

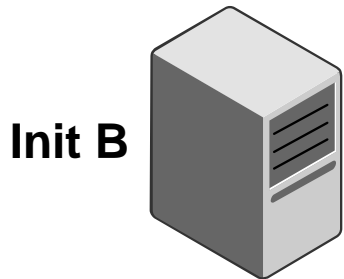
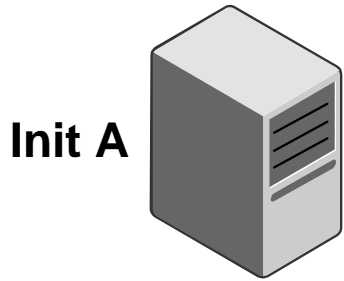
Persistent Reservation Issue #346 Update

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Symantec

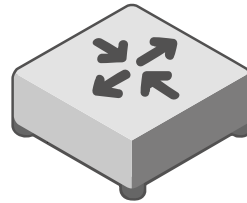
Topics

- Basic problem as presented last September
- Current Progress
- Idea for Tracing SCSI infrastructure

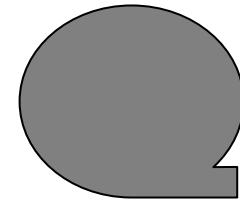
Basic Situation



Two Initiators

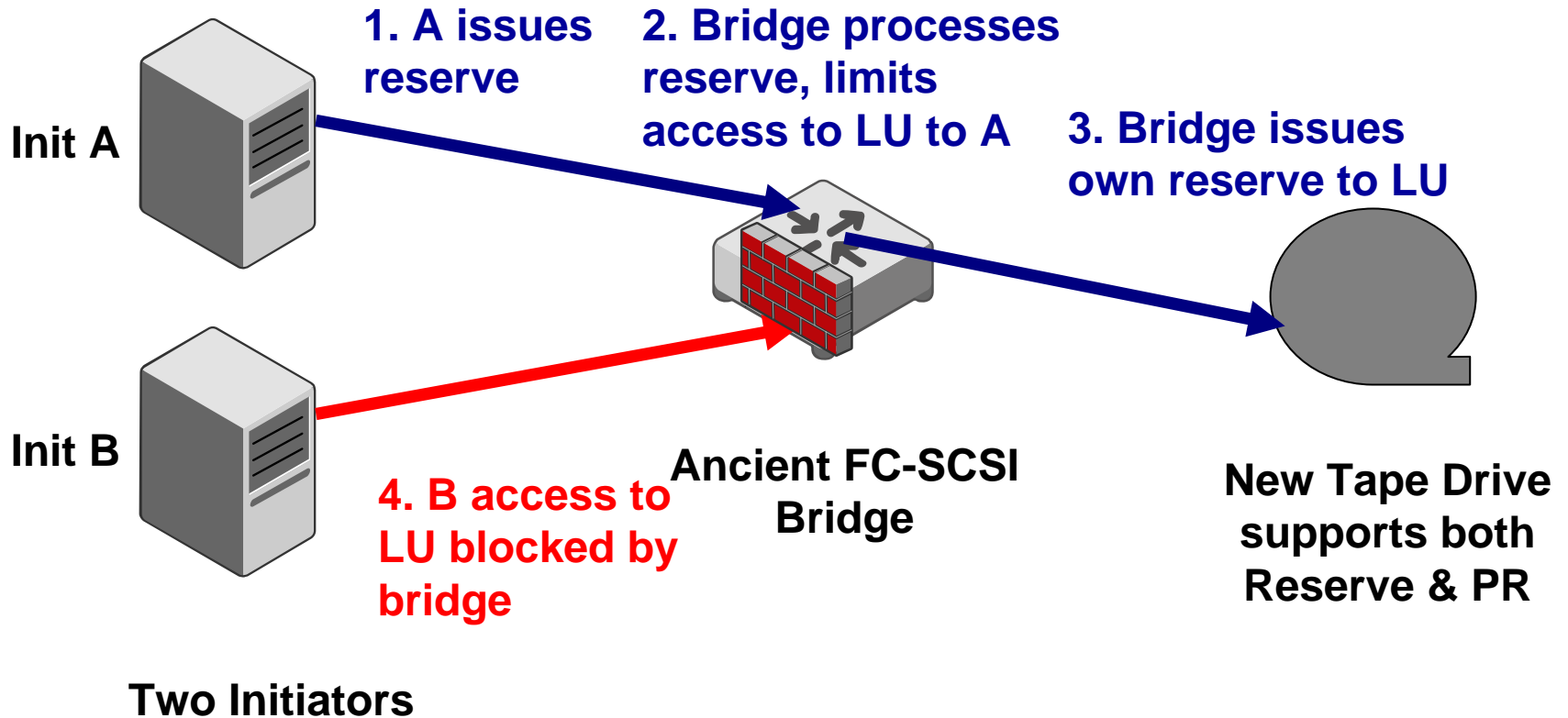


**Ancient FC-SCSI
Bridge**



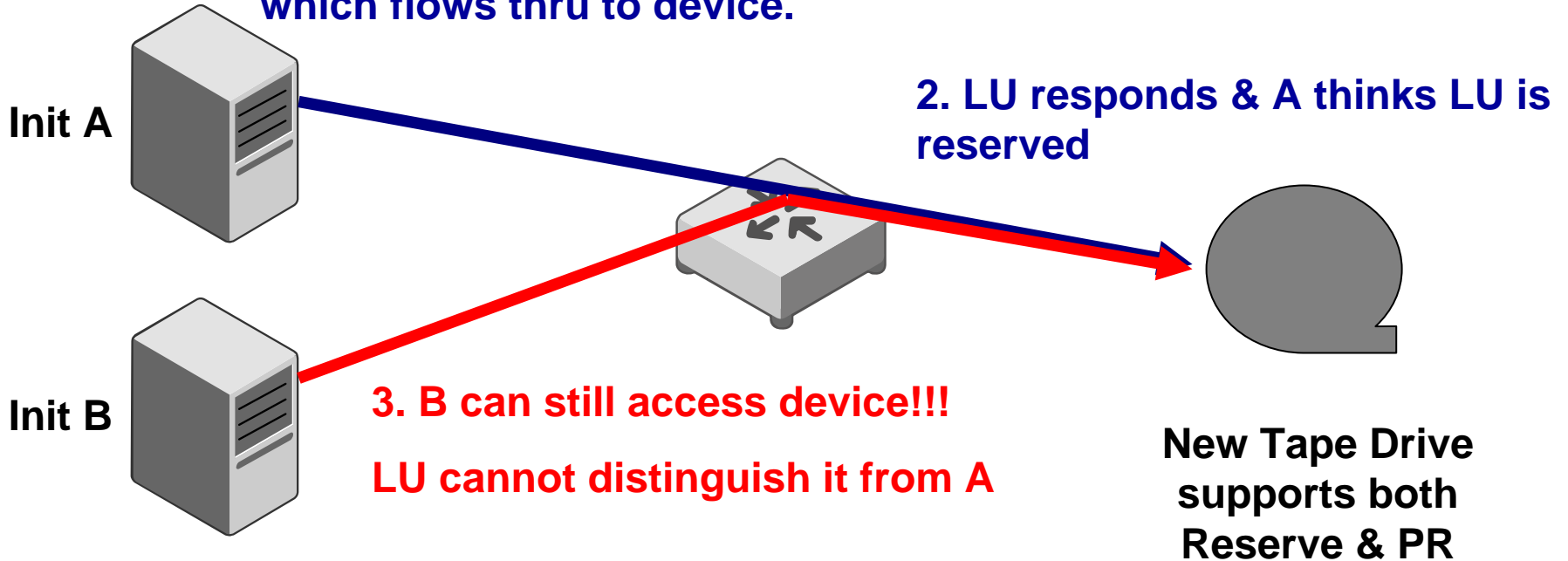
**New Tape Drive
supports both
Reserve & PR**

Reserve works well



PR fails horribly

1. A issues PR Register & Reserve
which flows thru to device.



Two Initiators

Current Progress

- Since September, at least 2 bridge vendors have addressed the problem
 - Both now detect PR commands
 - Do not pass them through to the back end
 - Return “Illegal Command” to Initiator
- This protects against the problem OK
 - But doesn't give much information about the reason for failure

Tracing SCSI Infrastructure

- The proposal to allow Inquiry to perform a function like “trace route” generated some supporting comments
 - Is there enough interest to warrant a proposal for SPC-4 independent of the bridge problem?
 - How should this be coordinated with the bridge commands proposal?

Add Field to INQUIRY

Bit Byte	7	6	5	4	3	2	1	0
0	OPERATION CODE (12H)							
1	reserved			LEVEL COUNT (LC)			Obsolete	EVPD

- Define new Level Count field (LC) containing unsigned integer in byte 1
- Rules as follows
 - If LC=0, existing behavior
 - If LC>1, decrement LC by 1
 - If result=1, respond to Inquiry command
 - Else, relay the command to the next level in the hierarchy as per SAM-3
- Would allow an application to map a hierarchy, and induce all SCSI-cognizant devices in path to identify themselves
 - Even supporting only EVPD=0 would be enough initially to indicate presence
 - May have to create some new Peripheral Device Type Codes e.g Intermediate Device