UTA HEP Group Computing Infrastructure

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What Is Required?

- Desktop workstations (typically PC's running Linux or Windows, some x-terminals)
- Local "analysis server"
- Reliable, readily accessible mail server
- Web server
- MS Windows application server (Terminal Server + Citrix Metaframe)

Analysis Server (on the cheap…)

- Dual Pentium III 1 GHz cpu's
- 1 GB RAM
- 354 GB disk storage (54 GB SCSI, 300 GB IDE RAID array)
- CD-RW, tape back-up, etc.
- Total: ~$3500

Analysis Server Functionality

- Install local versions of DØ software releases
- Local platform for code development
- Store large DØ data samples in 'root-tuple' format
- Scalable hard disk capacity

Other Servers

- Advantages of running our own mail server:

1) Provide users with large IMAP storage
2) Alternative to campus Exchange server

Other Servers (cont.)

- Web server is the primary repository for both internal (private) and external documentation
- Windows application server provides access to MS software from non-Windows clients (i.e., Linux, UNIX), simplifies administration & support

Summary

- Local computing resources exist for the large-scale production of DØ Monte Carlo data (Linux PC farm) along with data analysis (“analysis server”)
- Development of distributed remote analysis capabilities, for both DØ & Atlas, will require significant increases in disk storage and networking bandwidth capacities