"It’s The I_T Nexus, Stupid"

- George Penokie
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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

SCSI Domain

SCSI Device
- Target
- Initiator

Service Delivery
- Interconnect Subsystem
- Service Delivery
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  I_T Nexus  Initiator
```
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?

✘ 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