

ORION Backup Service Pilot at York University

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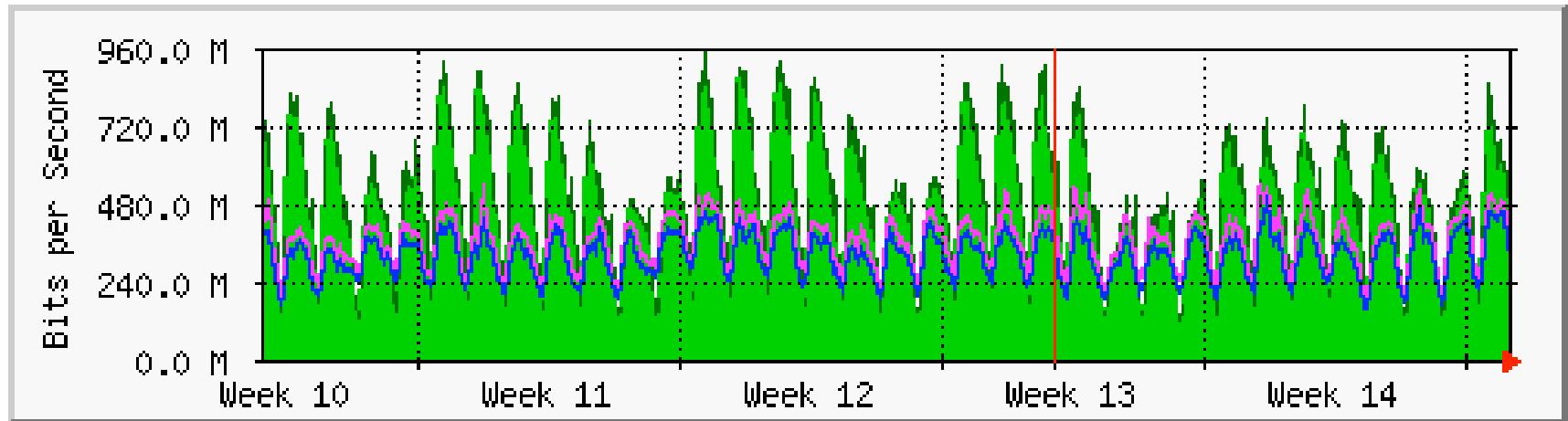
redefine THE POSSIBLE.





- About York
- About York's ICT Environment
- Genesis of our interest in Shared Services
- Disaster Recovery Planning
- Pilot of the ORION Backup Service with Storagepipe
- Why we tried it, what we did, results found

“Full Value”



- Border GE port connected via GTAnet to ORION
- Max IN 954.3Mbps

About York



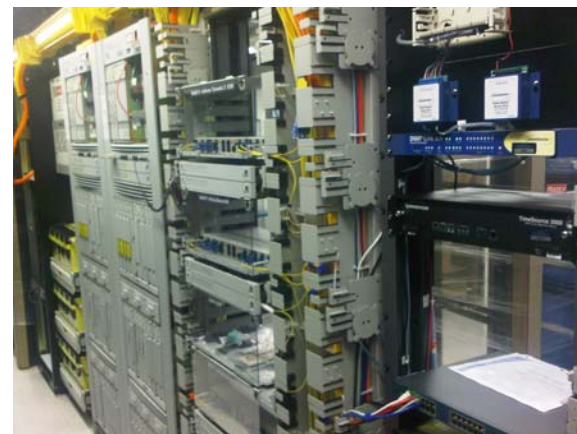
- Over 50,000 full and part-time students
- Main facilities are at 457 acres Keele campus
- Also 85 acre Glendon campus, two downtown Toronto campuses, and a number of other satellite presences around the GTA.
- Although the bulk of resources are located at Keele, academic themes include providing access to more resources from off-campus locations.



York's Information and Communications Technology Infrastructure



- Data Centres: 3 centrally operated
- Network: 35,000 drops
- Telephones: 11,000
- Servers: 1000+
- Storage: hundreds of TB
- Central Backup: 600+ clients from all IT groups
- GTAnet PoP, 10GbE upgrade in progress
- ORION PoP



Interest in Shared Services



- BearingPoint Report, 2005
 - Commissioned by York CIO Bob Gagne
- ORION meeting on shared services
- Business Drivers
 - D.R. Planning
 - Old Infrastructure
 - Increasing requirement for flexibility, “on-demand” services
 - Cost effectiveness and efficiency

Disaster Recovery Plan



- Classify systems by RTO/RPO Business Requirements
- Tactical solutions to achieve objectives
 - Alternate Data Centre(s)
 - Resilient/redundant network
 - Resilient Data
 - Storage replication
 - Backups
 - Off-site tapes
 - Backups located elsewhere from production systems
 - So you have the tapes, how do you restore them?

Supply and Demand Mismatch



- Supply

- Backup system nearing capacity
- Backup services need to be re-defined, not one size fits all
- Capacity limitation designed-in from start, incremental addition is costly, complex, and takes time

- Demand

- Particularly Research
- Library archives
- Media projects
- fMRI, etc
- Flexibility and agility required

York's Reasoning and Pilot Results



- Business case made sense
 - Unfair comparison with sunk cost of existing backup system, but that is nearing capacity limit
 - Consider power, space, cooling
- Pilot on windows server only
 - Solaris and linux support we did not complete testing
 - TSM client is all you would expect
 - Performance glitches due to known limitations (self-inflicted)
 - No technical feasibility issues found

Conclusion and Next Steps



- (York) Infrastructure capacity limitations being addressed, expect to better leverage services afterwards
- ORION Backup Service has a business case worth investigating
 - Particularly when considering hidden costs, such as power, space, cooling
 - Accomplishes D.R. objectives without need for alternate data centres
 - Need to define our backup services better, find out where this fits best
- York will continue to work with ORION to explore this potential
- This is just a beginning

Questions?

