




# IT Shared Service Opportunities

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## Overview

- The Opportunity
  - Overview of Study
  - Summary of Findings
  - What next
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## The Opportunity

- Common drivers for I.T. in higher education
  - Reliance on infrastructure
  - “always on”
  - Growing scrutiny - senior mgmt to board
  - Risk management
  - Growing demand
  - Expense pressures
  - Skill gaps

## The Opportunity

- Industry “themes”
  - IBM - “On Demand”
  - HP - “Adaptive Enterprise”
  - “Real Time Enterprise”
  - Utility computing
  - ...

## The Opportunity

- The higher education difference
  - How different are our needs?
  - Cross institution collaboration
  - Connectivity - ORION
  - Shared problems → Shared solutions?

## Shared Services Study

Carleton University	Royal Military College (RMC)
University of Guelph	Ryerson University
Laurentian University	University of Toronto
McMaster University	University of Western Ontario
Nipissing University	University of Waterloo
Ontario College of Art and Design	University of Windsor
ORANO	Wilfred Laurier University
University of Ottawa	York University
Queen's University	

## Shared Services Study

### Areas of examination -

- Business continuity and disaster recovery
- Data centre facilities
- Mission critical applications
- Technical support environment
  - Storage
  - Backup
  - System management
  - Email, web servers ...
- Future plans

## Shared Services Study

### Some findings -

- Gaps commonly exist in disaster recovery
- Data centre facilities > 75% utilized
- Multiple/alternate data centres on campus common
- No use of off-site locations for alternates
- Critical applications - email, library, SIS, LMS
- Diverse -
  - Sun Solaris most common core operating system (40%)
  - 60% of storage for critical applications use SANs
  - Backup split between Veritas and Legato
  - Little commonality in applications

## Shared Services Study

### Principles -

- Utilize proven, standards-based technologies
- Keep participation straight-forward - simple subscription model, shared investment
- Data storage consolidation boosts risk and importance of DRP
- Locate data storage in proximity to application servers
- Focus on new systems or components that can be disconnected
- Minimize non-productive use of “raised floor” space

## Shared Service Opportunities

### Data Storage Consolidation -

- Centralized backups and possibly tape vaulting
  - Scales well
  - Contributes to disaster recovery plans
  - Introduces increased risk → multiple sites
  - Challenge of diversity of SAN/NAS technology
  - Decentralized operational control

## Shared Service Opportunities

### Data Storage Consolidation -

- Shared Storage Area Network
  - Connected to distributed servers
  - Dual SAN environment for redundancy
  - Large and complex
  - Possible latency issues
  - Lack of common standards

## Shared Service Opportunities

### Business Continuity -

- Failover to support DRP
  - Utilize “partner” data centres
  - Distribute servers and/or storage over diverse locations
  - “warm” to “hot”
  - Large and complex
  - Diversity of facilities creates challenges
  - Best suited for common, standards based applications (e.g. email, web hosting)

## Shared Service Opportunities

### Centralized Hosting -

- ASP solution for common applications
  - Provides for scale
  - Centralized management and expertise
  - Limited candidates due to diversity
  - Consider for new or emerging applications/upgrades

## Shared Service Opportunities

### Next Steps -

- Refine recommendations
- High level examination of possible business models
- What can we learn from industry?
- Technical challenges are significant
- Organizational challenges equally challenging