



Case study for logical partitioning of a two-cluster grid

Hardware must be used and managed as effectively as possible to ensure your investments. One of the ways to protect the investment is by using the same hardware for more than one sysplex/host. Important points to consider are described, such as common areas that might need other technical competencies in addition to the storage team to be involved within the information technology (IT) structure for the correct sizing and planning.

It also gives you a practical guideline for aspects of the project, such as naming conventions and checklists. The solution is based on standard functions from IBM z/OS, Data Facility Storage Management Subsystem Removable Media Manager (DFSMSrmm), IBM Resource Access Control Facility (RACF), and functions available in the TS7700 2-cluster grid. A similar implementation can be done in any single-cluster or multi-cluster grid configuration.

The TS7700 R2.0 extended the possibilities of manageability and usability of the cluster or grid by introducing the *Selective Device Access Control* (SDAC). The SDAC enables you to split the grid or cluster into hard partitions that are accessible by independent hosts or applications.

SDAC, also known as *hard partitioning*, can isolate and secure environments with various requirements and objectives, shielding them from unintended or malicious interference between hosts. This is accomplished by granting access to determined ranges of logical volumes by selected groups of devices in a logical control unit (LCU) granularity (also referred to as *LIBPORT-ID*).

An example of a real implementation of this function is provided, going through the necessary steps to separate the environments Production (named PROD) and Test (named TEST) from each other despite sharing the TS7700 2-cluster grid.

This appendix includes the following topics:

- ▶ “Overview of partitioning” on page 932
- ▶ “Definitions and settings in z/OS” on page 933
- ▶ “Definitions on the TS7700 Management Interface” on page 940
- ▶ “Verification of changes” on page 950