











## **Business Resilience Means Business**

Reg Harbeck CA

February 12, 2007 Session 1641





- Setting the Stage: Business Resilience is About Business
- A Review of History: Starting with Storage
- Business Resilience Technologies Today
- Today's Business Resilience IT Issues
- Getting Back to Business: How it All Maps to the Bottom Line
- Looking to the Future of Business Resilience: Real World Examples with CA



## **Setting the Stage**

- What is "Business Resilience"?
  - Backup and Recovery?
  - DR?
  - Nothing to do with IT?
  - Exclusively IT?



## **Setting the Stage**

- Resilience and Continuity from an ITIL perspective
  - Business Continuity Management (BCM) means:
    - Risk analysis and management
    - Keeping risks acceptable
    - Ensuring reliable minimum capacity for production or service provision
    - Planning to restore business activities if interrupted by a disaster
  - IT Service Continuity Management (ITSCM) means:
    - Dealing with disasters affecting IT services
    - Maintaining services to allow the business to continue to operate

# Business Resilience **Is About** Business

## Concepts

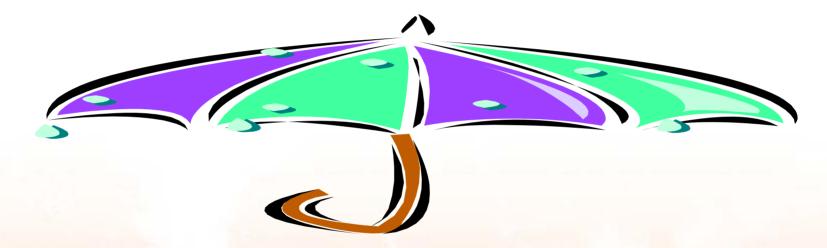


- Taking Ownership
  - "By design, not default"
- Balance
  - "Better" > "Perfect"



#### **Business Resilience**

Many Disciplines



- High Availability
- Continuous Operations
- Disaster Recovery



#### What is Business Resilience

#### High Availability

 Providing for fault tolerant, failure resistant infrastructures and clustering technologies enabling continuous transaction processing accounting for the events of planned and unplanned disruption of transaction processing.

#### Continuous Operations

 Providing for system maintenance and backups without impacting the availability of the business applications.

#### Disaster Recovery

 Providing for protection against unplanned outages such as natural disasters or man made disasters.



#### **Business Drivers**

- Rising Costs of Downtime
- Available Technology
- Heightened Risk Awareness
- Regulations, e.g. SOX
- Hydro Failure
- SARS, Bird Flu, etc.
- Identity Theft

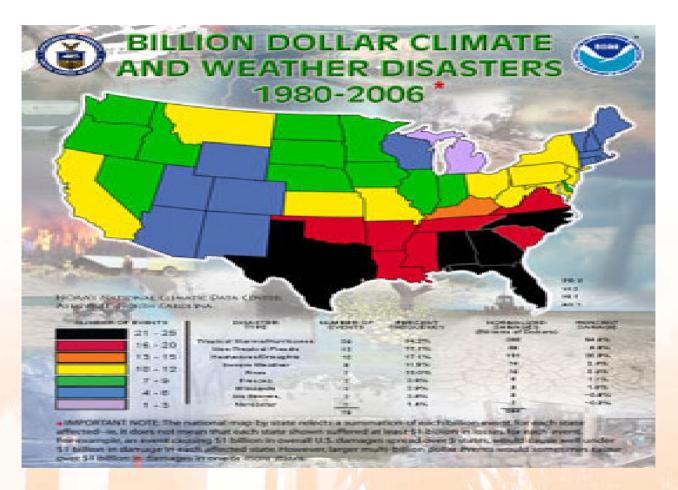
### **Resilience Driving Events**



- Natural disasters fire, floods, hurricanes, earthquakes
- Hardware breakdowns
- Software crashes
- Human error
- Terror attacks







Where is Your Center?

Source: http://www.ncdc.noaa.gov/oa/reports/billionz.html - National Climatic Data Center



#### **Downtime Impacts**

- Productivity
  - Cost of idle workers
- Damaged Reputation
  - Customers
  - Business Partners
  - Competitors
- Revenue
  - Direct Loss
  - Service Level Payments
  - Future Revenue
  - Billing Losses



#### **Cost of Downtime**

Type of Business	Average Hourly Impact
Retail Brokerage	\$6,450,000
Credit Card Sales Authorization	\$2,600,000
Home Shopping Channel	\$113,750
Catalog Sales Centers	\$90,000
Airline Reservations Centers	\$89,500
Cellular Service Activation	\$41,000
Package Shipping Service	\$28,250
On-line Network Connect Fees	\$25,250
ATM Service Fees	\$14,500



#### **Miscellaneous Terms**

### Tiers of Disaster Recovery

- Tier 0 (no recovery capability, no plan, no hot-site)
- Tier 1 (data is backed up, no hot-site in plan)
- Tier 2, 3 (tape intensive recovery methods, hot-site)
- Tier 4 (disk mirroring or disk point-in-time facilities)
- Tier 5 (software/ database specific recovery two sites)
- Tier 6 (near zero or zero data loss disk mirroring)
- Tier 7, which is a completely automated self-managed failover of servers, storage, application & system software, and networks.

Source: SHARE



## **Starting With Storage**

- Backup and Recovery
- HSM
- Tape Management
- Storage Management
- Mainframe and Distributed

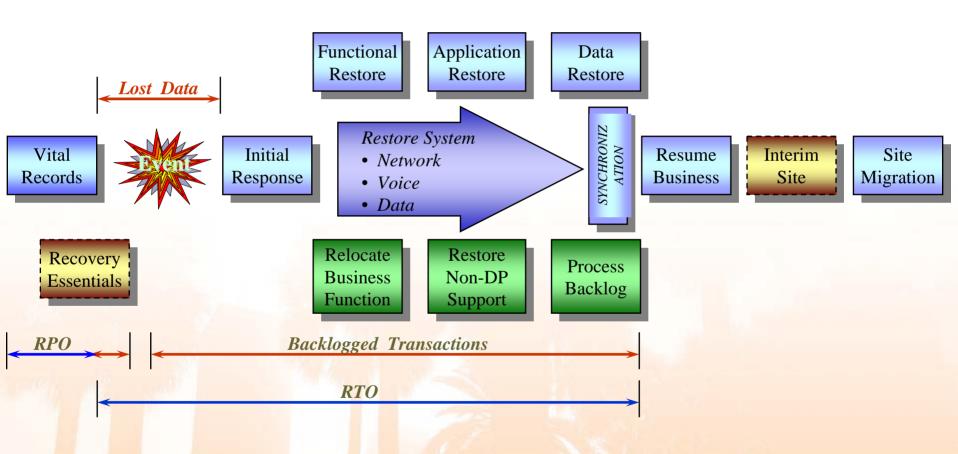


#### **Business Resilience Technologies Today**

- Resilience:
  - Enterprise-wide Automation
  - Performance
  - Network Management
- Database integrity, availability
- Security to guard data integrity, confidentiality
  - Including encryption of data in transit
- Tools to examine OS configuration for loopholes
- Cleaning up legacy

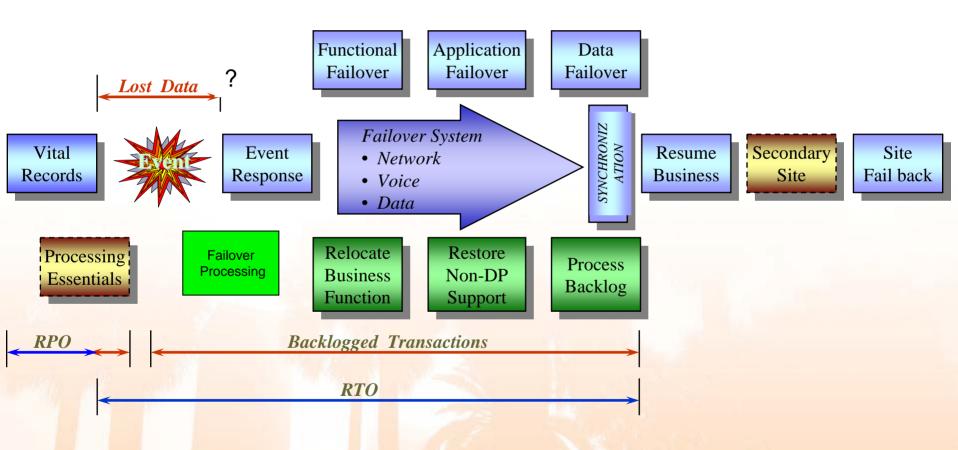


#### **Traditional Recovery Process**





#### **Business Resilience Process**





#### **Today's Business Resilience IT Issues**

- Beyond "Downtime"
- Reputation
- "Capricious Malice"
- Global Infrastructure
- New generations:
  - Mainframe
  - "Distributed" Platforms
  - "The Network is the Computer"
  - Ubiquitous Computing Devices
  - Technologists



#### How it all Maps to the Bottom Line

- IT's still about business
- ROI (Return On Investment) vs RON (Return On Negligence)
- 99.999% vs 100%
- Choose your consequences

#### Looking to the Future of Business Resilience: Real World Examples with CA



- As real world examples of implementing business resilience, CA offers:
  - Software
  - Services
  - Education
  - Vendor Consolidation
  - Comprehensive Business-Enabling Solutions (EITM)



#### Storage

- Backup, Recovery and HSM
  - CA-Disk
  - BrightStor ArcServe Backup
  - BrightStor HSM
- Tape Management
  - CA-1, Dynam/TLMS and Copycat
  - BrightStor Tape Encryption
- Storage Management
  - BrightStor CA-Vantage
  - BrightStor SRM
- Other Resilience-Enabling Technologies
  - VTape
  - BrightStor High Availability
  - BrightStor Tape Encryption



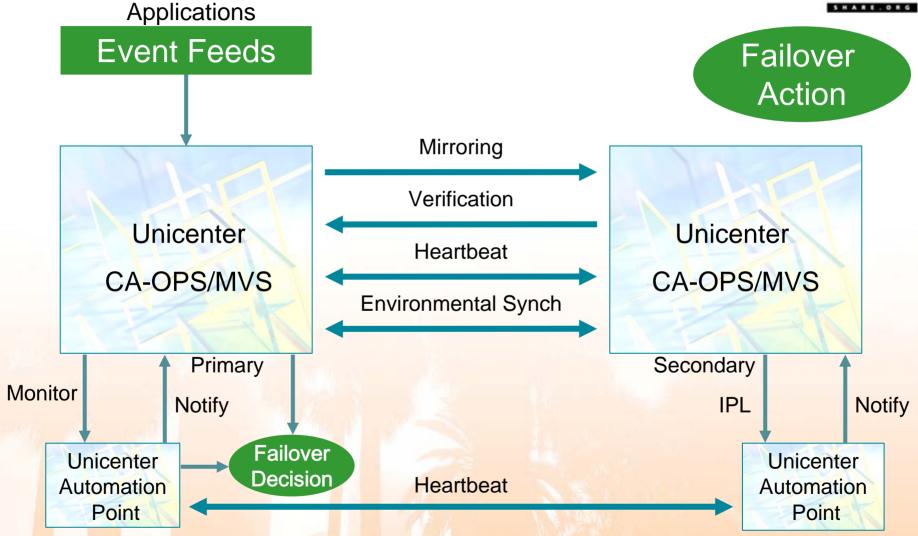
- Database Management
  - Datacom
  - IDMS
  - DB2/UDB tools
  - IMS tools
  - Tools for RDBMS including Oracle
  - Unicenter DCC



- Resilience: Automation & Performance
  - OPS/MVS
  - Sysview
  - MIM
  - Automation Point
  - Unicenter NSM and options

## **CA Automation – Where We Fit: Example Recovery Architecture**







- Resilience: Network Health
  - NetSpy
  - NetMaster (IP and SNA)
  - Unicenter NSM options
  - eHealth and Spectrum solutions



- Security
  - ACF2 and Top Secret
  - DB2 Options
  - Cleanup
  - Examine
  - eTrust Access Control
  - eTrust Policy Compliance
  - eTrust Security Command Center



### **CA Technology Services**

- Experienced consultants and partners
- Legacy Renewal service to evolve COBOL and Natural applications into business rules
- Optimization Services
- Pre-defined services including Healthchecks
- Assessments, upgrades, consolidations



#### **CA Education**

- Properly trained staff can better prevent and deal with contingencies
- Mainframe basics CBT's
- CA software beginner to advanced courses
- CA World



#### **Vendor Consolidation**

- Fewer Vendors =
  - Fewer fingers pointing
  - Fewer necks
  - Integration
  - Solid future
- Optimal number is two (one is a monopoly, more is a pain)
- Services and utilities to convert to leading-edge, integrated solutions





- CA's Enterprise IT Management vision
- How it works
- Its role in Business Resilience





#### **BUSINESS DRIVERS**

- Regulatory Compliance
- Responsiveness
- Investment ROI
- BusinessDependence
- Outsourcing
- Change in business process

Manage Risk

Manage Cost

Improve Service

Align IT
Investments

Intrastructure change & complexity

#### **Goals for IT**



#### MANAGE RISK

- Corporate Asset Protection
- Compliance
- Service Continuity

#### **IMPROVE SERVICE**

- Service Availability
- Service Management

#### MANAGE COSTS

- Optimize IT Resources
- Automate Processes

#### ALIGN IT INVESTMENTS

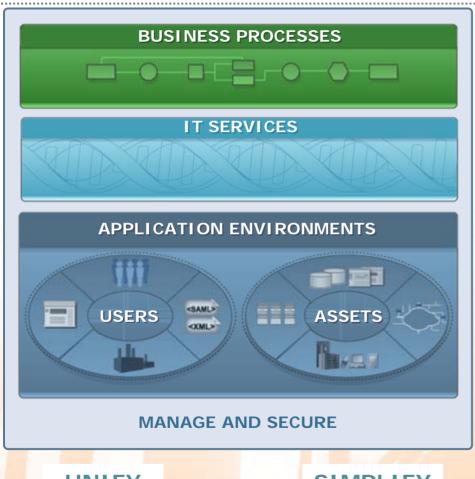
- IT Portfolio Management
- Value Management
- Business Process Management

#### BOTTOM LINE:

Unify and simplify to improve the service IT offers and add value to your business.

#### **CA's Vision**



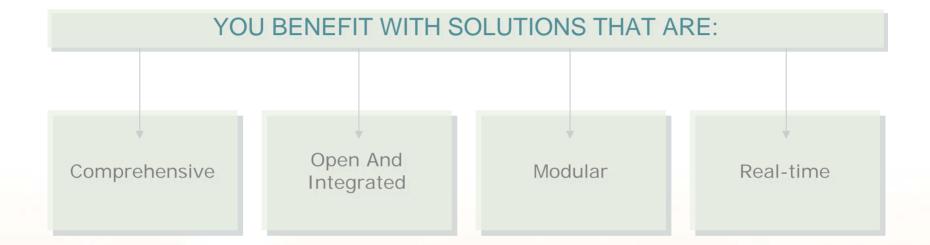


Enterprise IT Management (EITM) to **unify** and **simplify** the management of enterprisewide IT

JNIFY SIMPLIFY









#### **EITM** and Business Resilience

- Simplicity = Manageability
- Greater visibility
  - Achievable plans
  - Awareness at all stages of "irresilience events"
- Integrated functionality
  - Interoperability
  - Single point of control



## **Bringing IT All Together**

- You can't stop the future
- You can't even predict it
- But you can choose it
- Get the business perspective
- Think it through carefully
- Choose your consequences





- Business Resilience is About Business
- It Goes Beyond Storage
- Enterprise Resilience
- Dealing with Today's Issues
- Partner with CA for Success