



**SUNGARD** AVAILABILITY SERVICES

# Simplify Your Data Protection Strategies: Best Practices for Online Backup & Recovery

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# Agenda

- **Challenges with Backup & Recovery**
- How to Approach the Challenge
- How Online Backup & Recovery Solutions Deliver Value
- Key Steps to Get Ready for Online Backup & Recovery

# Backup On Its Own Is Challenging...

**Labor Intensive - Set up, on going management and problem resolution when the jobs fail**

**Costly - Purchases include Hardware, Software, Maintenance, Support, Training, Power, Space, Cooling costs**

**Off-Site Transit – Risk of loss for tapes transported off-site for recovery**

**The Never Ending Backup - More data is being backed up as grow rates continue to climb for all companies**

## ....But Recovery Adds Even More Complexity

**Recovery is expensive, requiring dedicated staff + resources**

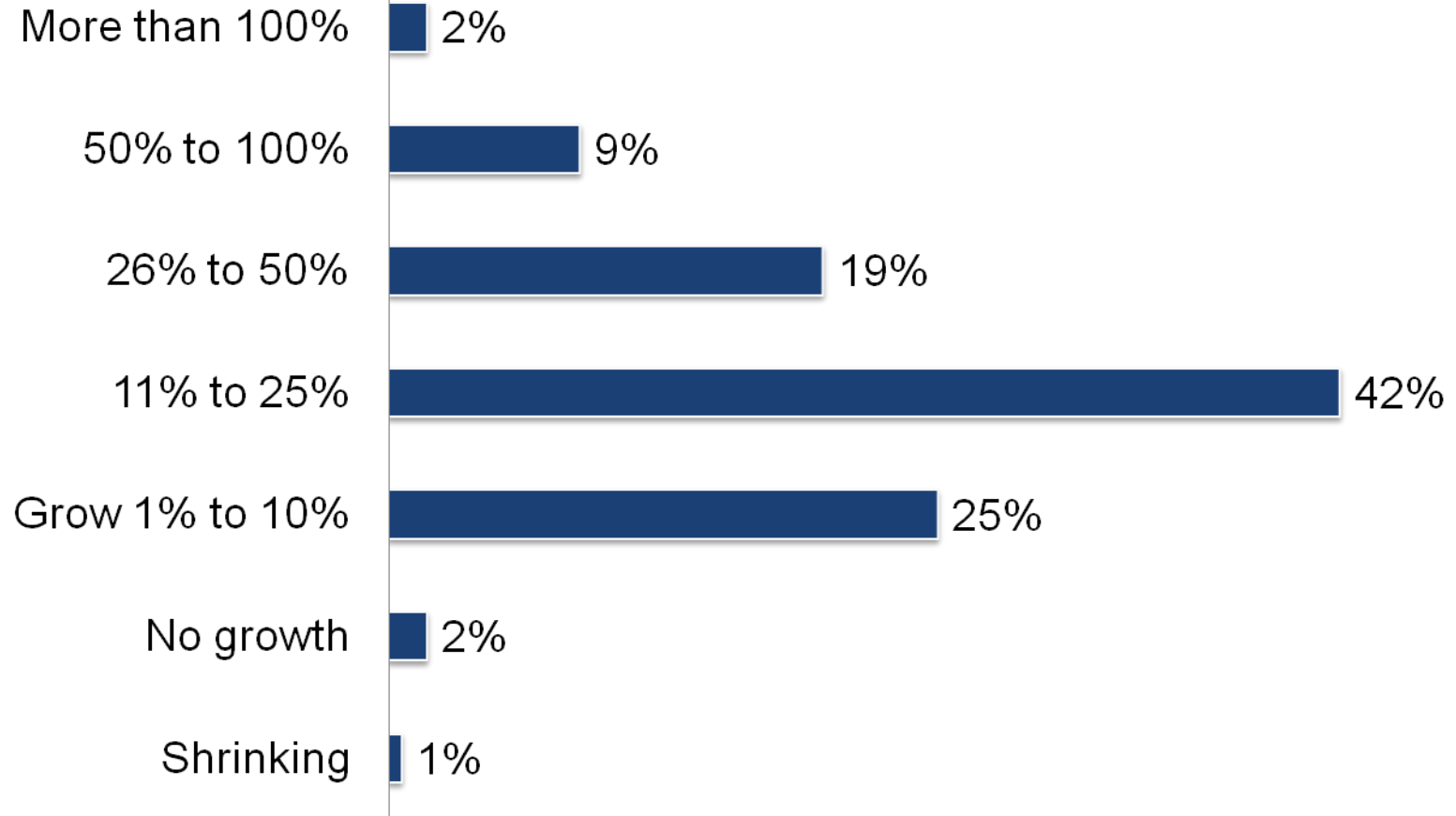
**Recovery is risky technically and operationally**

**Recovery is a thankless task – no upside, lots of downside**

**Devoting resources to recovery has opportunity cost**

# Data Continues Its Exponential Growth

“What do you expect will be the overall storage growth at your company over the next 12 months?”



Source: Forrester's Technology Foresight's For Hardware, Q3 2010

Base: 351 server, storage, or data center decision-makers at North American and European enterprises

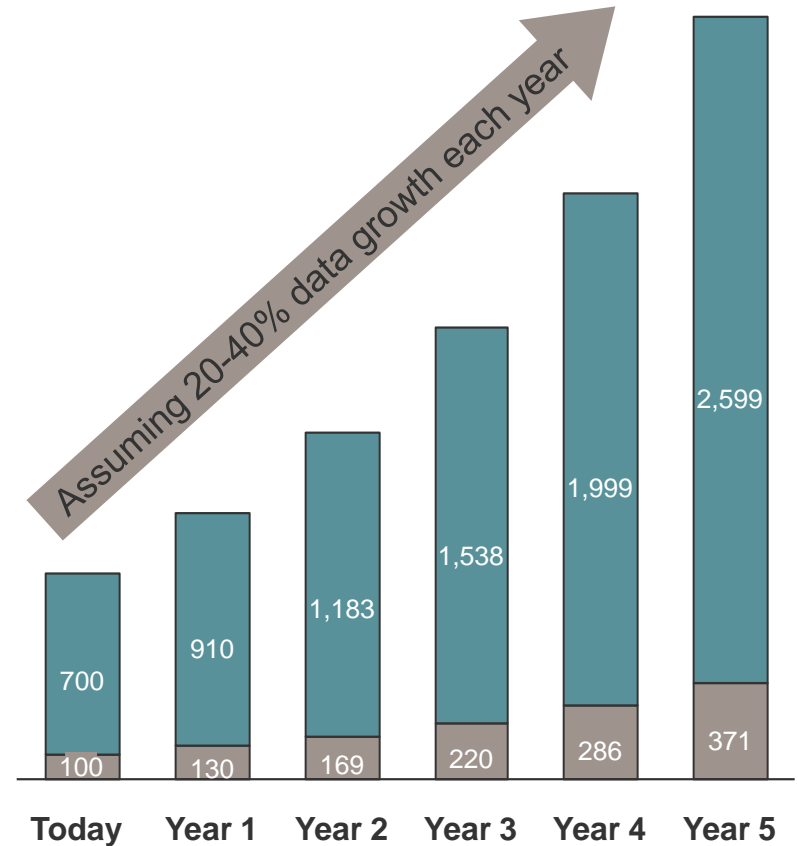
# Key Data Growth Drivers

- Compliance requirements and fear of litigation have increased retention times
- More digitalized content and rich media
- Many non-mission critical data backups are maintained longer than necessary in most organizations
- Adoption of virtualization is creating VM sprawl in many organizations

# Data growth of 100 TB's

In 5 years 100 TB of production storage turns into almost 3 PB

■ Backup storage capacity (TB)  
■ Production storage capacity (TB)



Source: The February 2010 "Controlling Storage Cost Amid High Growth" Forrester report

# Business Priorities

## Maintain/Grow Revenue Streams

- Launch new programs
  - Drive new revenue streams
  - Attract new customers
  - Maintain competitive edge
- Maintain current programs
  - Increase uptime
  - Reduce overhead and spend





# Audience Question

**“When it comes to backup and recovery, what is the most important consideration to you?”**

- Streamlined and consistent backups that can be recovered effectively
- Mitigating risk of transporting physical tapes offsite with quick access to recover the data
- Providing remote and branch offices the same protection as headquarters
- Managing costs through a subscription-based OpEx model

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# Approach to Availability

**Tier Applications by Business Value**

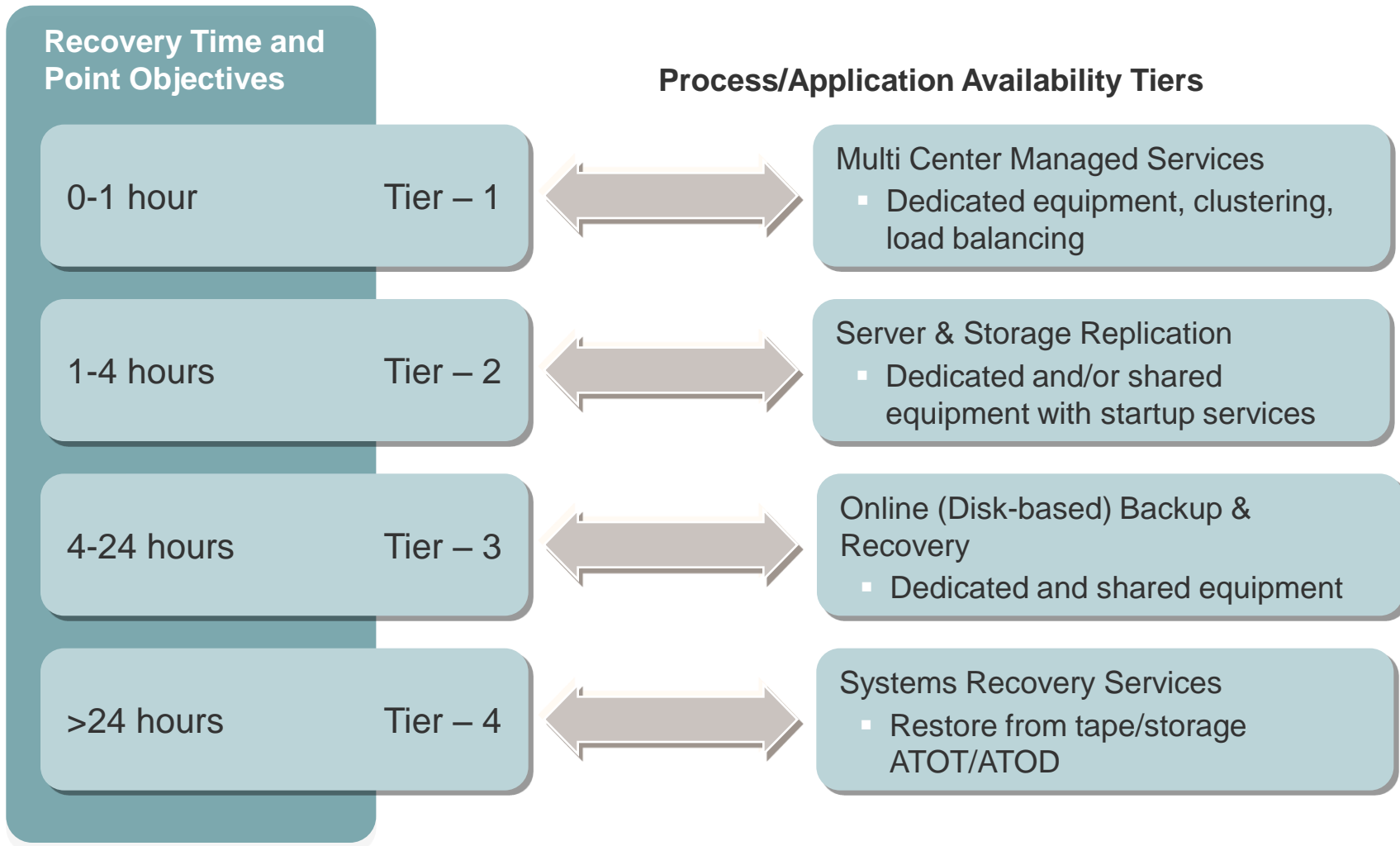


**Based on Value, Determine Sensitivity to Downtime**

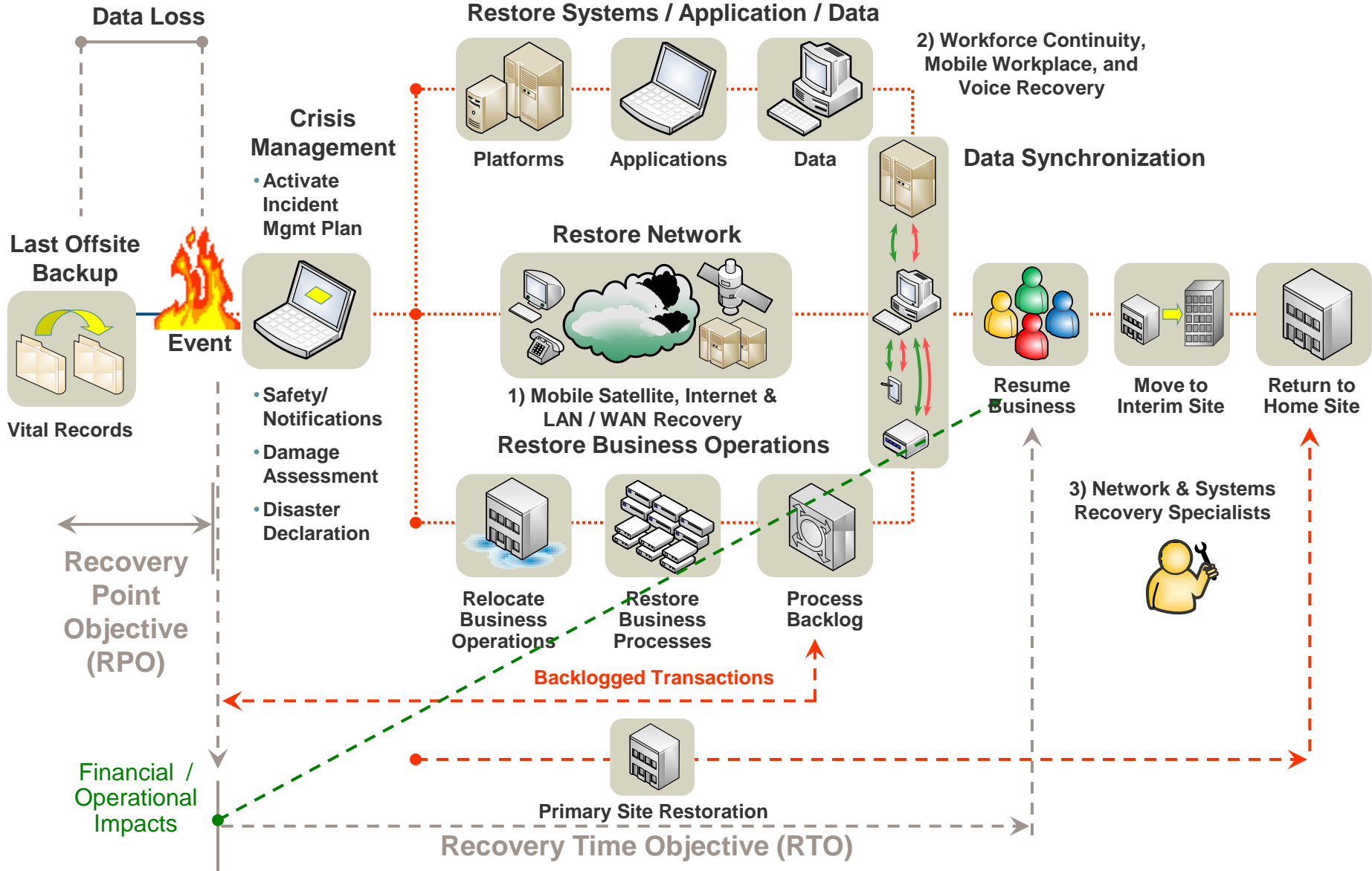


**Based on Sensitivity, Select Solution by Tier**

# Tiered Solutions Match Appropriate Availability Options to Application and Data Criticality



# Are You Really Ready to Recover? – “Anatomy Of A Recovery”



# Audience Question

**“How would you rate the maturity of your backup and recovery strategy?”**

- **Best Practices Enabled** - We're ready for any outage. We have the ability to restore locally as needed and have offsite access to a secondary data center with all necessary infrastructure and personnel to handle a full recovery.
- **Average** - We backup all of our critical data offsite – some on disk and some on tape. We have a documented plan for recovery, though it hasn't been tested frequently. Our remote offices have their own plans which largely follow different processes and procedures.
- **“Work in Progress”** - We backup to tapes locally and send them offsite. Our plans are very tactical in nature and more theoretical than practical. Portions of our recovery plans are documented.

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# Key Benefits of Online Backup & Recovery

## Value can be realized by companies of all sizes from the SMB to the Enterprise

- Enhanced availability through efficient off-site storage and recovery with optional on-site recovery capability via appliances
- Regular and consistent backups making full recovery achievable
- Elimination of staff time spent on backup and recovery tasks
- Lower risk of operator error by eliminating manual intervention in process
- Provides the same protection for remote offices as corporate
- More effectively manages costs via predictable OpEx models while reducing or eliminating CapEx



# Customer Case Study #1 – Large HealthCare Provider



HALIFAX  
HEALTH

## Company Profile

- Halifax District Hospital opened its doors to the community on January 3, 1928. Founded by the state legislature, the hospital began operations with 125 licensed beds. During World War II, the hospital became a convalescent facility. In 1947, it was remodeled and returned to the community as an acute care general hospital. In 1986, the hospital was designated as the area's only Level II Trauma Center and changed its name to Halifax Medical Center.

## Customer Buying Scenario

- Hurricane Recovery Real problem
- Must reduce RTO

## Customer Solution Requirements

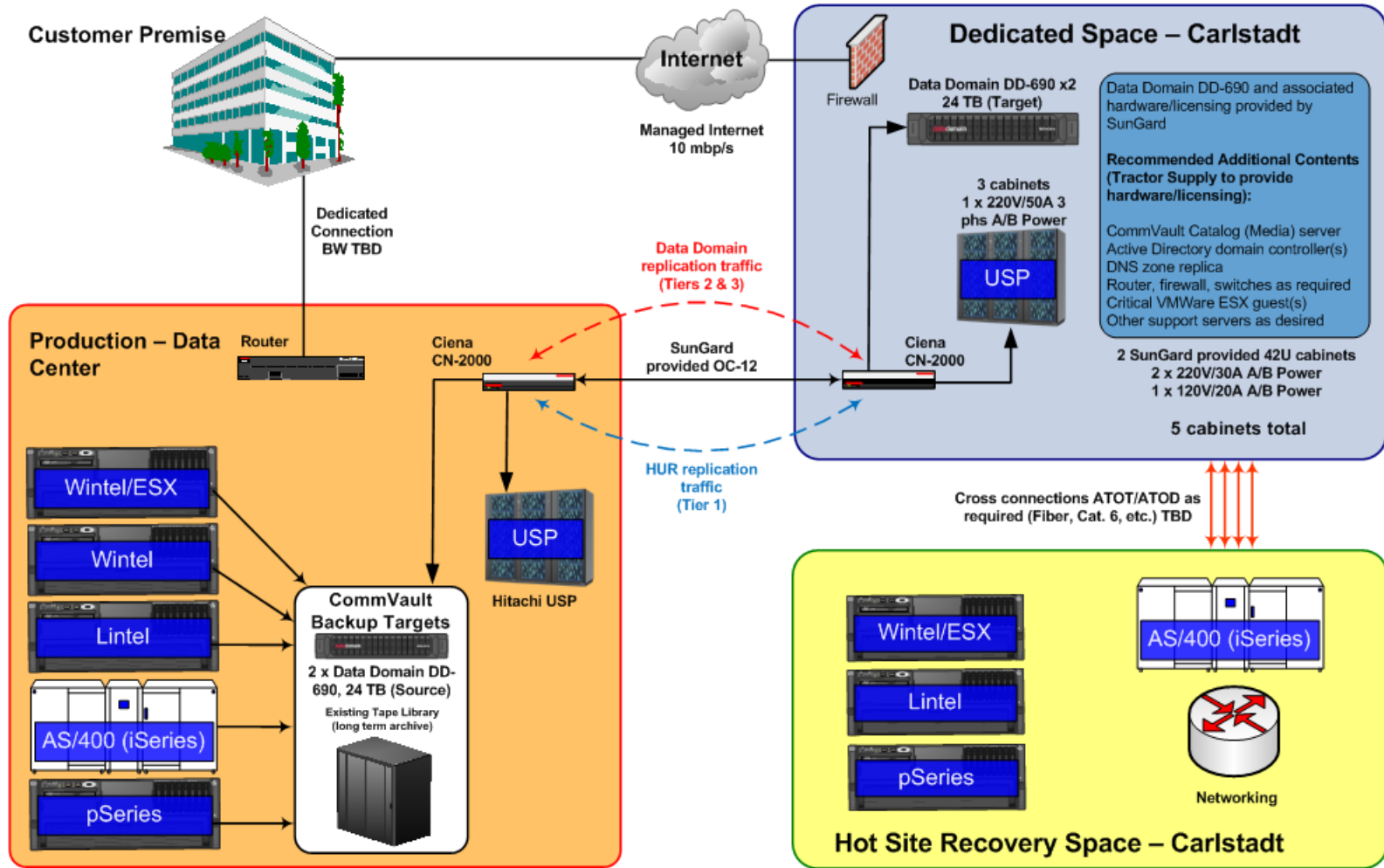
- <24 hour RTO for tier-1 apps
- Want to continue to own backup process
- Requirement to get data off site for Disaster Recovery
- Had to get data out of Region



## Why SunGard an Online Backup & Recovery Solution?

- Trusted Advisor
- Competitive price
- Application recovery
- Restore went from 60 hours to 16 hours

# Customer Case Study #2 – Large Retailer



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# How to Get Ready for Online Backup & Recovery

1. Work with a trusted advisor to tier applications based on business value and sensitivity to downtime
2. Evaluate your data growth needs over the next 3 years
3. Identify current backup and recovery costs including data center real estate, power, cooling, labor, hardware, software and maintenance
4. Evaluate vendors who can offer both backup and recovery capabilities that possess strong expertise, geographical diversity and are financially stable
5. Assign a time line with clear requirements and time frames to bring the decision process to a close



# QA

# Challenges with Backup & Recovery

## Data Center Diversity

- New and legacy equipment
- Heterogeneous
- Limited spares

## Unexpected Issues

- High probability risk impacts recovery time
- Possible delays reaching experts

## Change Management

- Additional resources (equipment or staff)
- Manage dependencies on others (e.g., vendors, quick ship programs)

## Recovery Readiness

- Idle systems often have unknown defects
- Multi-purposed systems impact recovery time

**What's your confidence in your Backup & Recovery?**

## Data Center Standards

- Security
- Regulations (e.g., PCI)
- Procedures using ISO standards

## Staff Expertise

- Experts in backup, but rarely recovery
- Don't perform recoveries enough to gain expertise

## Human Capital

- IT Staff willingness to go to recovery site after major disaster affects their family
- Ongoing training

## Recovery Tests

- Usually an audit, not a full recovery
- 40% don't test due to lack of time

# What Are We Hearing From Our Customers?


## Business Drivers

- IT Efficiency
- Total cost of ownership
- Continuous access to enterprise data
- Uptime & availability
- Operations process discipline
- Customer Service
- Cost associated with system failures
- Regulations/Compliance

## Technical Drivers

- System availability
- Higher availability
- Flexibility/Scalability
- Connectivity
- Security of applications
- Virtualization and utility models
- Facilities
- Technical expertise

# Recovery Time Objectives (RTO) Appropriate to Application Value

Downtime tolerance	Desired RTO	Increasing Data Size 
None	<4 hours	Disk-, Fabric, and Server-based Replication combined with resource virtualization (compute and storage)
Some	Hours	Backup and Recovery
Moderate	2+ days	Tape-based Backup and Recovery

**Secure2Disk®**

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**SunGard's Backup  
and Recovery  
Solution Portfolio**