

Bridge Controller Command Set project proposal issues

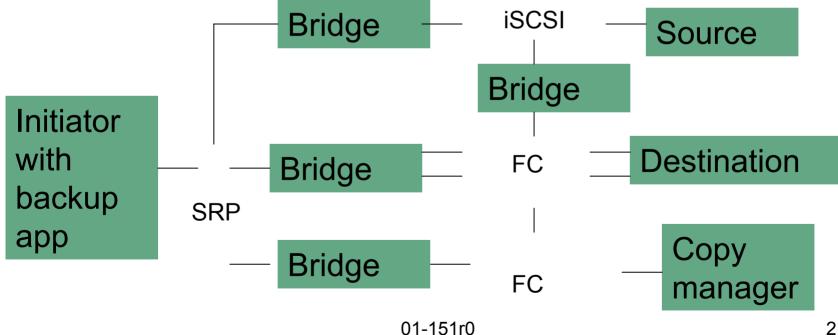
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What are the project goals?

- Bridge needs
 - Expose multiprotocol fabric topology to SCSI software
 - EXTENDED COPY target descriptors
 - backup app, copy manager, data source, data destination may each be on different fabrics





Bridge needs continued

- ACCESS CONTROL Transport IDs
 - TransportID must use target protocol's identifier type
 - target may be on different fabric from initiator
- Asymmetric target ports
 - all target ports may not be reachable
 - need to understand how each target port is mapped through a bridge
- Multiple paths
 - multiple bridges connecting same protocol islands possible
 - many paths through a fabric possible
- Bridge configuration
 - Query beyond bridge, open/close maps to different devices

General management needs

- Access all MIB or XML data in-band
 - alternate way to get at the data
- In-band vs. out-of-band management
 - both useful in different scenarios
- Management Command Set (MCS)?
- SCSI Socket Services (SSS) to transport IP over SCSI?
- same or different from bridge needs?
 - two proposals or one
 - define bridge commands as MIBs or something that can be shared with IP management tools



What device type?

- BCC (new) vs. SCC-3 (existing)
- Existing bridges claim to be SCC devices
- Existing RAID controllers also claim to be SCC devices
- Neither implements all the required features of SCC
 - MAINTENANCE IN
 - VOLUME SET IN/OUT
 - REDUNDANCY GROUP IN (one "configuration method" is required - simple, basic, general - which implies at least this command be supported)

What device type continued

- Current operating systems tolerate SCC devices, may not understand a new device type
- New type indicates new commands supported
- How to differentiate SCC-2 vs SCC-3
 - Version descriptors in INQUIRY data
 - Try new command, rejection means likely SCC-2 only device
 - CmdDT INQUIRY feature
 - broken for MAINTENANCE IN/OUT and variable length CDBs



Target port cognizant functions?

- Multiported target behind a bridge
- Bridge may have access to all the ports or just a subset
- Bridge may have multiple ports on either side (near/far)
- Relative target port ID
 - Real LU only knows about its own hardware
 - In a LUN mapping bridge, does the bridge need to make them identifiers for its own near ports?
- REPORT and SET TARGET PORT GROUPS
 - logical unit has control of its target ports
 - No control of bridge target ports

