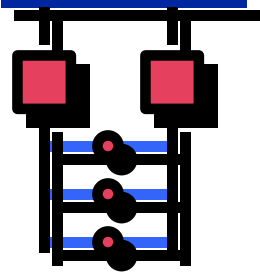
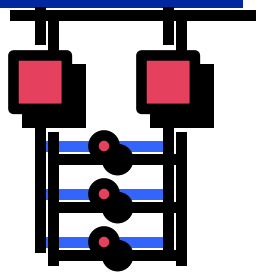


Fault Tolerant
Controller
Configurations



Proposed Controller Failover Profile

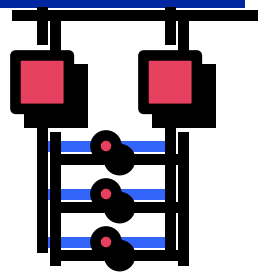
Steve Sicola
Digital Equipment Corporation



Proposed Controller Failover Profile

■ Overview

- Purpose
- Assumptions about Fault Tolerant Controller Configurations & Failover
- Functional Description of FT Controller Configuration Usage
- Additional SCSI-3 Requirements & Issues
- Other High Availability Issues - Hagerman

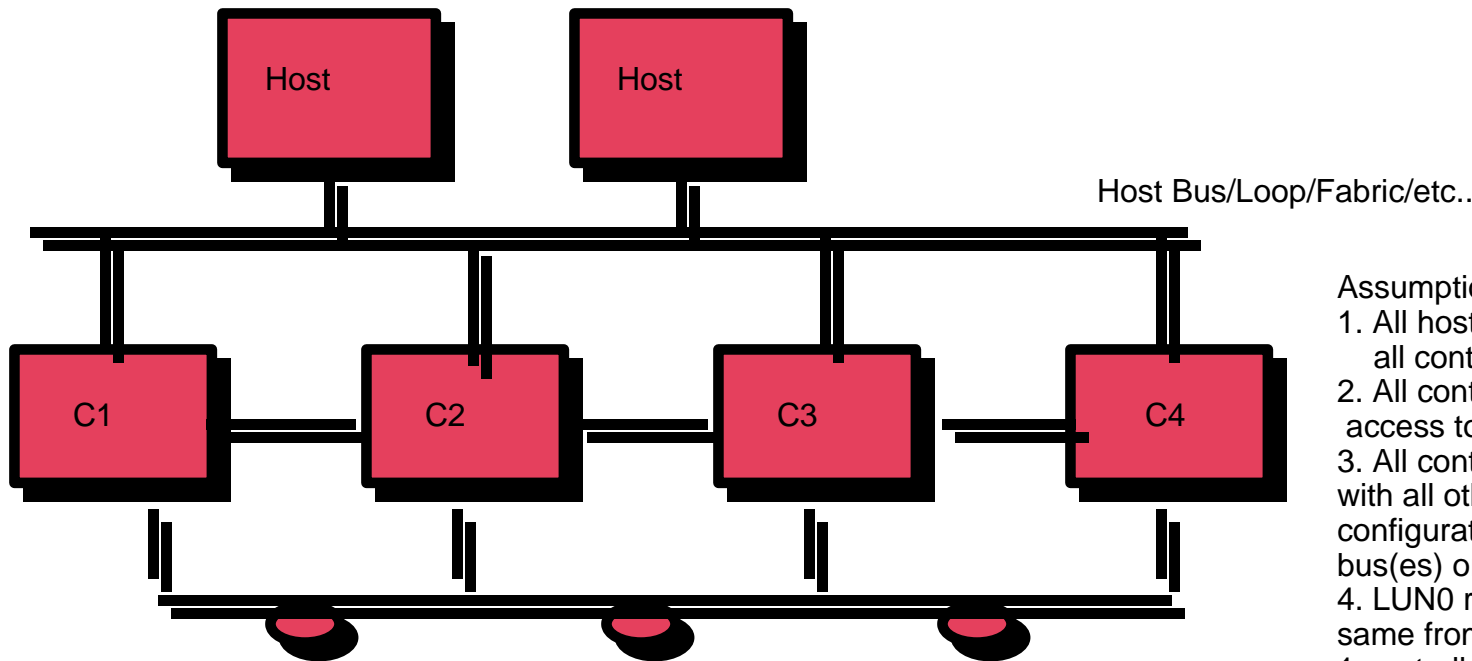


Purpose for Profile

- **Generalize the concept of fault tolerant controller configurations**
 - 1 controller logically with many ports
- **Generalize usage of SCC to aid OS driver development across all industry platforms for various fault tolerant configuration types**
 - standardize setup and/or registration of controllers in FT configuration (with naming independent of serial #'s)
 - standardize reporting of failing controller/returning controller events
 - one port to n-port controller boards
 - any number of controller boards in configuration

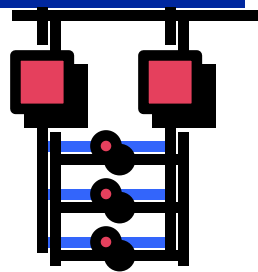
Fault Tolerant Controller Configurations

SCC & Fault Tolerant Controller Assumptions



Assumptions

1. All hosts can access all controller
2. All controllers share access to storage
3. All controllers can communicate with all other controllers in configuration via shared storage bus(es) or private comm intrfce
4. LUN0 response exactly the same from all controllers (ie 1 controller logically with n-host ports)



Functional Description of FT Controller Usage

- SCC used to either create attachments between controllers sharing storage or report attachments
- ;S