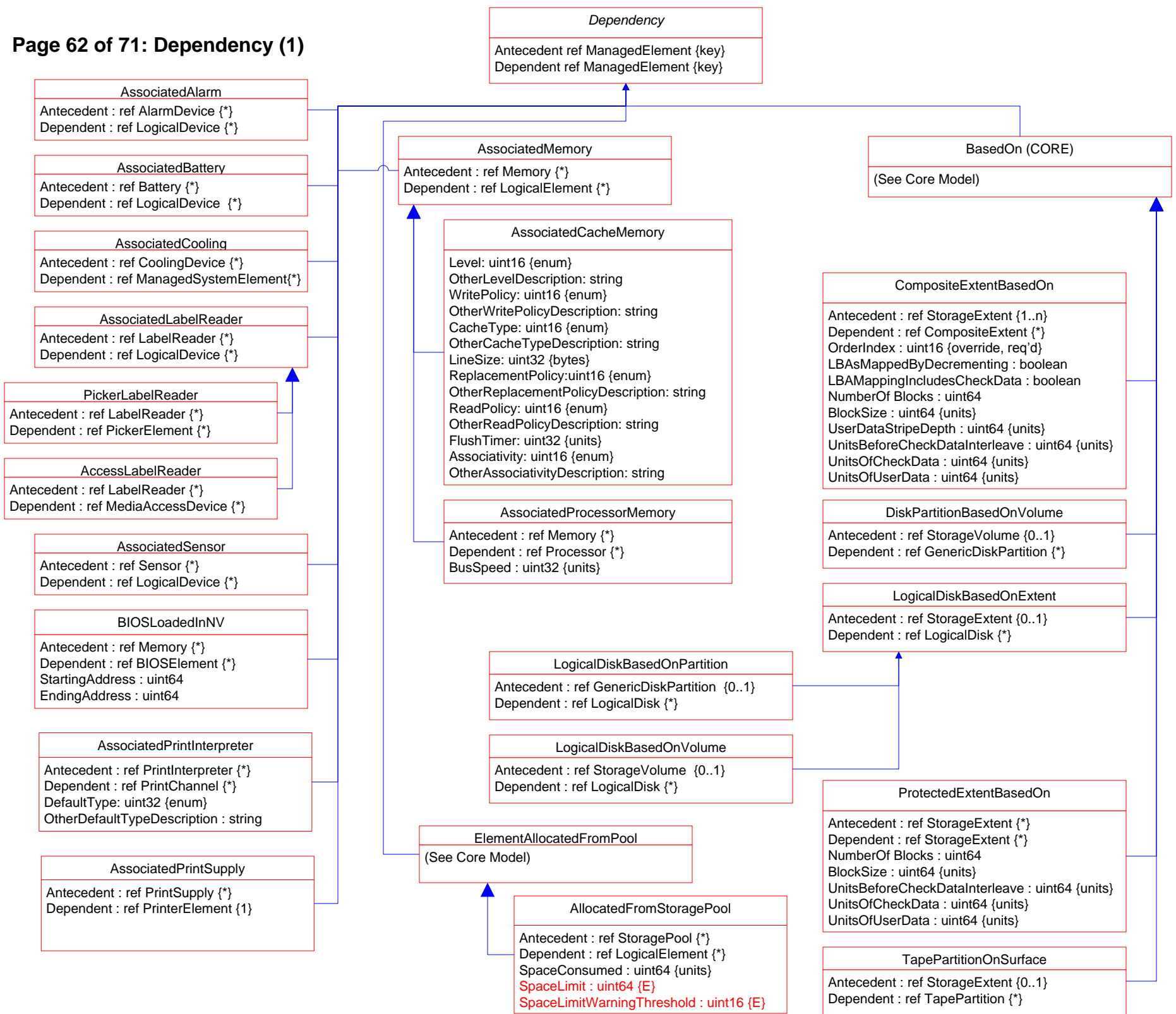




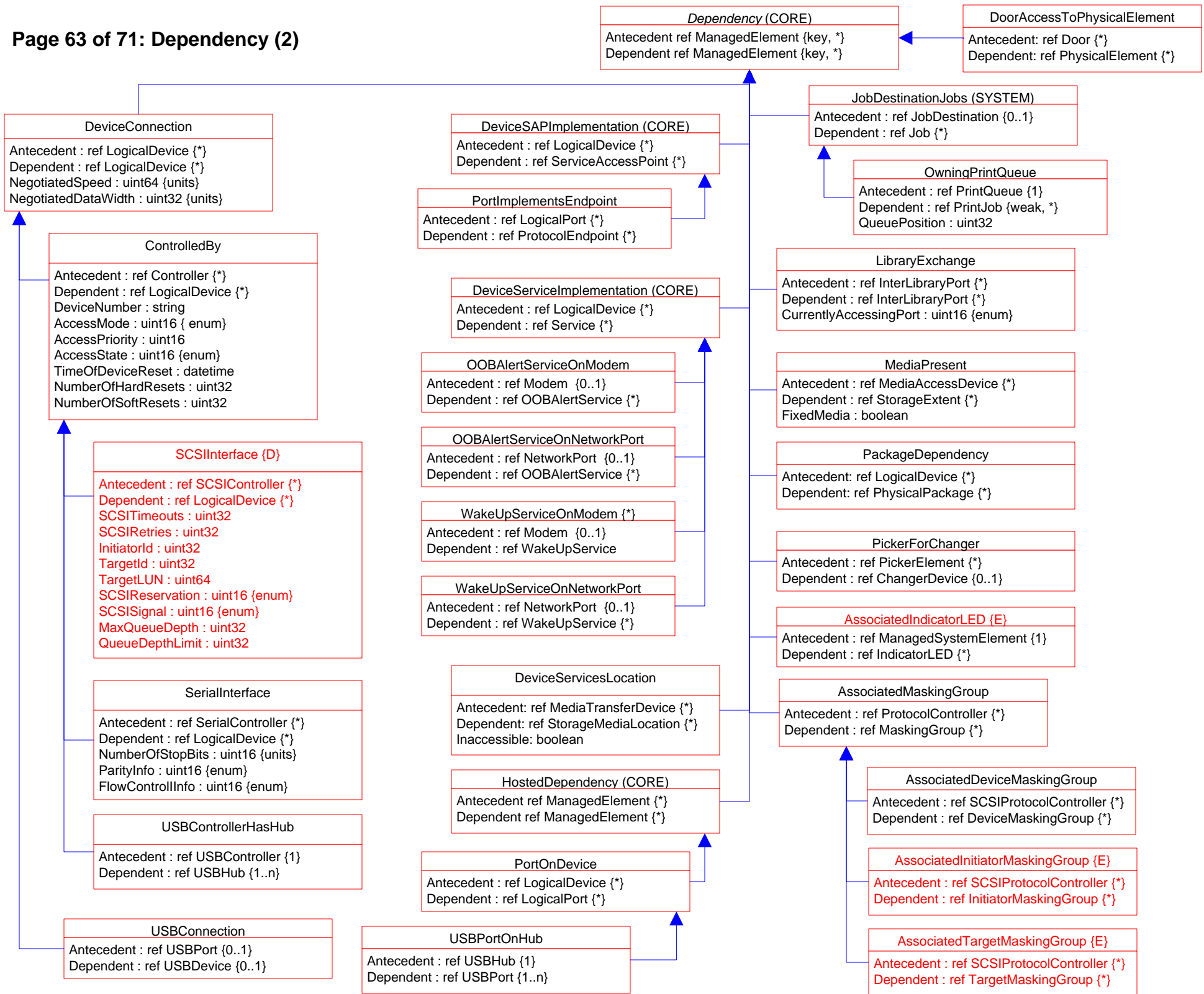
Page 61 of 71: Operational Power

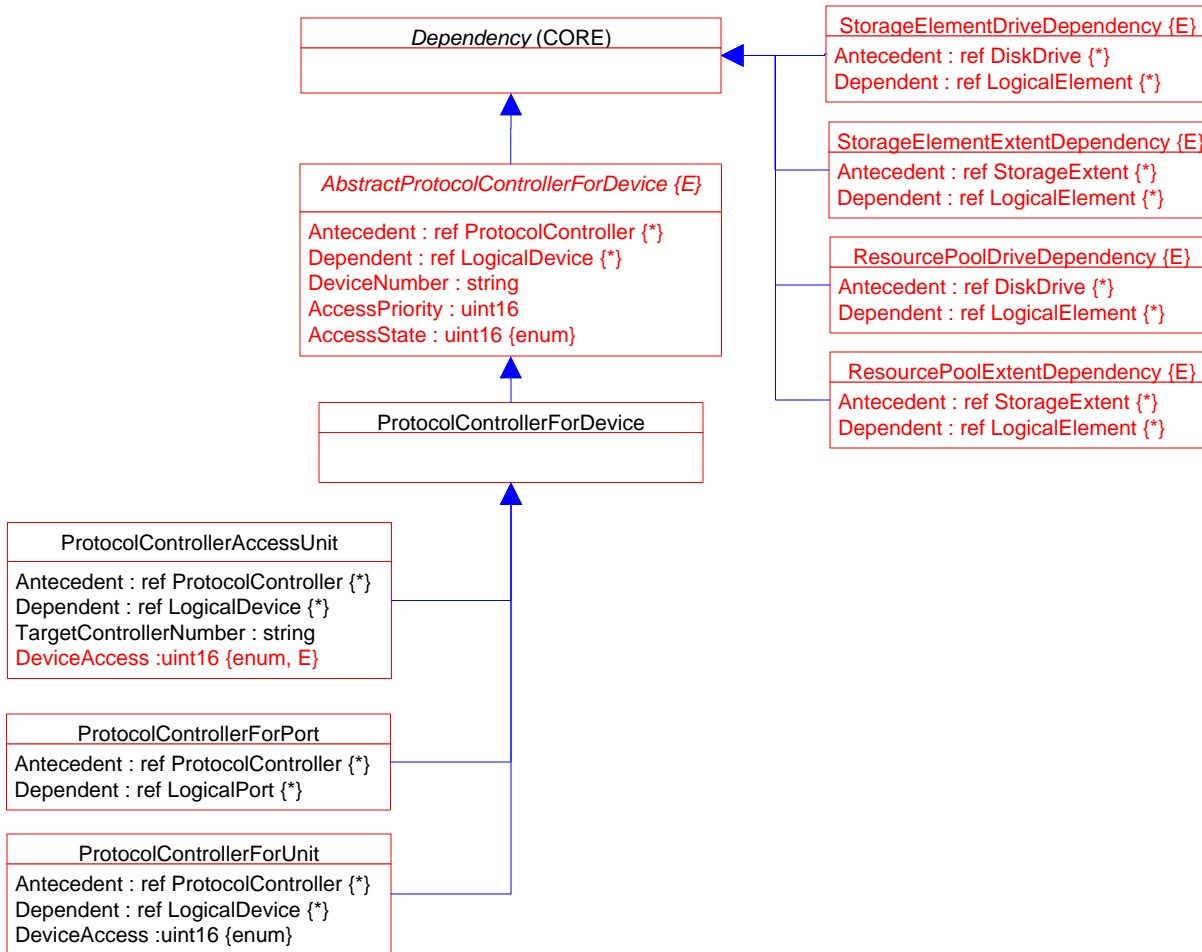


Page 62 of 71: Dependency (1)

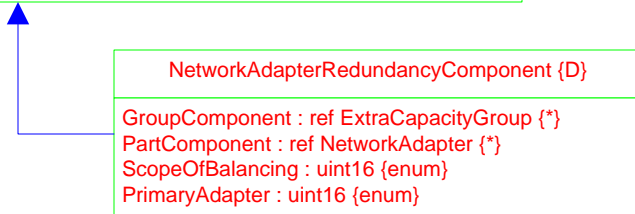
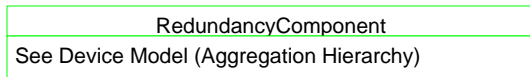
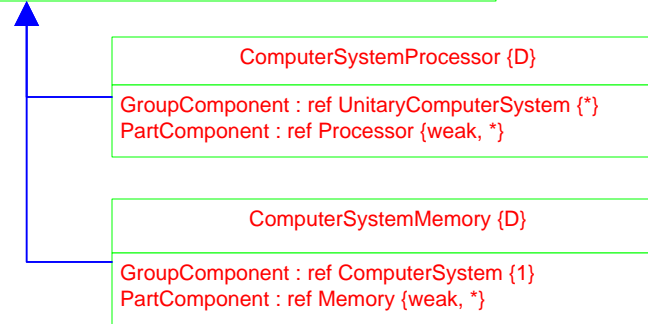
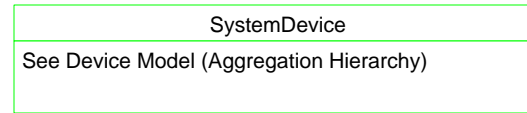
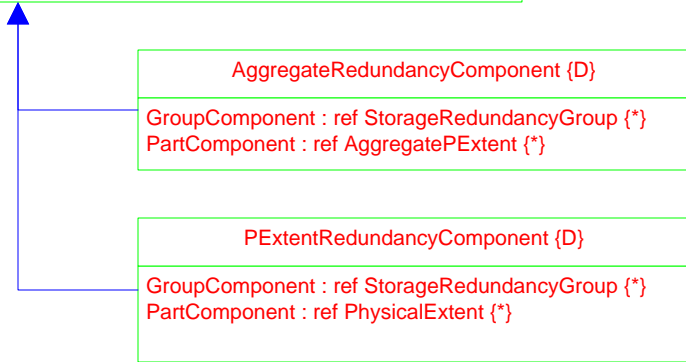
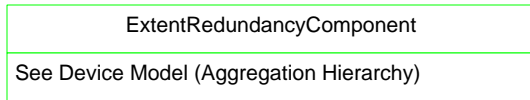


Page 63 of 71: Dependency (2)

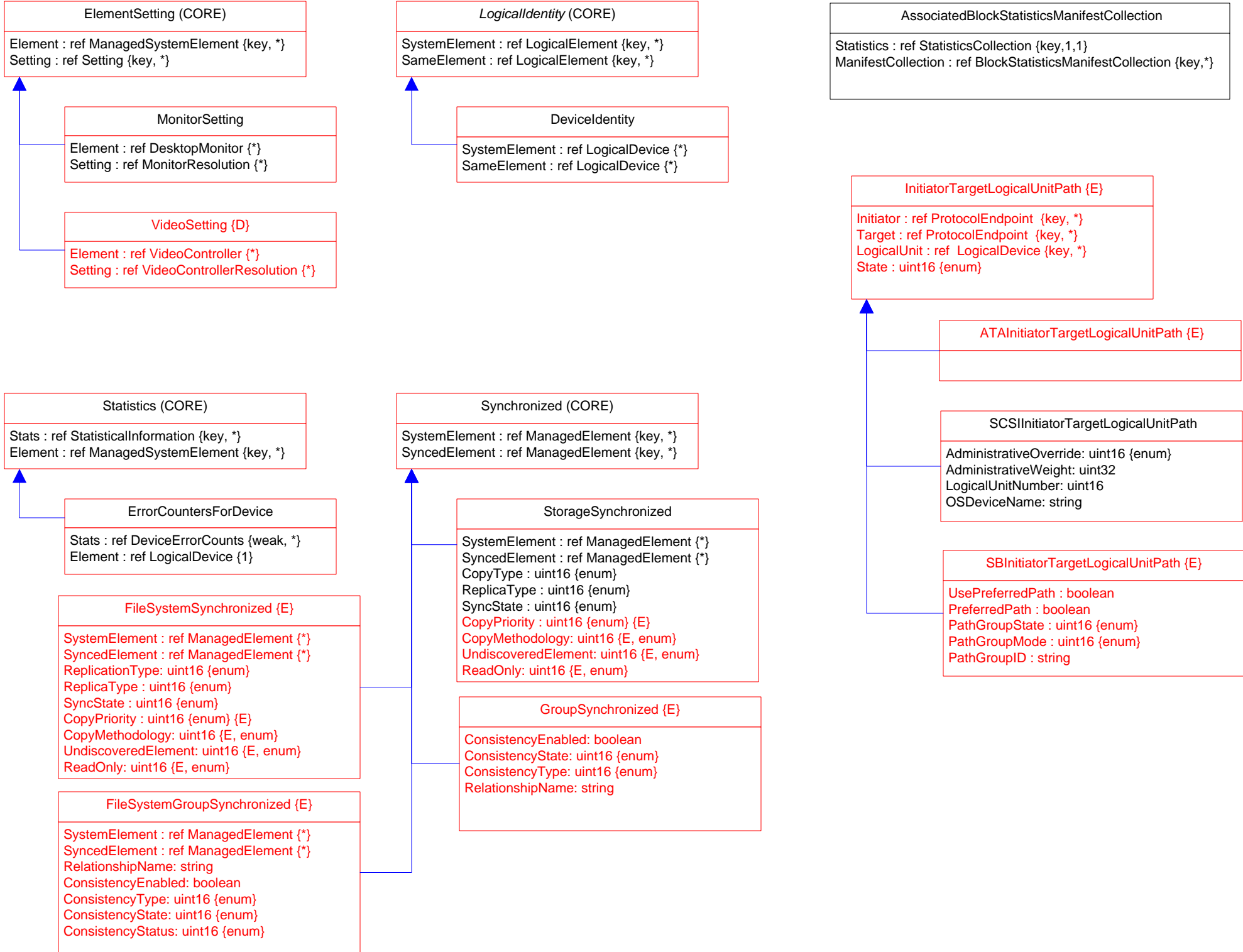


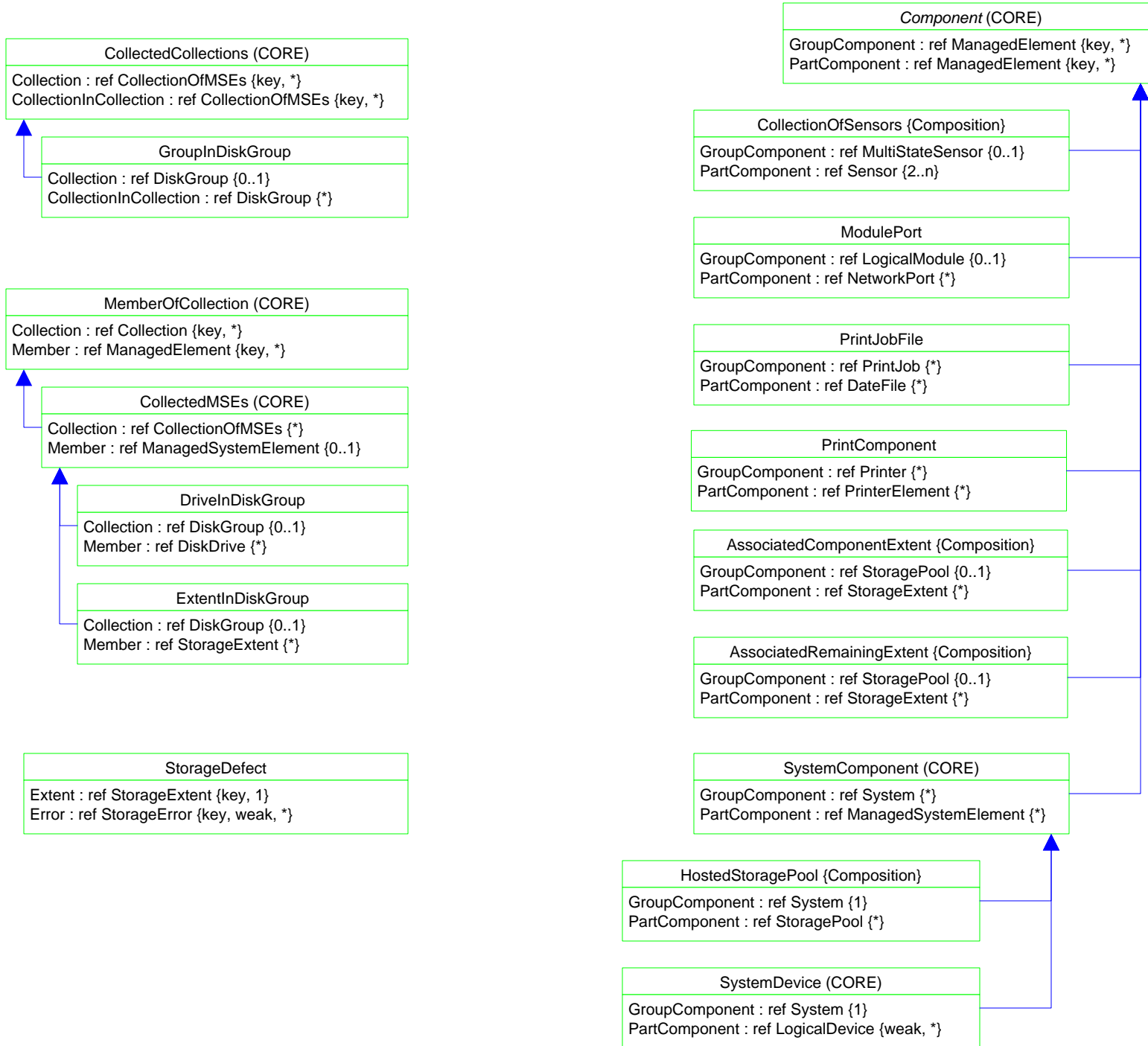


Page 66 of 71: Aggregation Deprecation

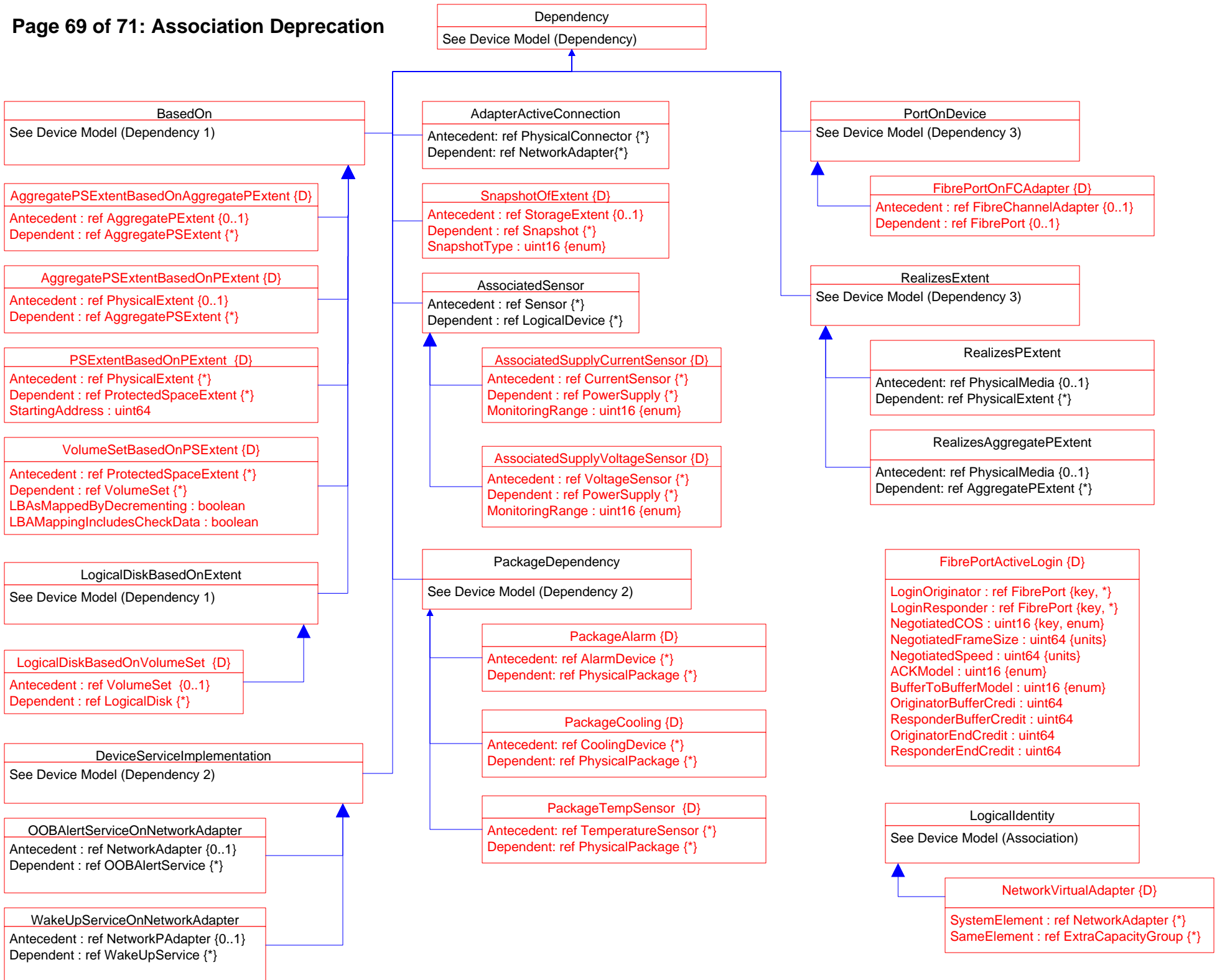


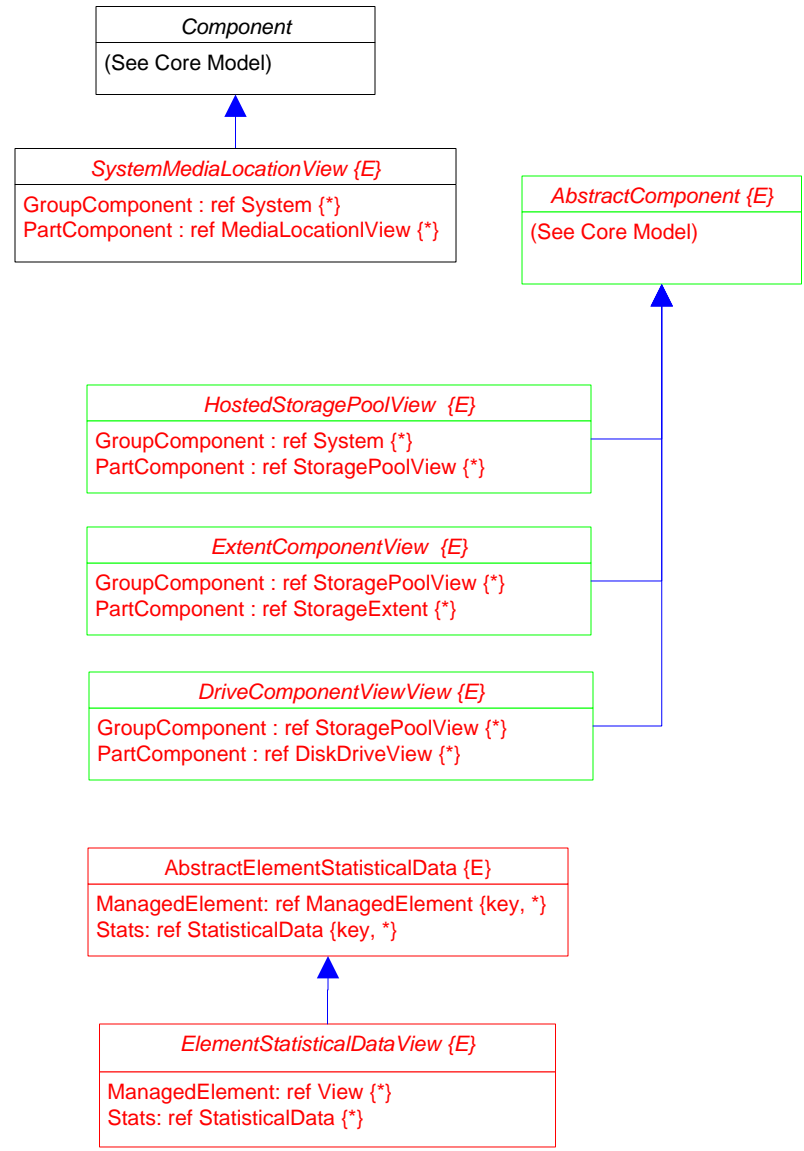
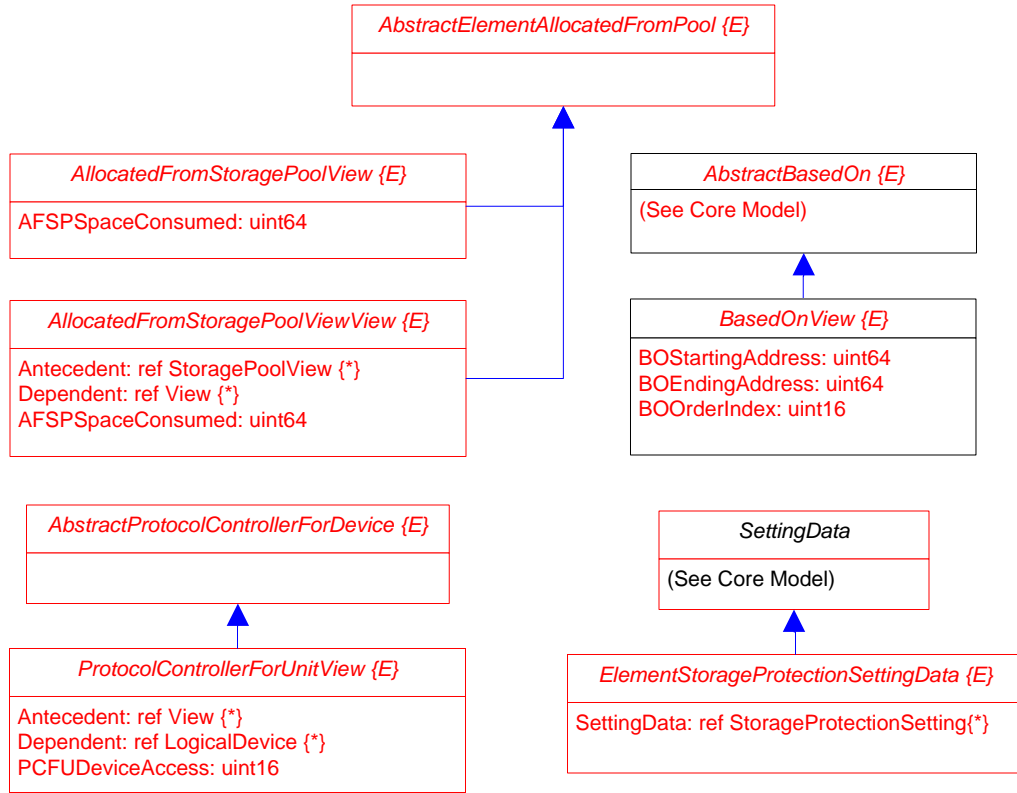
Page 67 of 71: Association Hierarchy





Page 69 of 71: 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