"It’s The I_T Nexus, Stupid"
- George Penokie
20 February 2000

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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

๑ The central concept in SAM-2 is the SCSI Domain

๑ From which devolves the SCSI Device and the Service Delivery Subsystem
Look at the SAM-2 Hierarchy Diagram

- SCSI Domain
  - SCSI Device
    - Target
    - Initiator
  - Service Delivery
    - Service Delivery
    - Interconnect Subsystem
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

```
Target Port  I_T Nexus  Initiator Port
```

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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?

✘ 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

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