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Targus

OneNeck provides a **comprehensive, flexible** suite of outsourcing solutions designed specifically for mid-market companies

- Founded in 1997
- Supports over 50 customers at over 850 sites worldwide
- 99% Contract Renewal Rate exceeding the industry average of 85%
- Primary data center/support center operations in Phoenix and Houston
- 100% US based operations and employees
- Diverse staff of Dynamics AX certified professionals
- Average of 99.9% systems availability
- Supports multi-site deployments for two of the largest hosted Dynamics AX environments in North America
- Ranked #1 ERP Outsourcing Vendor by the Black Book of Outsourcing

Business Continuity by Design

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Agenda

- Business Continuity
- Continuity By Design
 - ✓ System Design
 - ✓ Application Design
 - ✓ Network Infrastructure Design
- Summary
- Questions and Answers

Business Continuity

What is Business Continuity?

- Business continuity (continuance) and business continuity planning (BCP) are those steps an organization takes to ensure that essential business functions can continue during and after a service failure
- The main goals of BCP
 - ✓ Prevent interruption of mission-critical services
 - ✓ Return mission-critical services to operation quickly and efficiently
 - ✓ Minimize the loss of data in the event of a service failure
- Put in simpler terms:
 - ✓ BCP attempts to minimize the financial impact caused by failure of a mission-critical service

Survey

- Which applications would you classify as mission or business critical?
- Email
- ERP system
- B2B (EDI) Transactions
- B2B/B2C site

The BCP Lifecycle

- Analysis
- Design
- Implementation
- Test and acceptance
- Maintenance

Analysis

- Business Impact Analysis
 - ✓ Helps define critical and non-critical systems
 - ✓ Identifies critical system recovery times
 - ✓ Identifies critical system recovery requirements
- Risk Analysis
 - ✓ Identifies how likely certain disasters are to happen to critical systems
 - ✓ Plan for the most extreme possibility
- Impact Scenarios
 - ✓ A definition of those events that will likely cause a critical system failure
- Recovery Requirement Document
 - ✓ A statement for each critical system
 - ✓ Defines “What” recovery means
 - ✓ Defines the maximum acceptable system outage

Design

- Identify the most cost-effective recovery solution
 - ✓ To restore the minimum usable system and data
 - ✓ Within the identified recovery time frame

Implementation

- To execute the design
 - ✓ May include initial functional testing of the design
 - ✓ Provides feedback to the design process

Testing

- To validate the design
- To test the failure from primary to secondary system
 - ✓ Test the declaration of continuity business processes
 - ✓ Test the system restore procedures
- To test the function of the secondary system
 - ✓ Validate system availability
 - ✓ Validate data accuracy and completeness
- To test the return to primary from secondary system
 - ✓ Test the return to operations procedure

Maintenance

- Periodic validation of the design
 - ✓ Documentation of changes to the system
 - ✓ Analysis of the changes to the design
 - ✓ Regular testing of the design
 - ✓ Employee awareness training

Continuity By Design

Continuity by Design

- Design Goals
- Design Considerations
- Many risks can be mitigated by thoughtful design
 - ✓ System Design
 - ✓ Application Design
 - ✓ Network Design
 - ✓ DR Design

Design Goals

- System Recovery
 - ✓ What is the minimum requirement that defines system availability?
- Recovery Point Objective (RPO)
 - ✓ The point in time that recovered systems can be restored to
 - ✓ Is the backup from the night before last good enough?
- Recovery Time Objective (RTO)
 - ✓ The amount of time it takes to return the system to operation
 - ✓ How long to procure a location and systems
 - ✓ How long to receive and restore tapes?

Design Considerations

- System Recovery
 - ✓ What is the minimum requirement that defines system availability?
 - ✓ **A recovered system may not need to be as large as the primary system**
- Recovery Point Objective (RPO)
 - ✓ The point in time that a DR systems can be restored to
 - ✓ Is the backup from the night before last good enough?
 - ✓ **Traditional RPO is 24-48 hours**
 - ✓ **The Lower the RPO, the higher the cost**
- Recovery Time Objective (RTO)
 - ✓ The amount of time it takes to return the system to operation
 - ✓ How long to procure a location and systems
 - ✓ How long to receive and restore tapes?
 - ✓ **Traditional RTO can be 72 hours and up**
 - ✓ **The lower the RTO, the higher the cost**

System Design

- Use tier 1 hardware providers
 - ✓ Consistent hardware in chassis
 - ✓ Support contracts available
 - ✓ Continually updated drivers
 - ✓ The TCO is less when considering management implications
- Design system fault tolerances
 - ✓ Redundant Power supplies
 - supplied through separate circuits
 - Uninterruptible power supplies
 - ✓ Redundant Hard Disks
 - RAID
 - SAN disk
 - ✓ Alternative system restore utilities
 - System Imaging
 - Virtualization technologies

Application Design

- Keep Operating Systems up to date
 - ✓ Plan for operating system upgrades
 - ✓ Maintain current service-pack levels
 - ✓ Automate critical update processes
- Deploy anti-virus solutions
 - ✓ Automate signature updates to all systems
 - ✓ Deploy separate vendors at mail server and Internet gateway
- Maintain application currency
 - ✓ Automate updates to critical applications
 - ✓ Plan to install the most current version of applications

Application Design

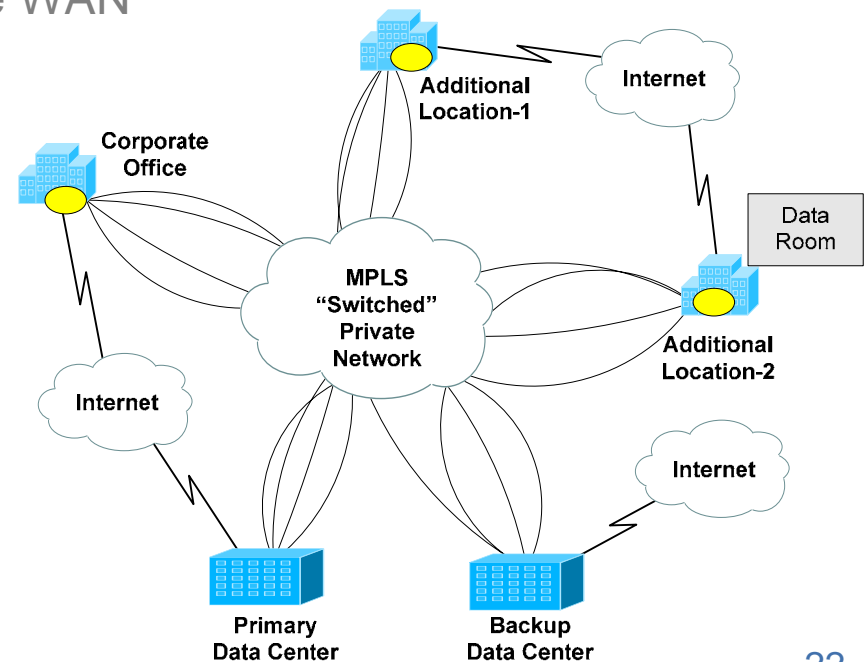
- Design with backup and recovery in mind
 - ✓ Deploy redundant infrastructure services (AD, DNS, Etc)
 - ✓ Deploy DFS for file management and backup
 - Replicate DFS shares to datacenter (for backup)
- Deploy applications where they are needed
 - ✓ Centralize key applications like ERP, monitoring, Exchange
 - ✓ Locate file, print, and infrastructure services near user community
 - ✓ Appliances can present or virtualized services locally
- Clustering/Load balancing

Network Design

- Use tier 1, business-class LAN/WAN hardware
 - ✓ Designed to handle the data rates that business require
 - ✓ R&D produces superior products
 - ✓ Up-to-date on current technologies
 - ✓ Patched and tested for security
- Leverage current, right-sized networking hardware
 - ✓ Newest technologies supported
 - ✓ Faster hardware
 - ✓ Latest security methodologies
 - ✓ Provides options for hardware redundancy
- Leverage WAN acceleration technologies
 - ✓ Can replace local infrastructure services
 - ✓ Optimizes WAN bandwidth
 - ✓ Provides additional networking services opportunities

Network Design

- Leverage Current WAN Technology (MPLS)
 - ✓ Offers fully meshed WAN topologies
 - ✓ Support for newer technologies like QoS
 - ✓ Built-in redundancy within the provider's network
- Leverage the Internet with VPN failover
 - ✓ Provides a redundant path to mission-critical applications
 - ✓ Can remove Internet traffic from the WAN



DR Design

- Design for multiple DR options
 - ✓ Implement virtualization technologies
 - ✓ Implement replication technologies
 - ✓ Implement WAN Acceleration technologies
 - ✓ Implement an Internet VPN solution

Summary

- BCP attempts to minimize the financial impact caused by failure of a mission-critical service
- Proper design comes from a thorough business impact analysis
- The lower the RPO and RTO, the higher the cost (traditionally)
- Many risks can be mitigated by thoughtful design
- Business continuity and DR planning is nothing more than insurance

Q&A

- Question/Comments