PRODUCT DATASHEET

CONTINUITY SOFTWARE

RecoverGuard™

Ensuring business continuity and data protection with automated HA/DR testing

Configuration Drift: The Greatest Threat to Business Continuity

Configuration drift is an inevitable condition in today's constantly changing data centers. It occurs when production or primary infrastructure configurations "drift" or become different in some way from the recovery or secondary infrastructure. This can create data protection gaps which put your Recovery Point Objectives (RPO) at risk as well as host or cluster configuration gaps impacting your Recovery Time Objectives (RTO).

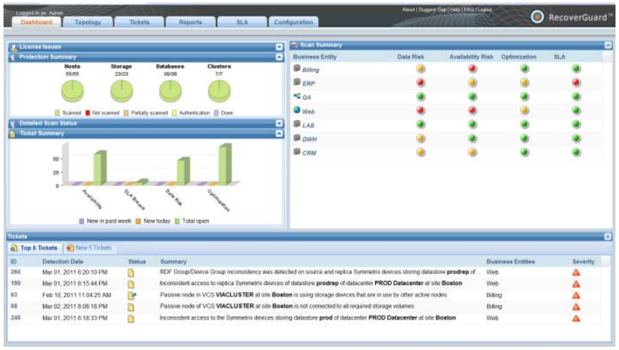
Manual HA/DR Testing is Not the Solution

Periodic high availability (HA)/disaster recovery (DR) testing requires considerable advance planning, along with a sizable investment in time and manpower. But because it can only be performed several times per year, it still leaves your organization vulnerable to configuration errors during long durations between tests.

RecoverGuard: Automatic HA/DR Vulnerability Detection

RecoverGuard software automatically detects all HA/DR risks immediately as they occur, so you can resolve them before they impact your business. This innovative software integrates into your IT infrastructure and operates in read-only, non-disruptive mode. It automatically scans storage, databases, servers, virtual machines, clusters, and replication configurations for vulnerabilities such as unprotected databases, erroneous cluster settings, noncompliant replication configurations, data that cannot be recovered to a valid consistency point, and much more. When gaps are uncovered, the software issues an alert, including a detailed description and suggestions for remediation.

The RecoverGuard Dashboard



Business Entity	Data Risk	Availability Risk	Optimization	SLA
Billing	🟡	🔴	🟢	🟢
ERP	🔴	🟡	🟡	🔴
QA	🟢	🟢	🟢	🟢
Web	🔴	🔴	🟡	🟢
LAB	🟢	🟢	🟢	🟢
DWH	🟡	🟢	🟢	🟢
CRM	🟡	🟡	🟢	🟢

ID	Detection Date	Status	Summary	Business Entities	Severity
260	Mar 01, 2011 6:20:10 PM		RDF Group/Device Group inconsistency was detected on source and replica Symmetrix devices storing datastore **prodrep** of ...	Web	⚠
190	Mar 01, 2011 6:15:44 PM		Inconsistent access to replica Symmetrix devices of datastore **prodrep** of datacenter **PROD Datacenter** at site **Boston**	Web	⚠
63	Feb 10, 2011 11:04:25 AM		Passive node in VCS **VIACLUSTER** at site **Boston** is using storage devices that are in use by other active nodes	Billing	⚠
68	Mar 02, 2011 8:08:18 PM		Passive node of VCS **VIACLUSTER** at site **Boston** is not connected to all required storage volumes	Billing	⚠
246	Mar 01, 2011 6:18:33 PM		Inconsistent access to the Symmetrix devices storing datastore **prod** of datacenter **PROD Datacenter** at site **Boston**	Web	⚠

The RecoverGuard dashboard provides an immediate snapshot of HA/DR risks throughout your IT infrastructure and the ability to drill down to the details of any issue.

What RecoverGuard Offers

- Automatic detection of availability and data protection vulnerabilities using a knowledgebase of over 5,000 risk signatures
- Analysis and presentation of potential impact on business services
- Identification of infrastructure optimization opportunities and best practices recommendations
- Agentless, non-intrusive data collection using standard communication protocols (SSH, WMI, WinRM, Storage APIs, JDBC, Sudo) with zero impact on the scanned environment
- Integration with leading configuration management database (CMDB), ticket management, and enterprise console systems

Key Benefits

- Dramatically reduce business downtime and data loss by automatically detecting HA/DR readiness and data protection vulnerabilities
- Verification and measurement of disaster recovery (RPO, retention, capacity and more)
- Reduce HA/DR pre-test effort and time, and improve test success rates
- Ensure business continuity by validating that your production and replication/cluster environments are always in sync
- Continuously audit and improve cluster, DR, and data protection practices
- Effectively manage disaster recovery and high availability capacity
- Maximize your cluster, replication and DR investments and identify wasted storage, bandwidth, and server resources

RecoverGuard delivers a robust feature set and cross-vendor/cross-domain/cross-platform support to ensure business operations can quickly resume in the event of disaster or unexpected downtime.

Business Continuity Vulnerability Detection

- Risk Detection Engine automatically uncovers configuration gaps between the production and DR/HA environments that create data protection, availability, or disaster recovery risks.
- Community-driven Risk Knowledgebase contains thousands of configuration risk signatures and is constantly updated. See examples at www.continuitysoftware.com/gaps.
- Real-time verification of IT changes enhances HA/DR tests and configuration audits.

Comprehensive SLA Management

- Policy-driven SLA Management monitors established SLA policies by host, business service, or business unit. Notifications are issued when a violation is detected.
- RPO Measurement & Analysis offers a high-level, aggregated, graphical overview of potential RPO risks.
- Disaster recovery and high availability capacity tracking helps ensure business continuity.

HA/DR System Configuration Validation

Automatically identify significant gaps between production and HA/DR servers to ensure hardware and software parameters are aligned and avoid a single point of failure.

Live Data Center Documentation

Gain insight with an interactive, graphical topology of all data center entities, dependencies, and relationships.

Comprehensive Reporting

Get the data you need, on-demand, to assess and analyze your current ability to maintain business continuity.

Data Center Change Audit Trail

Ensure the entire data center team stays informed of all changes.

Risk Assessment Dashboard

Provide non-IT executives with insight into the company's readiness and risk levels.

Automated Alerts & Notifications

Direct instant notification of a potential problem to the proper person in your organization.

Identification of Optimization Opportunities

Discover unutilized storage space or other opportunities to reduce costs and improve overall system performance.

Integration with CMDB and System Management Consoles

Consolidate system management across the enterprise. Integrates with CMDB and ticket management consoles from leading vendors (IBM Tivoli, HP OpenView, BMC Remedy, and other).

Supported Platforms

Operating Systems

- Solaris 8+
- HPUX 11.0+
- AIX 4+
- Linux RedHat AS 3+, SuSE 8+
- Windows 2000+

Virtualization

- VMware vSphere
- All major Unix virtualization environments

Databases

- Oracle 8.1.7+
- MS SQL Server 2000 SP3+
- Sybase 12.5+
- DB2 UDB 8.1+

Storage

- EMC Symmetrix / CLARiiON
- NetApp Filers – All
- HDS AMS, USP, VSP
- IBM DS 6K, 8K, XIV, SVC
- HP XP

Clusters

All major cluster environments

Replication

All native replication engines

Volume Management

All major LVM and filesystems

PRODUCTS OF THE YEAR 2007 SILVER

Products of the Year '09 Storage magazine/SearchStorage.com

Data Protection

Replication

- Data completeness
- Data consistency
- Process failures

Data Protection SLA

- RPO management
- Data retention
- Performance
- Location
- Insure protection of critical assets

SAN Best Practices

- I/O multi-pathing best practices
- SAN security / tampering prevention

Optimization

- Reclaimable storage
- Optimize replication
- Optimize I/O
- Optimize performance
- SAN best practices

Virtualization

- Storage allocation
- Dependency mapping

Database Best Practices

- Data corruption
- Performance
- DB vendor recommendations
- Joint DB / storage vendor recommendations

Availability Management

DR Data Access

- Correct access to shared storage (HA) and replicas (DR)
- Redundancy and performance

Host Configuration

- OS version / SPs / patches
- Installed products / versions
- Kernel parameters
- Network services

Root Cause Analysis

- Datacenter change analysis

Clustering Best Practices

- Consistent configuration across cluster nodes
- Vendor best practices
- Local / geo clustering

Virtualization Best Practices

- HA & DR
- Vendor best practices

Redundancy

- RAID level
- SAN Multi-pathing
- Network
  - NIC / teaming
  - DNS, LDAP, AD
- DB file configuration