

MSC Presentation

**SCSI and FC Standards
Rochester, Minnesota
George Penokie**

**E-Mail Address:
GOP@US.IBM.COM**

SCSI Management Server Commands (MSC)

Manage Target Devices

Manage Virtualization Devices

Inband Retrieval of Management Information using SCSI commands

Target Device Management

Current SCSI commands have little control over target devices:

- SCSI commands are all delivered to logical units

Minimal target device information is available using functions defined within LUN 0:

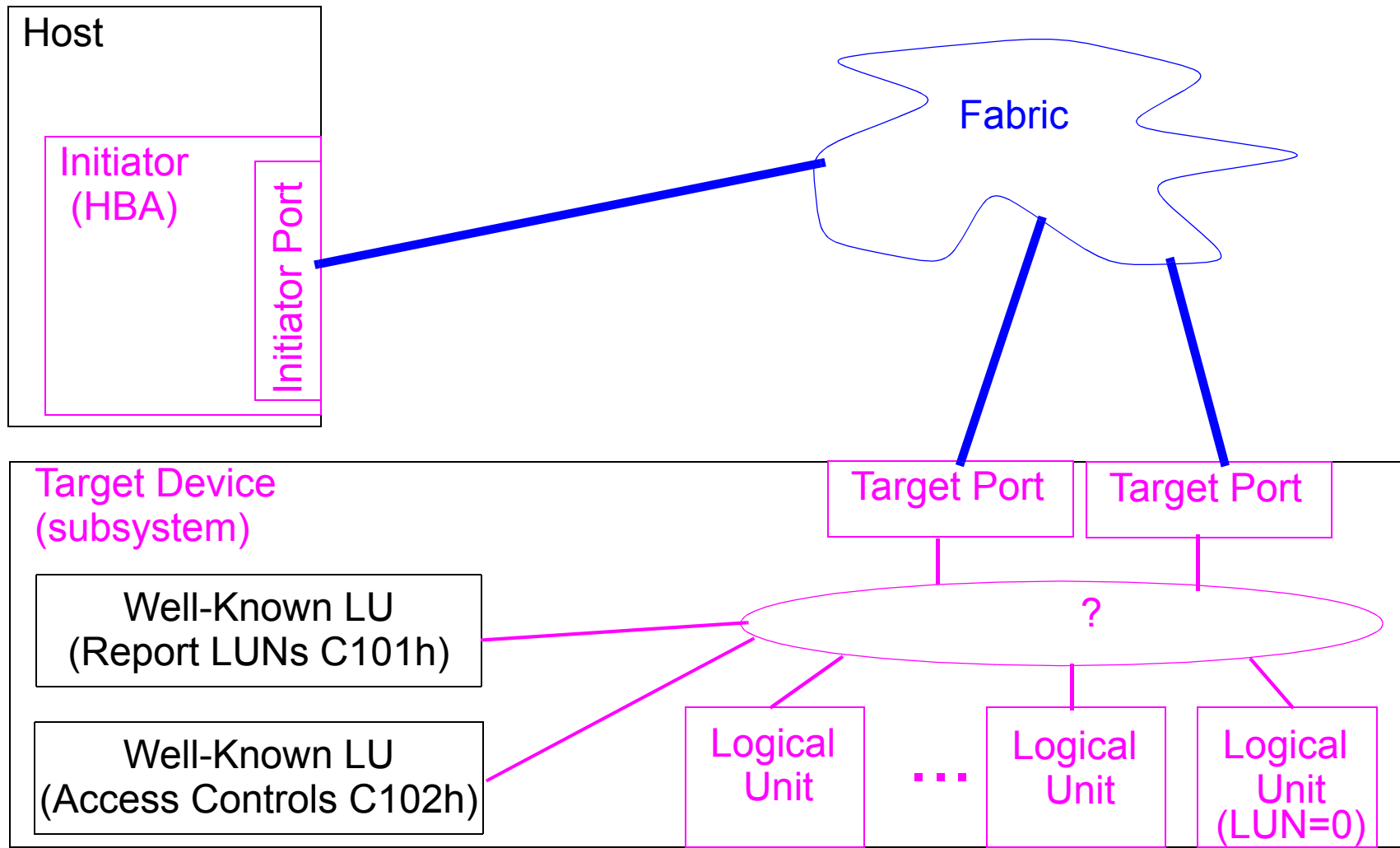
- Requires LUN 0 to have different knowledge than other logical units
- Architecturally a logical unit should have no knowledge of the target device
- Architecturally a logical unit should only have knowledge of target ports that are used to connect it to the transport

Some target related information accessible using well known logical units:

- Well known logical units are specifically architected to have knowledge about the target device:
 - Report logical unit numbers W-LUN
 - Access controls W-LUN
 - Target log pages W-LUN

MSC would define other target device functions that would be accessible using well know logical units.

Target Device Example



Virtual Device Management

In addition to issues relating to target devices, virtual devices:

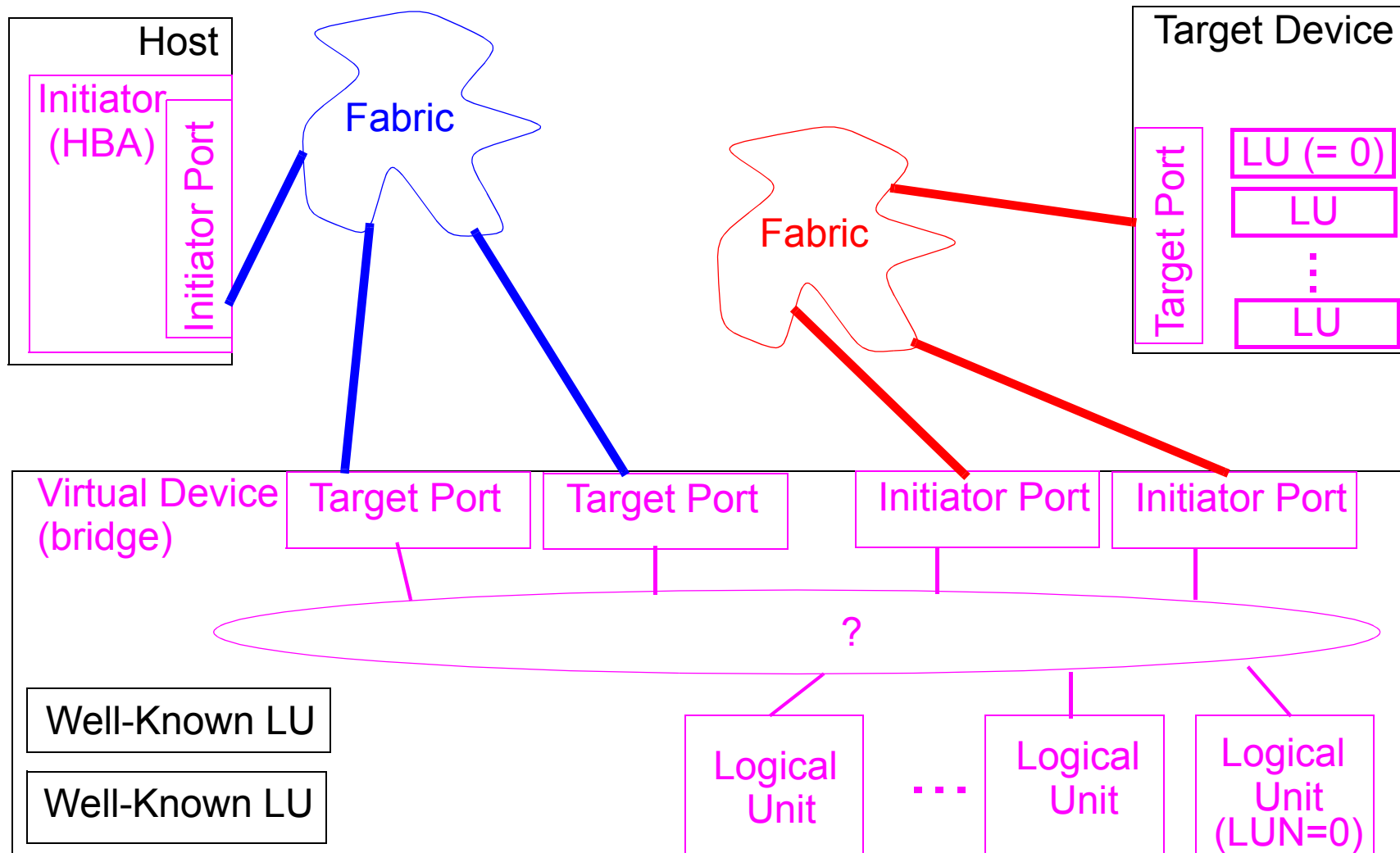
- Do not contain any data storage but instead received the data through a target port and then transmit that data through an initiator port
- May act as a bridging device between different transport protocols
- May hide all the data storage by defining a set of virtual logical units

SCSI has no commands to gather information about the hidden transport protocols nor how the storage is mapped on the back side of a virtual device.

MSC could, for example, define a set of well known logical units that accept SCSI commands to:

- Return the hidden topology
- Return logical unit mappings
- Return target port to initiator port mappings

Virtual Device Example



Inband Retrieval of Management Information

No SCSI commands defined for retrieving management information:

- MIB information
- CIM information

MSC could, for example, define a set of well known logical units that accept SCSI commands to:

- Retrieve MIB and/or CIM information from any target device supporting the relevant well known logical units

The access to the well known logical unit would not be restricted to the type of transport protocol connecting devices in a network.

Target Device Example

