A Collaborative Approach to Disaster Recovery and Business Continuity

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Vision

To create a collaborative disaster recovery and business continuity solution that leverages existing staff and facilities to provide an enterprise-class solution at a very low cost.
Our Goals

- Disaster recovery warm/hot sites
- Emergency communications capabilities
- Institutional strategic/operational security plans
- Benefits of collaboration and knowledge-sharing
Challenges

How do we:

• mitigate the differences while accentuating the similarities?
• create a model that can be applied at other schools?
• use collaboration to make our respective organizations and institutions better, richer, more effective?
Similarities and Differences

• Differences
  Geography, Institutional Size, etc.
  Threats
  Time Zones
  Legal Considerations

• Similarities
  Infrastructure
  Management Style and Culture of IT
  Institutional Vision and Philosophy
The Phases of a Disaster Recovery Program

Phase 1: Building Team & Planning
Phase 2: Easy Wins: Emergency Web/DNS
Phase 3: Environment and Hardware
Phase 4: Emergency University Communication
Phase 5: Business Continuity Planning
Phase 6: Business Continuity Implementation
Phase 1: Implementation Steps

• Plan
• Obtain High Level Sponsorship
• Be Persistent
• Know your Partner
• Be Flexible
• Create an Environment for Collaboration
Phase 2: Implementation Steps

- Emergency Websites
- DNS
- Internet2/VPN
- Voice over IP
- 24 Hour Operator
- Connect-ED
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There are no campus emergencies at this time

In the event of a campus emergency, this website will be used to provide timely information for students, parents, faculty, staff, emergency agencies, the media, and the community.

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Phase 3: Environment and Hardware

Functional Infrastructure Design

- Storage
- Server
- Networking
- WAN Acceleration
- Security

Partners/Products

- Cisco
- VM Ware
- Microsoft
Phase 3: Environment and Hardware
Phase 4: Emergency Communication

- Active Directory Replication
- Exchange Dial Tone Server (until Exchange 2007)
- Connect-ED
- Sat Link (email/cable)
Phase 5&6: Business Continuity Planning and Implementation

- Critical Applications
  - Email
  - Payroll
  - LMS/CMS

- Vital Data availability
  - Student information systems
  - IdM Identity Management
Phase 5&6: Business Continuity Planning and Implementation

- Institutional Prioritization
- What information should be distributed, managed, maintained?
- Creation of a Strategic DR/BC Plan
- Physical and Digital Security Scan (Forrester Research)
Rewards and Successes

- Relationship - Partnership - Trust
- Knowledge Sharing-Sum Greater Than Parts
- Continuous 360
- Collaboration - Learning How to be a Better Partner with Institutions and Companies
- Leveraging Virtual Technology and Partnerships to Overcome Physical and Fiscal challenges
Costs

Until Now: Less than $35,000

• **Staff Time**
  ‣ Current: 15-20 hours a month per institution
  ‣ Future: 12-10 hours a month per institution

• **Hardware**
  ‣ Current: 15 Months into project no additional costs
  ‣ Future: Servers, Storage, WAN Acceleration

• **Networking**
  ‣ Current: DNS Hosting, I2
  ‣ Future: Increased Internet Bandwidth
Cost of a hosted hot-site:
$100,000 per month  $1,200,000.00

Bowdoin/LMU Collaboration Model Costs:
Depreciated capitalized costs:
Software Licenses/Maintenance $1,686.00
Blade Servers and Storage:
  3 Blades: $4,500.00
  SAN Storage 1Tb: $2,000.00

Increased operating costs include:
Connect-ED $15,000.00
3.6 Kw Power for Blades: $10,500.00
Additional Power for Blades: $5,250.00
Satellite Communications: $118.00

Labor: $21,800.00

Total annual costs: $53,854.00
Total Annual ROI (no disaster): $1,139,146.00
Total Annual ROI (with disaster*): $1,104,146.00

*Additional blades: $15,000.00
*Additional data storage (10 Tb): $20,000.00
Next Steps

President’s Memo of Understanding
Campus-Wide Disaster Plan Integration
Defined Plan of Action
  • Trigger definitions and actions
  • Communication Responsibilities
  • Monitoring Plans
Public Documentation: Co-location Wiki