

**"It's The I\_T Nexus, Stupid"**

**- George Penokie  
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01-093r1**

# The Central Concept in SAM-2 is the I\_T Nexus

✓ This quixotic adventure started  
with a claim that the I\_T Nexus is  
the central concept in SAM-2

✗ In fact, however, it's not

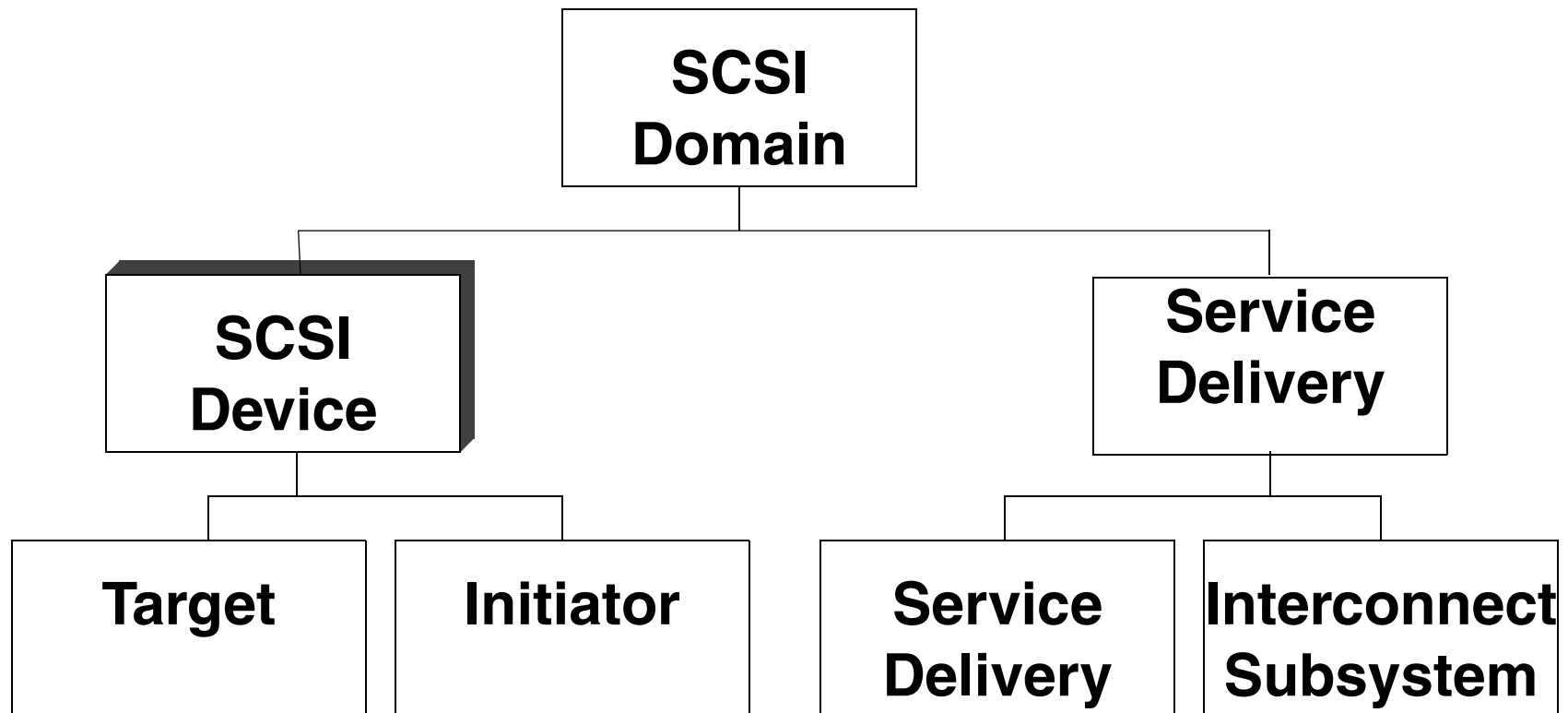


The central concept in SAM-2 is the  
SCSI Domain



From which devolves the SCSI  
Device and the Service Delivery  
Subsystem

# Look at the SAM-2 Hierarchy Diagram



# It's Really Worse Than That

- ✗ The SCSI Domain contains SCSI Devices**
- ✗ The SCSI Devices contain Initiator Ports and/or Target Ports**
- ✗ Initiator Ports and Target Ports Have Identifiers**
- ✓ An I\_T Nexus is a pairing of**
  - 1 Initiator Identifier &**
  - 1 Target Identifier**

# What If The I\_T Nexus Were the Central Concept?

The hierarchy diagram would be



# What If The I\_T Nexus Were the Central Concept?

- ★ Initiator and Target Identifiers
  - ✓ Belong to an I\_T Nexus
  - ✓ Don't belong to a port

# What If The I\_T Nexus Were the Central Concept?

- ★ **A Protocol Could Map an I\_T Nexus**
  - ✓ **To a Login**
  - ✓ **Making Initiator/Target Identifiers**
    - ✚ **Arbitrary 8-byte Numbers**
    - ✚ **Unique Only In The Target**
- ★ **Protocols Stop Using Identifiers as Globally Unique Addresses in the SCSI Domain**

# But If Identifiers Are Not Addresses Then What Are?

✓ Names

✓ Names Used to Effect Login

★ After Login

✱ Identifiers Function Like Today

✱ Name Based Identifier Assignment



# Will It Work?

**X Can't be sure**

**✓ Consistent with SRP and iSCSI**

**✓ SPI-4**

**\* Name = Identifier**

**\* Arbitration = Login**

**\* the legacy case**

**✓ FCP-2 & SBP-2**

**\* Login already exists**

**\* [FCP-2] ADISC & PDISC support**

**Name Based Identifier Correlation**

# But Wait! There's More!

## ★ If This Is An I\_T Nexus



★ Then What's In The Middle Doesn't Have To Be Just One Protocol

★ Login Goes FCP → iSCSI → SRP

★ After That, It's The I\_T Nexus, Stupid

# What About Bridging in the I\_T Nexus?

✓ **It's Possible**

→ **Definitions In Protocol Documents**

→ **Or, in Bridging Documents**

→ **SCSI Transport Protocol layer**

★ **Bridging NOT Constrained By SAM**