



CCF Report - GDM

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Purpose

- Quick Visit of operational aspects
- Hystersis, and coordination required.
 - Therefore perhaps constraints.
- Input desired today
 - Correctness and completeness or presentation
- Input desired later
 - Is the meat appropriate, what changes need to be made.

Overview

- Storage System Operations
- Computer Security
- Networking

Computer Security

- CSPP and philosophy.
- Impact on systems.
- Current and envisioned process.

CSPP and philosophy

- The CSPP is a document approved by DOE, Our operations must be consistent with it.
 - It is a task to revise it, when a governing Office of Science document is complete.
- Current CSPP gives us (in broad brush)
 - Hooks in Networks (as opposed to systems)
 - Default allow (Diversity and throughput as rationale)
 - Structure of a general domain + critical systems
 - Roles and relationships to line management
 - Many elements of CS process.

Impact on Systems -- Environment

- **Emphasis on default allow**
 - Global Controls are tuned for default allow
 - E.G. no special firewall device.
 - E.G. Authentication technology is mandated.
 - E.G. strong central net is mandated.
- **Emphasis on depth of knowledge**
 - Controls extend to hosts, e.g wrappers, chains
 - “sprinkle on security” is hard to do
 - Conflict with systems not invented here.
- **Structuring of network environment**
 - Assumption that secure systems are there to choose is long in the tooth.

Current and Envisioned Process.

- Increasing emphasis on process v.s technology.
- Example: Risk analysis which will touch systems engineers.
 - NIST format – part of being “professional”
 - Enstore prototyped this.
 - Technical result: write-protect tabs used.
 - Learning: will have to write organizing and orienting materials.

Networks

- Physical Media
- Network devines
- Higher-Level (well for networks) Services

Physical Media

- Media and connectors have a large cost.
 - Thinking of of the cable at best buy is not a good model.
- More care with the satellite architecture.
- Non-IP technologies & media.
 - There is some demand for FC SAN.
- Backlog of service calls – Needs attention in FY2005 work plan.

Higher level services

- There is a conflict between centralizing services and how freely they might be used.
 - E.g. integrated use of DHCP servers.

Network Devices

- Experiments are constrained to use managed devices.
 - Managed central network considerations
 - Computer security considerations.
 - It is work to maintain a a useable device list.
- Network Gross structure may change
 - CSPP – more border controls
 - Advanced networking (see last weeks' talk).

Storage System Operations

- Tape handling
- Lower storage
- Upper storage

Tape handling

- FY2005 – no infrastructure for massive hand mounts.
- Main tasks
 - Labelling
 - Insertion
 - Write-protect handling
 - Removal.

Lower Storage

- Improve hardware config management
- Improve system/application config mgt
 - “no iterated install”
- Deal with resource conflicts
 - STK in ADIC is a prototype conflict.
- FY2005 facilities plan will beg
 - “federation and Dispersal”
- Operationally easy migration.

Upper storage

- STKEN dCache.
 - Problem of gathering the “or” of requirements
- Roles in other dCache instances.
 - Going through this to state them carefully.
- Need to gather administrative and operational documentation.
- Investigate perceptions with the software
 - Some say insufficiently redundant
 - Some say privilege level is not handled well.

Video conferencing

- Provide direction and leadership
 - Resulted in H323 systems
- Provide for facilities, use of them.
 - FY2005 WBS proposes more use of outside contracts.
- Provide for technologies induced by collaborations
 - VRVS, Access Grid