Safeco Insurance
Using Disaster Recovery and Business Continuity Planning to Drive Virtualization in the Production Datacenter

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Agenda

- About us
- Pre Business Continuity Program (BCP) snapshot
- BCP and the VMware value proposition
- Building the case for VMware at Safeco
- Designing and implementing our VMware solution
- Delivering BCP results
- Optimizing our VMware investment now and into the future
- Questions
Who is Safeco?

- Our business & organization -
  - Four operating segments: Safeco Personal Insurance, Safeco Business Insurance, Surety, and Property and Casualty Other
  - The company markets its products primarily to drivers, home owners, and small- and mid-sized businesses through independent agents and brokers
  - Safeco Corporation was founded in 1923 and is headquartered in Seattle, Washington

- Our technology environment -
  - Multi-platform, multi-tier applications
  - Revenue generating systems
  - Availability/Recoverability
  - 1600 Wintel Servers, 10,000 desktops
  - Dual data centers
  - Multiple environments (Dev, Lab, Prod)
Pre-BCP Snap Shot

- Limited BCP programs- Infrastructure only (Before 2004)- RTO 72 hours
- Tape Recovery
- No second data center for Recovery
- Proof of concept pilot for vmware
Disaster Recovery Journal estimates that 1 out of 500 data centers will have a major outage each year.

Gartner estimates that 80% of all data centers will have one major event every 5 years.

20 year survey of Fortune 500 crisis readiness by University of Southern California’s Center for Crisis Management (July 2003) - 2 conclusions:

- Incidents of intentional damage to corporate assets has risen markedly over the past 10 years.
- Between 75 – 85 percent of Fortune 500 companies are not prepared to respond to a new type of crisis.

Business Drivers for Safeco:

- Business Impact Analysis (BIA) – Completed late 2004
- Sarbanes-Oxley (Sox)
- No Disaster Recovery Program
Requirements for Disaster Recovery

- 1st- RTO - Recover all vital & Critical Apps within 72 hours with 24 hours of data loss by June of 2006
- 2nd- RTO - Recovery all vital & Critical Apps within 24 hours with 4 hours of data loss by December 2006
- High availability
- Highly automated
- Recoverability without regular support staff
- Support 100% of Production Load
- Cost effective
- Timeline of one year
Applications at Safeco

- Over 850 Apps- various nature (Mainframe and Distributed)
- 200 vital & Critical (Example: Q & I, CVO, Email)
- 250 Important & Essential – (Example: FileServers, Internal dept. web sites)
- Never attempted Recovery Before
The VMware Value Proposition

- Server Consolidation
  - Pilot program-June 2004
    - Familiarization
    - Proof of concept- 32 vms on 3 hosts
- Recoverability-
  - Timing with BCP
  - Reducing program costs
  - Automate and simplify recovery
Building the Case for VMware at Safeco

- cDat (Performance Data Collection tool) study & Analysis
  - 70% of vital & Critical systems were less than 5% utilized
  - Recommendation
- Gaining executive support-present Analysis & Recommendation
  - Present to BCP project Management
  - Present to the 2nd level management
  - Present to the Directors (Apps, IT, BCP)
- Gaining developer and application owner support-
  - Info Exchanges
  - Q & A and 1 on 1 sessions
  - Provide a solid Test Environment
  - Test Apps and Document the Results
Example of App Performance After Migration to VM

- CVO-Claims virtual office
  - 4.5 hours per user for the first two days
- Other Benefits achieved
  - Clone & deploy new servers in minutes then Months
  - Recovery
  - High availability
Designing and Implementing Our VMware Solution

- Create a technical design
  - Resources
  - Research
  - Test-SRDF-A over FCIP & SAN to SAN Bake off
- Functional and system requirements
  - Applications on stand alone servers
  - Migrate data to SAN
- Aligning requirements with VMware capabilities
  - No performance impact
  - No application reconfiguration
  - Automated Recovery
Challenges

- IP addresses
- P2V migrations
- Short Timeframe
- Staffing Level
- Resource Constraints for app validation
- Two physical locations
- New hardware platform - (IBM 366, SAN, SRDF-A)
- Virtual Center Farm Naming Convention
- Performance Monitoring
- On going Education - (Support staff & customers)
Implementation Plan

- Create an Implementation plan
- Determine the number of Servers to Migrate
- Select a good P2V tool
- Create Pre& Post P2V Checklist
- Align Resources
- Create & Communicate migration schedule
- Follow up with the customer after the migration
- Monitor the ESX Server Environment Closely
- Have a good Back out plan
CVO Performance in VM

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Over All BCP Design
Asynchronous Replication
How Testing is Conducted

- Isolate Recovery Site from the Primary Site
- Take a snap Copy data at Recover
- Run script to attach luns to the ESX Server
- Scan Luns on All ESX Host Servers-
- Copy vmx files from the Virtual Center server to each ESX host
- Register VMX files
- Power on vm guest
Delivering BCP Results

- BCP Achievements
  - First goal exceeded expectations by 36 hours
- Server infrastructure recovered in 4.5 hours
- Saved $$$ in hardware cost and software licenses
- Projected recovery times
- P2V migrations 100% successful
- Recovery 100% success
Optimizing Safeco’s VMware Investment

- Virtualization Strategy
  - Strategic goals/executive summary
  - Consolidation targets
  - Cost model
  - Demand management
  - Metric reporting
Questions?

- Open Q&A

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