

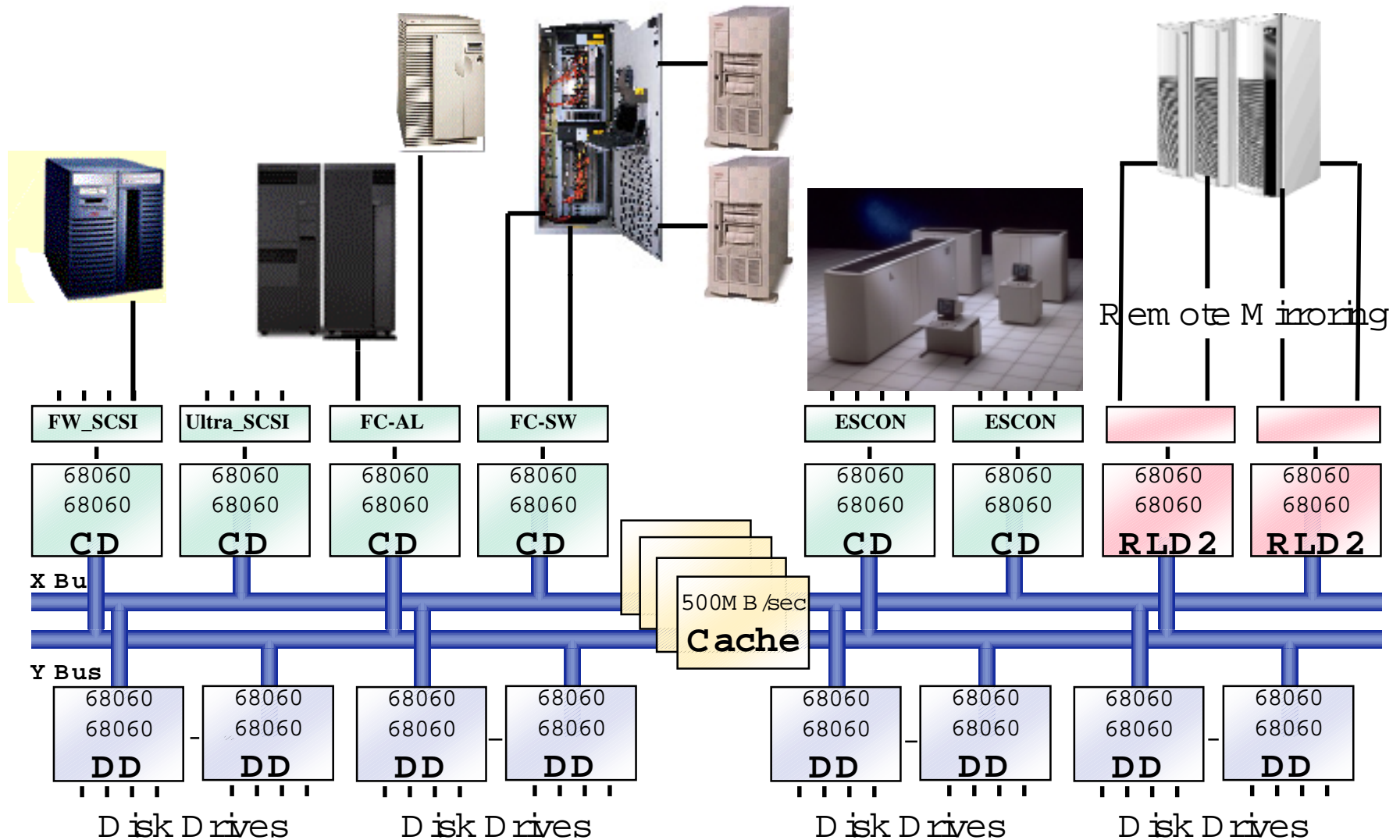
EMC in the Real World

Bryan Province

Caterpillar Inc.

What is an EMC Symmetrix

- Large scale disk array
- I/O enhanced by large amounts of cache
- Optimized by caching algorithms
- Multiple host attachment via ESCON, FW SCSI , Ultra-SCSI, FC-AL (arbitrated loop), and FC-SW (switched fabric)

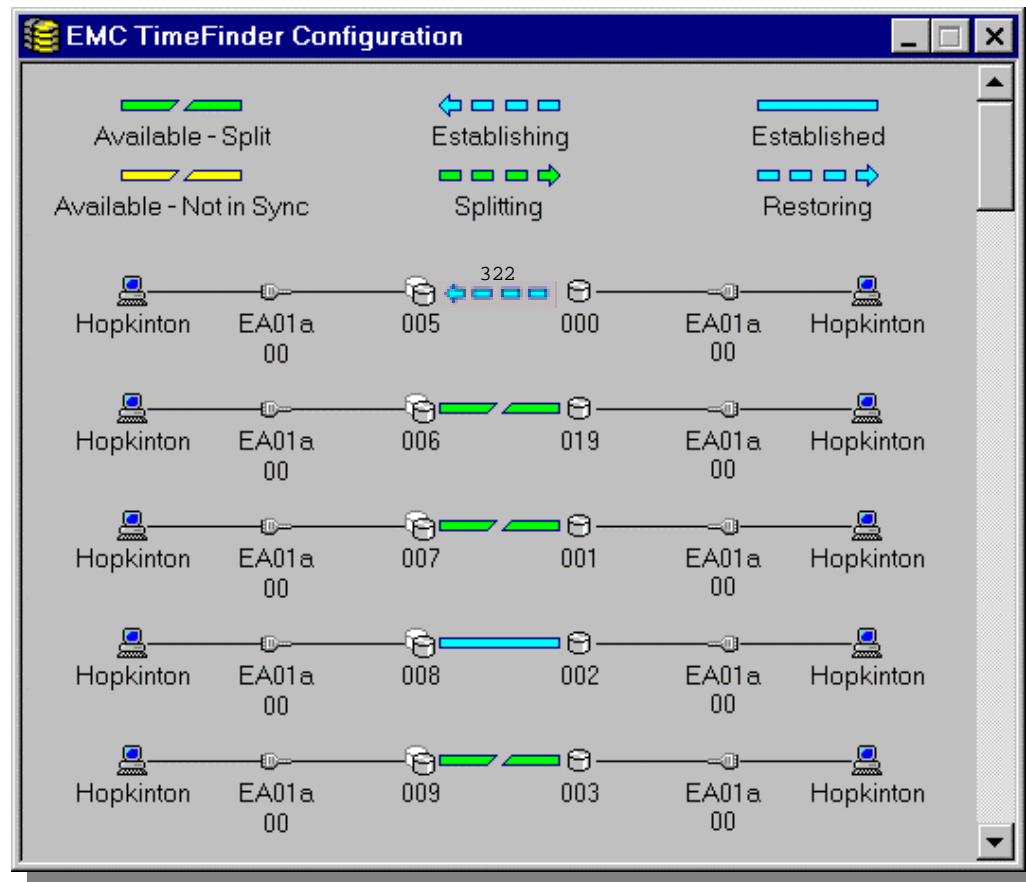


500M B/sec Cache Memory and Backplane
Dual Processor Channel and Disk Directors
Parallel, ESCON, FW SCSI, Ultra-SCSI,
FC-AL (arbitrated loop), and FC-SW (switched fabric) Host Attach

Storage Area Networks (SANS)

Business Continuation Volumes (BCVs)

TimeFinder Manager



- Monitor and manage TimeFinder operations:
 - Establish a BCV pair
 - Split a BCV pair
 - Re-establish a BCV pair incrementally
 - Restore from a BCV device
 - Incremental restore from a BCV device
 - Remote Management

Symmetrix Disk Reallocation (SDR)

Symmetrix Disk Reallocation



- Assign or re-assign Open System Volumes
- Drag and drop logical volumes between:
 - SCSI adapters (workload balancing)
 - Host systems

Patches and Drivers for HP-UX

How to move your data

Setting Up Alternate Links

It “Never” Goes Down
But what to do when it does.