

"It's The I_T Nexus, Stupid"

**- George Penokie
20 February 2000**

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01-093r0**

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

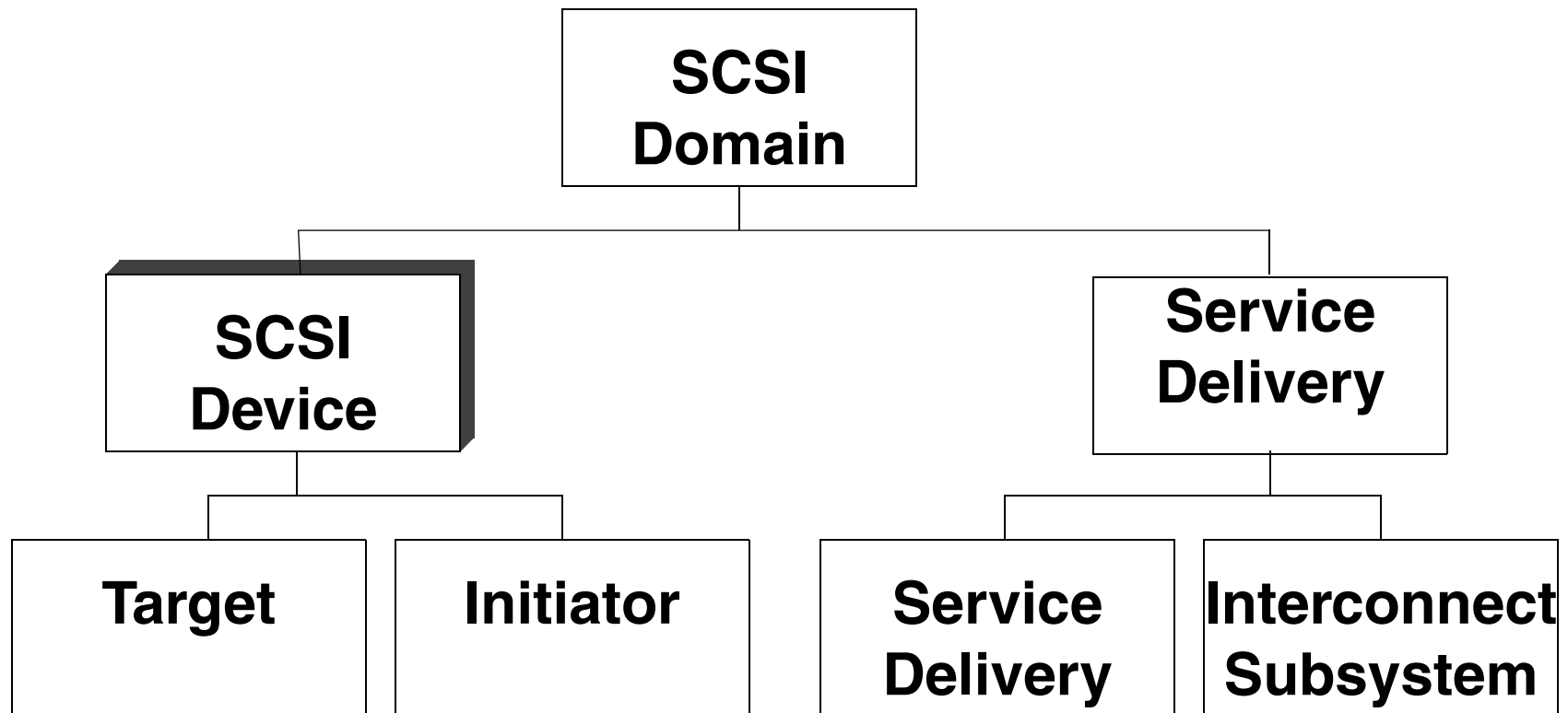


The central concept in SAM-2 is the
SCSI Domain



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 Become Addresses
for SCSI Domain**

✓ **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

*** Login already exists**

*** ADISC & PDISC support**

Name Based Identifier Assignment

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**