

Changes to the Fabric Configuration Server Model (11-220v0)

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WHERE WE ARE SO FAR IN FC-GS

FC Switching Element and Physical Switch Attributes

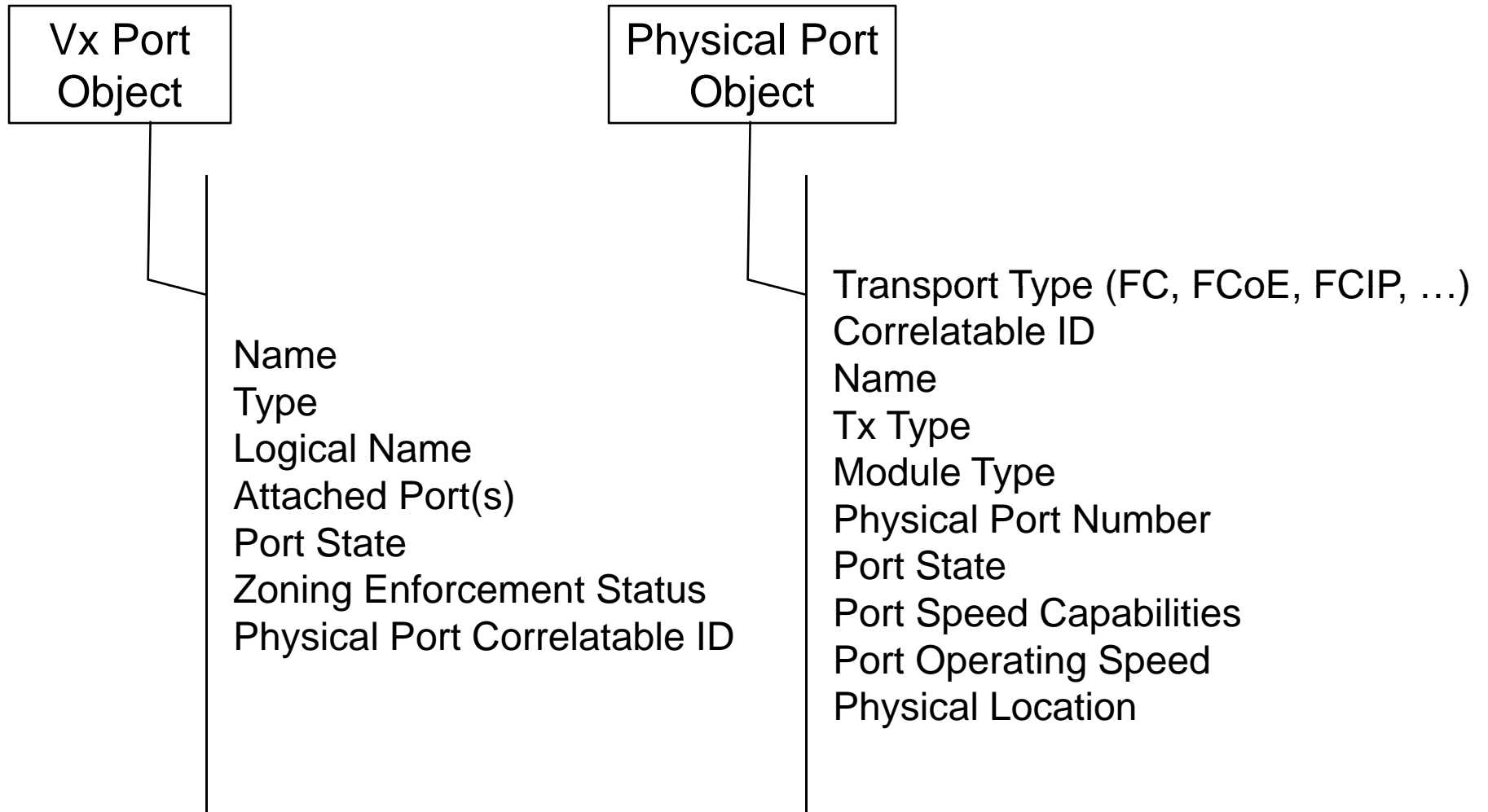
FC Switching
Element
Object

Name
Type
Domain ID(s)
Fabric Name
Logical Name
Management Address(es)
Physical Switch Correlatable
Identifier

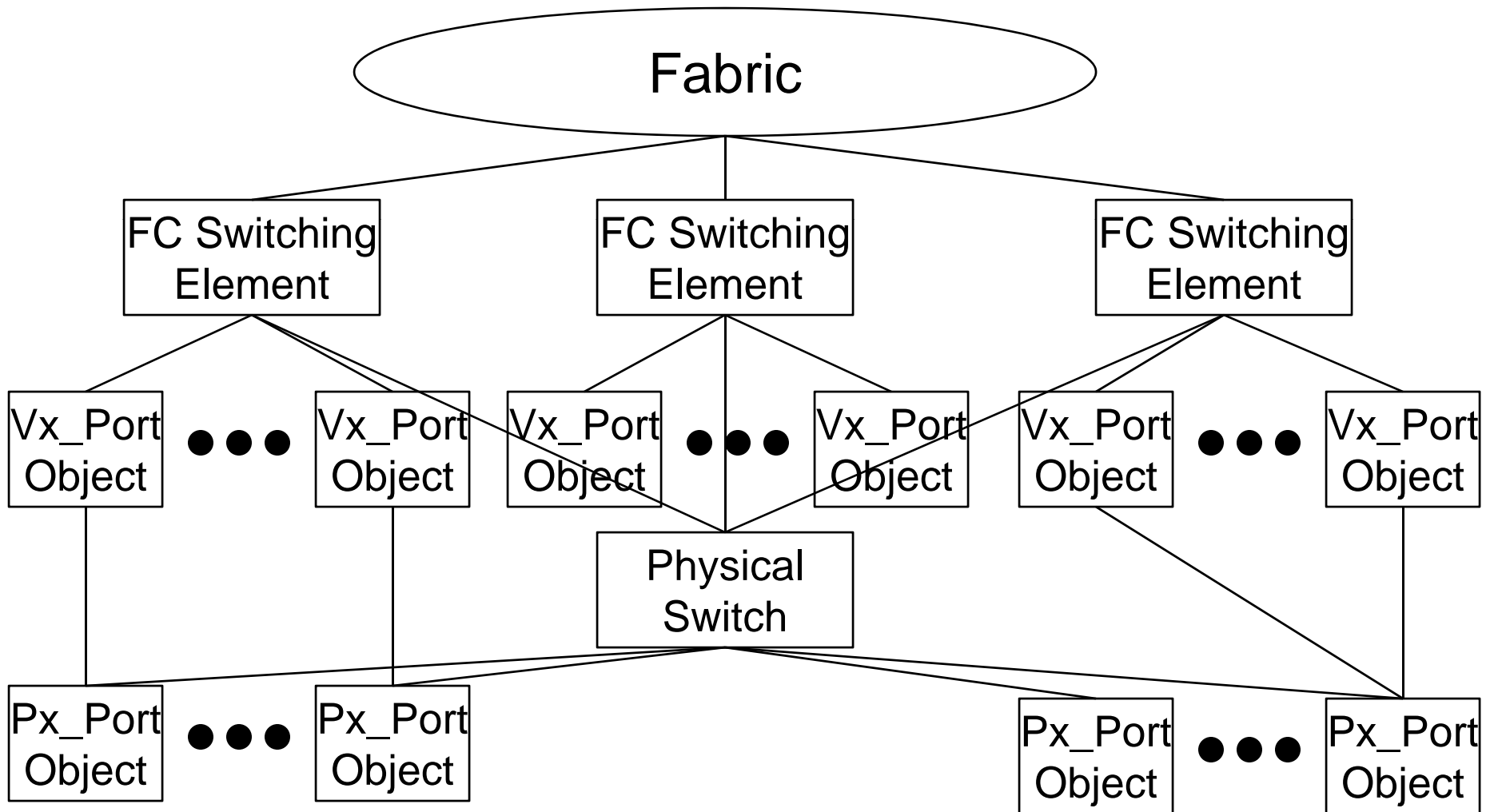
Physical
Switch
Object

Correlatable Identifier
Management Address(es)
Vendor Name
Model Name
Release Code
Vendor Specific Info

Vx Port and Px Port Attributes



Fabric Configuration Server Object Model



Enhanced Fabric Configuration Server

– Request Command Codes

Code (hex)	Mnem.	Description	Attribute(s) in Request CT_IU	Attribute(s) in Accept CT_IU
0100	GSEL	Get Switching Element List	none	List of Switch Element Names
0101	GSEAG	Get Switch Element Attribute Group	Switching Element Name	A group of attributes for the Switch Element
0102	GSEPL	Get Switching Element Port List	Switching Element Name	List of VxPorts
0110	GPSAG	Get Physical Switch Attribute Group	Physical Switch Name	A group of attributes
0111	GPSPL	Get Physical Switch Port List	Physical Switch Name	List of PxPorts
0130	GVPAG	Get Virtual Port Attribute Group	Switching Element Name, List of VxPort Names	A group of attributes for the listed ports

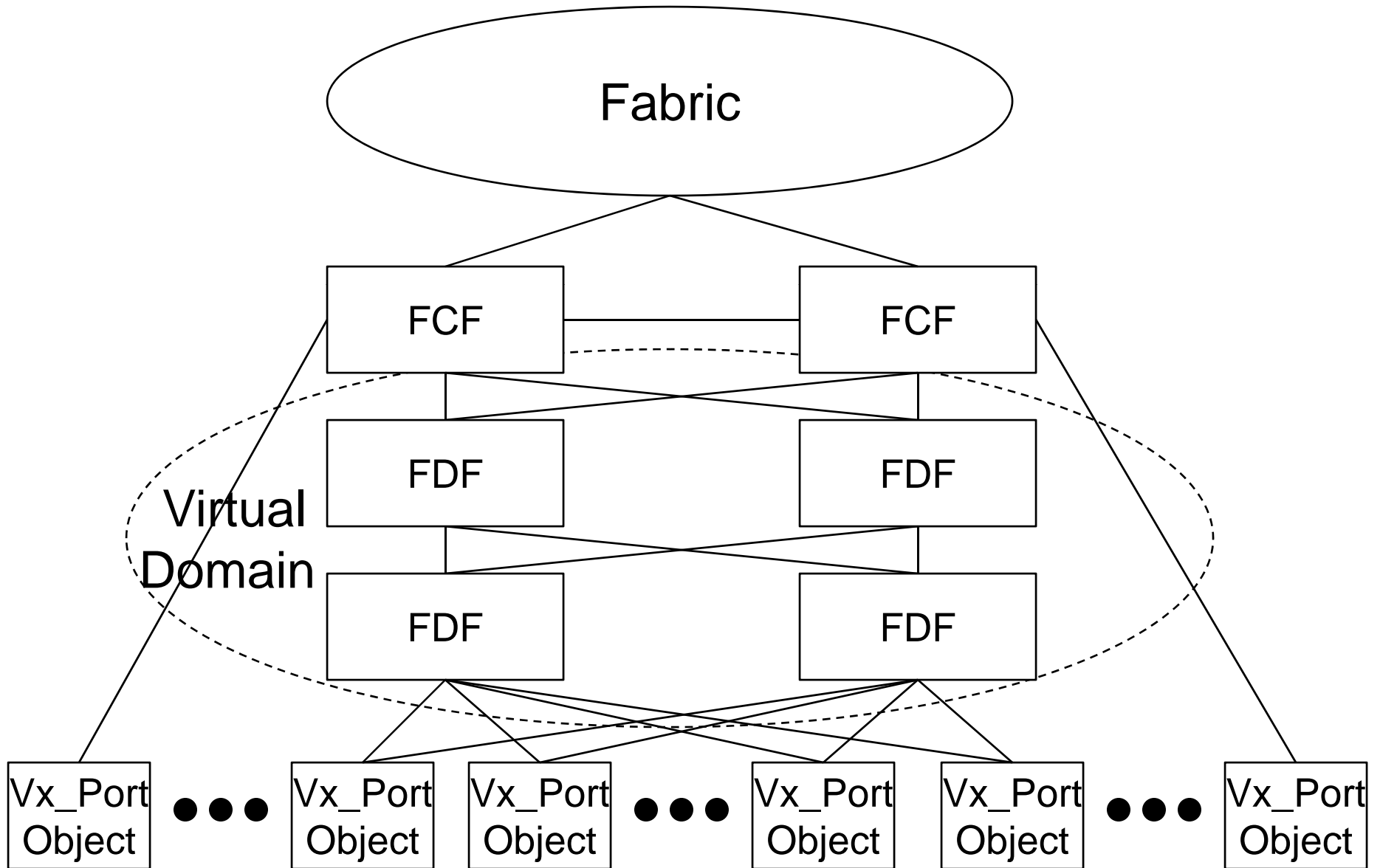
Enhanced Fabric Configuration Server

– Request Command Codes

Code (hex)	Mnem.	Description	Attribute(s) in Request CT_IU	Attribute(s) in Accept CT_IU
0131	GAPL	Get Attached Port List	Port Name	List of Attached Port Names
0140	GPPAG	Get Physical Port Attribute Group	Physical Switch Name, List of PxPort Names	A group of attributes

STILL NEED TO ADDRESS FCFS/FDFS

Cascading FDFs



FDFs/FCFs

- FDF
 - FDF Name
- VA_Ports
- A_Port
- Virtual Links between:
 - Controlling FCFs and Controlling FCFs (VE_Port to VE_Port)
 - FCFs and FDFs (VA_Port to VA_Port)
 - FDFs and FDFs (VA_Port to VA_Port)
 - FDFs and End Device (VF_Port to VN_Port)
- Virtual Domain
 - Virtual Domain ID

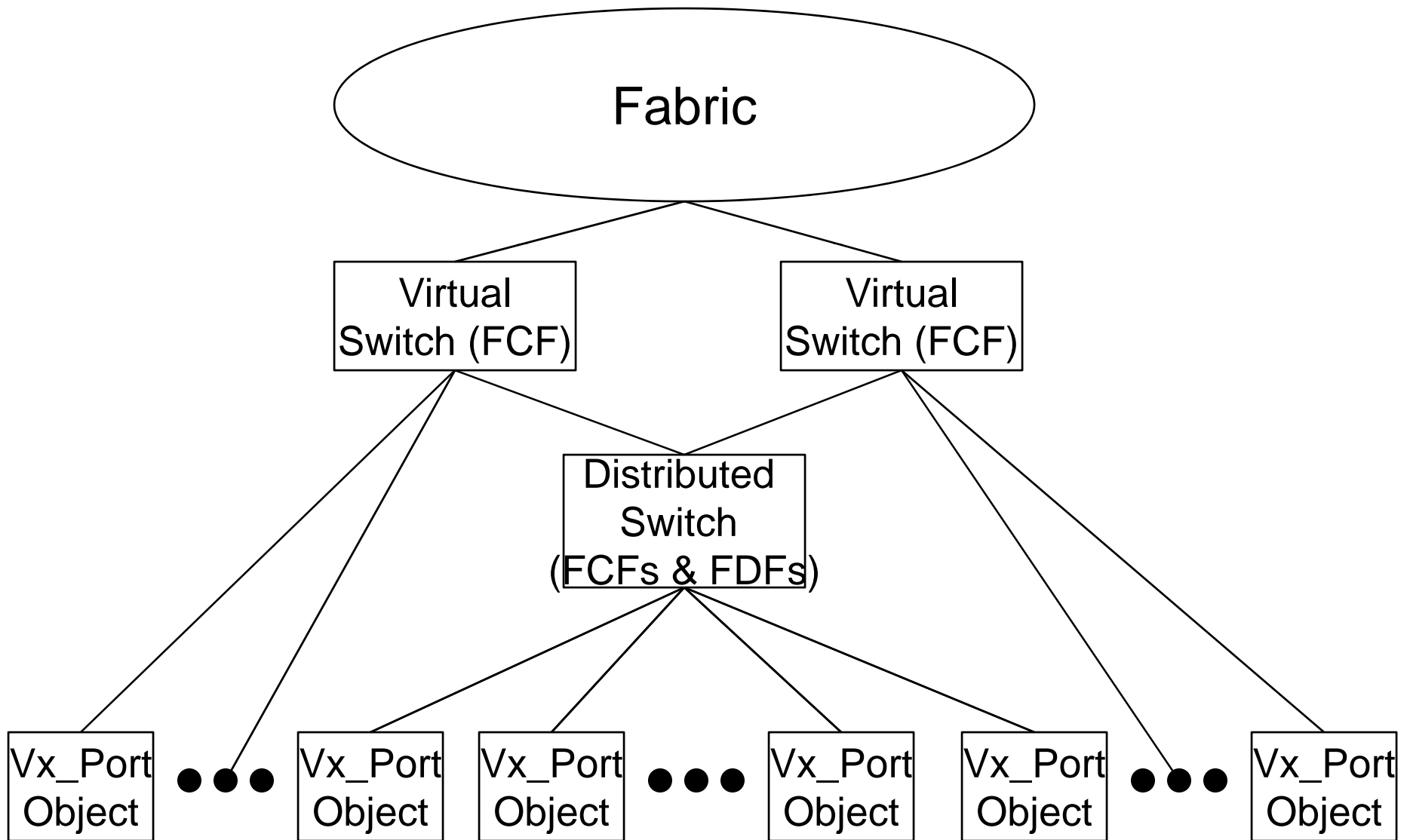
Assumptions

- FCFs have unique names
 - Switch Name
- FDFs have unique names
 - Should be equivalent to Switch Name
- Virtual Domain has unique name
 - What is the allocation/creation model?
 - What is the persistency model

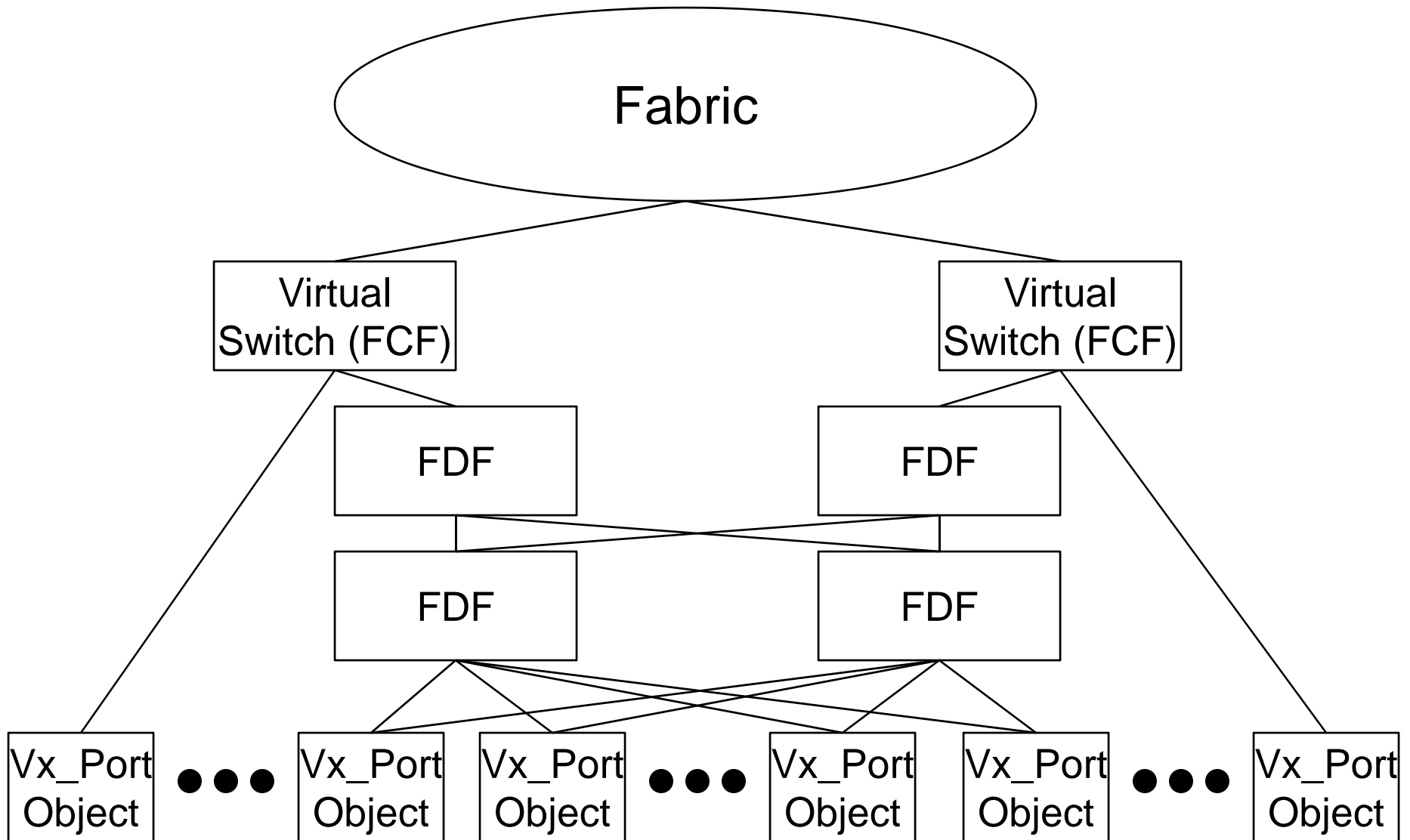
Distributed switch turns model upside down

- Virtual Fabrics
 - One (Physical Switch Object) to many (FC Switching Element)
 - One (Physical Port Object) to many (Vx Port Object)
- Distributed Switch
 - Many (Controlling Switches and FCDFs) to one
 - Many (Physical Port Object) to many (Vx Port Object)

Distributed Switch FSPF Topology View



Distributed Switch FCF/FDF Topology View



Topology has two logical views

- Two Views
 - Controlling Switches (FCF) and FCDFs
 - Logical topology of FCFs and FCDFs
 - Distributed Switch FSPF View
 - FCDFs removed
 - Just the FC Switching Object
 - No A_Port to A_Port links
 - From 11-026v1 page 27
- Not sure how to show Controlling Switches and FDFs View
 - Suggested that we have Interconnect Elements of Interconnect Elements

And there are other Interconnect Element Types

- Interconnect Element Types
 - Switch
 - Hub
 - Bridge
- We still need Hub and Bridge
- We have FDF and FCF also

FC Switching Element and Physical Switch Attributes

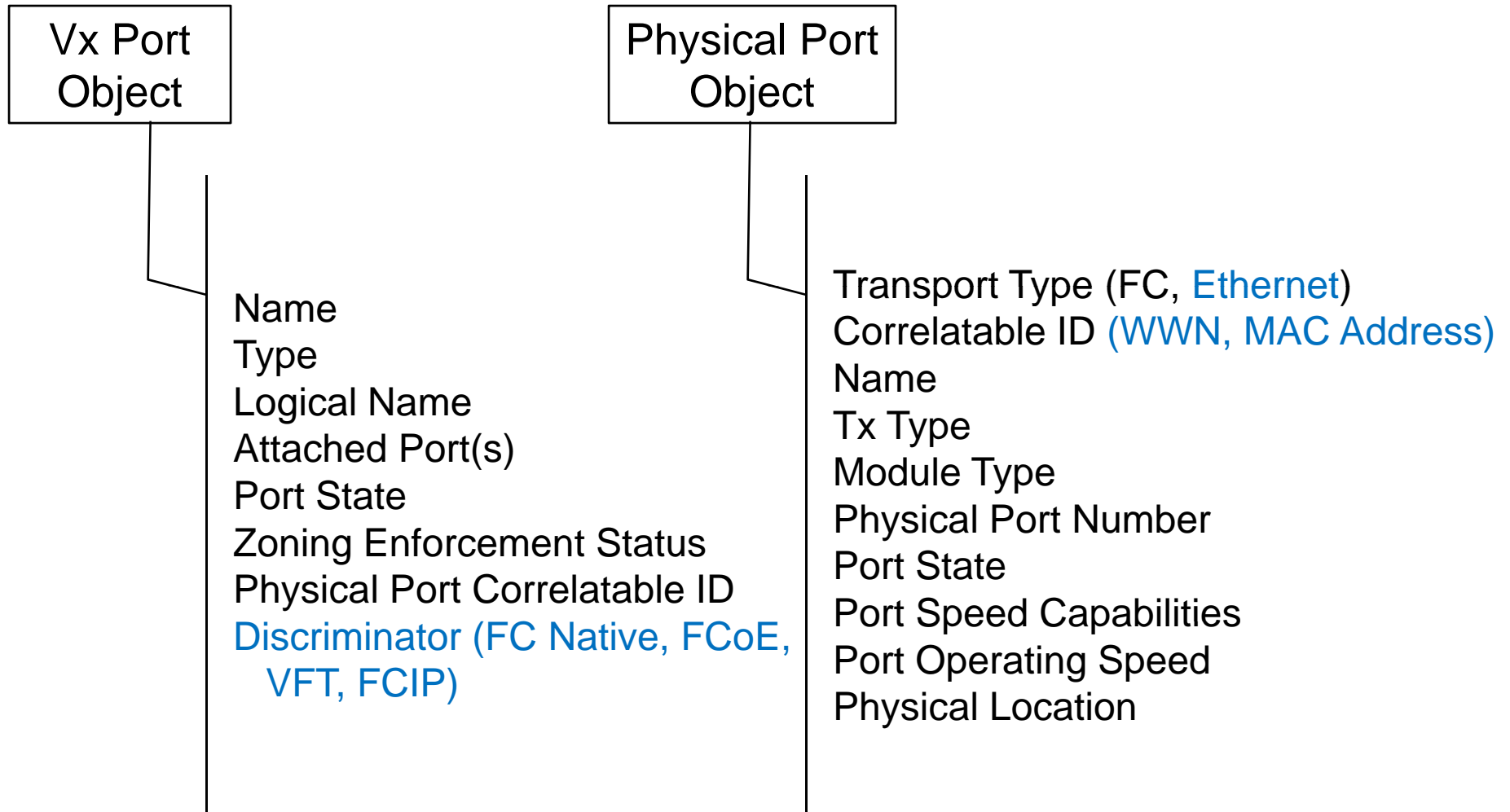
**Interconnect
Element
Object**

Name
Type
Domain ID(s)
Fabric Name
Logical Name
Management Address(es)
Physical Switch **Object** Correlatable
Identifier(s)

Physical
Object

Correlatable Identifier
Management Address(es)
Vendor Name
Model Name
Release Code
Vendor Specific Info

Vx Port and Px Port Attributes



How do we address FCIP where the Correlatable ID is the IP Address which may go over Ethernet?

Other Interconnect Element Types

- Interconnect Element Types
 - Switch
 - Hub
 - Bridge
- We still need Hub and Bridge
- We have FDF and FCF also

Platform Types

- Platform Types
 - Gateway
 - Host
 - Storage Subsystem
 - Storage Access Device
 - Wavelength division multiplexer
 - NAS Server
 - Bridge
 - Virtualization Device
 - N_Port Virtualizer
 - Multi-function Device

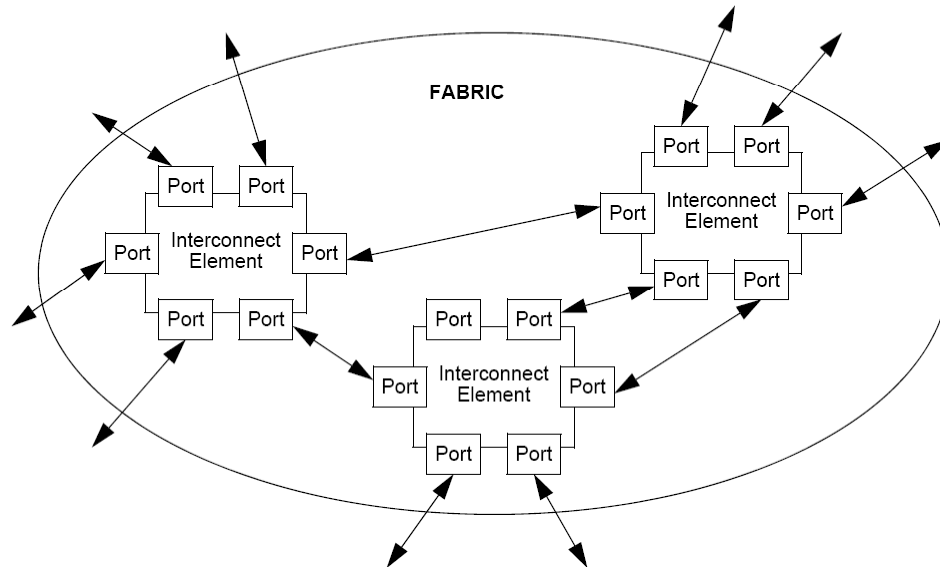
Other ToDos

- Still need Virtual Fabric ID

BACKUP

Fabric Configuration Server

- Physical Fabric Illustration



- States that it “illustrates the physical Fabric, consisting of one or more Interconnect Elements, that each have some number of physical Ports (i.e., LCFs). These Ports are then connected either to other Ports on other Interconnect Elements, or to Nx_Ports outside of the physical Fabric.”

Current Interconnect Element and Port Attributes

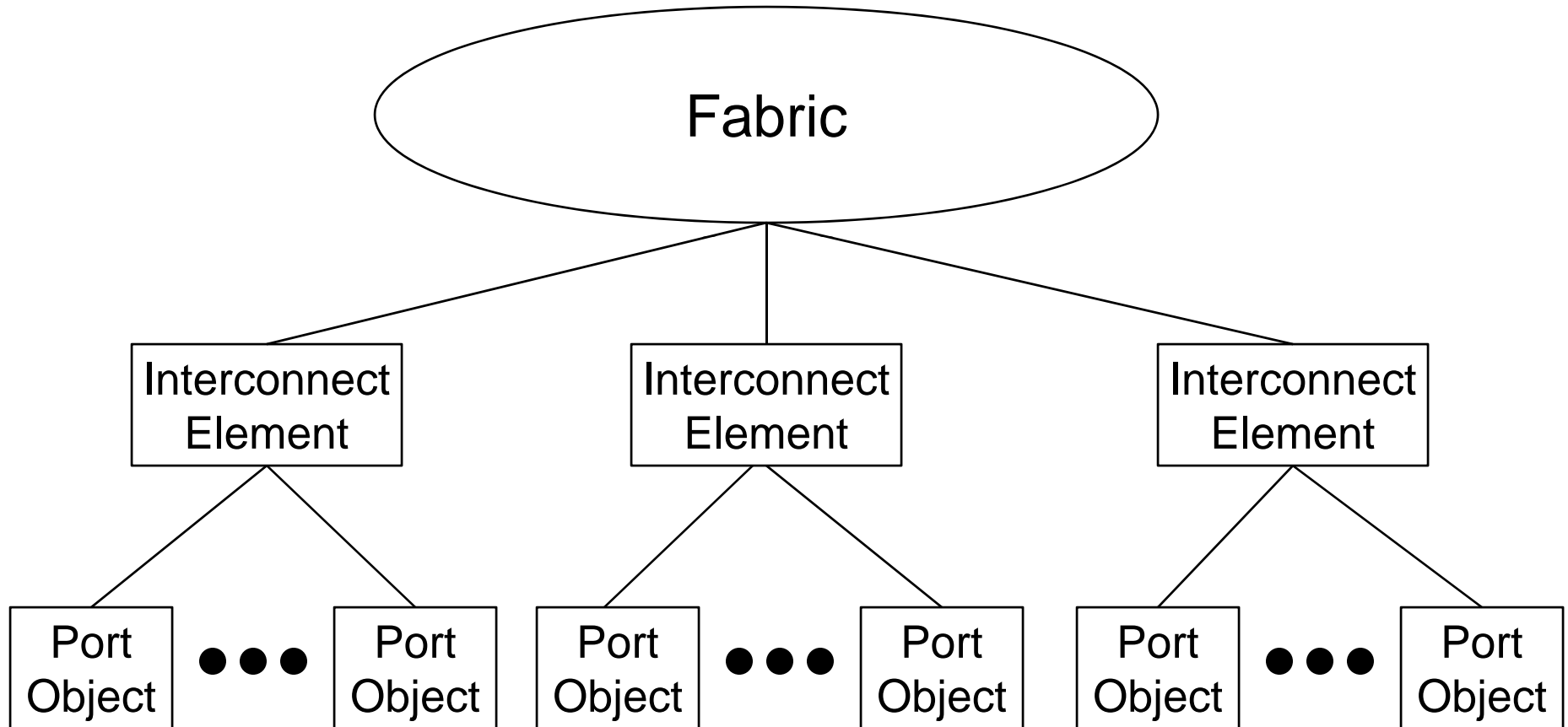
FC Switching
Element

Name
Type
Domain ID
Management ID
Fabric Name
Logical Name
Management Address(es)
Information List
 Vendor Name
 Model Name
 Release Code
 Vendor Specific Info

Port
Object

Name
Type
Tx Type
Module Type
Physical Port Number
Attached Ports
Port State
Port Speed Capabilities
Port Operating Speed
Zoning Enforcement Status

Current Fabric Configuration Server Object Model



Fabric Configuration Server Object Model (SW and FS Terms)

