POWERFUL, CLOUD CENTRIC, DISASTER RECOVERY FOR SEAMLESS AND AUTOMATED BUSINESS CONTINUITY

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Today’s presenter

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Business Continuity Plan

• Documented and formal arrangements for resuming critical business operations in a timely manner following a disaster or other disruption
  - “Timely” may equal “Immediate”
  - Degraded operations may suffice temporarily
  - Focus is on sustaining the organization
  - Business operations require essential resources
  - Recovery process must be efficient and organized
Lessons From Past Disasters

• The event may impact multiple sites simultaneously.
• Communications may suffer extended outages.
• Full staffing may not be available for the recovery.
• Hotsite demand may exceed available capacity.
• Work in process and vital records may be destroyed.
• Essential transportation may not be available.
• Supply chains may break down.
• Untested provisions are unreliable.
Questions that need to be answered

• Has the organization embraced the importance of a formal disaster recovery plan?
• Are you taking advantage of virtualization, the cloud, or other newer technologies?
• How are you separating and securing faculty and student data and how will this effect backup and storage of data?
• How and where are your systems duplicated?
• Is everything documented and tested?
• Are you living within the parameters of your policies and procedures?
Effectively Planning For Disaster Recovery

• Your Disaster Recovery strategy can be broken down into the following steps
  – Understand your current technology posture
  – Identify current recoverability for each system, application and data set
  – Establish RTO/RPO’s for systems, applications and data sets
  – Architect a Disaster Recovery solution that meets your RTO / RPO objectives
  – Test your Disaster Recovery solution and validate functionality
Business Impact Analysis—Recovery Time Objective (RTO)
How Do I Manage My RTO Cost Effectively?

• Consider leveraging cloud based backup and recovery options.
• There are a wide variety of options that span most needs and budgets
• Careful review of options and selection of the appropriate solution will be key to meeting organizational goals and adherence to standing BCP / DR policies
What Do Cloud BCP / DR Options Look Like

• Site To Site Duplication Of Data And Systems
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• Site To Site Duplication Of Data And Systems
  – Strengths
    • You own the hardware and software assets
    • You control the security of the solution
    • May allow for near real time backup and recovery of data and systems provided the network and systems are scaled appropriately and growth is adequately projected
  – Weaknesses
    • You are responsible for maintaining the solution
    • High cost of entry & refresh
    • A network outage, virus outbreak, or hardware fault may break the entire solution and the data will be unavailable until you re-establish any broken links
    • Will address disaster recovery concerns, but an alternate solution will be required for archival backup duties
What Do Cloud BCP / DR Options Look Like

- Site To Cloud Backup (Software Based)
What Do Cloud BCP / DR Options Look Like

• Site To Cloud Backup (Software Based)
  – Strengths
    • You own the on site facet of the backup and control the security of the backup via SSL
    • Has a local backup repository that may be used for speedy recovery of damaged systems and files
    • Low cloud storage costs, and SLA’s that control the cloud provider to ensure security and uptime
    • May use a host of different cloud providers for flexible provisioning
    • Depending on the storage provider, virtual DR may be established in the cloud quickly and will enable remote access to critical systems from anywhere via remote sessions.
    • Covers both DR and archival backup needs in one solution
  – Weaknesses
    • Virtual recovery is typically not instantly available and may take some time to establish
    • Staff will have to be directed as to how to access DR systems virtually, advanced training and procedure review will be beneficial
    • Testing, training, and verification of operability are key to ensuring a fast turnaround in the event of a failure
What Do Cloud BCP / DR Options Look Like

• Site To Cloud Backup (Appliance Based)
What Do Cloud BCP / DR Options Look Like

• Site To Cloud Backup (Appliance Based)
  – Strengths
    • One single platform for backup, fast local recovery, offsite data storage, and offsite DR
    • Capable of backing up and recovery almost any system
    • Low cloud backup costs, and SLA’s that control the cloud provider to ensure security and uptime
    • Has a highly flexible cloud backup model, allowing for variable retention all the way up to infinite retention
  – Weaknesses
    • Moderate buy in cost
    • All on site functions are based in one single appliance, so a failure of that one appliance may interrupt backups and DR capabilities for a short period in the event of a failure.
Considerations In Selecting A Solution

- **Disaster Impact**
  - What impact will a disaster have on our organization?
  - How long can we afford to be without critical business systems before they impact faculty and students?

- **Existing Systems**
  - What do we have in house today, and does it serve our needs and allow for expansion of our DR capabilities?

- **Staff**
  - Does our staff have the cycles to fully engage on disaster recovery?
  - Does our staff have the skills to fully configure and manage disaster recovery?

- **Investment**
  - What is our current IT budget?
  - Which style of disaster recovery meets our RTO / RPO in the most cost effective manner?
Testing and Validation Is Critical For Success

• Testing the Disaster Recovery infrastructure is a critical component to the overall BCP Plan
• It validates that the systems, application and data which have been identified important to be recovered, can actually be recovered in the desired time, with the specific RPO specified
• Yearly testing is suggested for most businesses, and many times this is an outsourced function as it helps maintain independence of the IT Department
• Document the processes
• Tabletop test for departments
QUESTIONS AND ANSWERS?
Additional Information

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Thank You!