

## Overview

The HP Disaster Tolerant SAN (DT-SAN) for Tru64 UNIX® and Windows® is a complete business continuity infrastructure for your most critical information consisting of consultancy services, storage products, management tools and training. The solution integrates several system management products on Windows workstations to provide a 24 X 365 way to manage and monitor two remotely mirrored data centers. It allows a true disaster tolerant solution to be constructed with minimal impact to your business, resulting in a highly resilient and disaster tolerant platform for business applications.

The core of the solution is built from off-the-shelf technologies:

- StorageWorks HSG80 storage subsystems
- SANworks Data Replication Manager, configured synchronously
- StorageWorks Enterprise Backup Solution with StorageWorks MSL5052 Tape Library (optional)
- SANworks Enterprise Volume Manager (optional)
- Management stations running Windows NT®
- Heroix RoboMon and Event Distribution Architecture Software: for event monitoring and console management
- HP Disaster Tolerant Services Site Consolidation Software
- HP Disaster Tolerant SAN Services
  - Assessment and Design Services
  - Pre-installation visit
  - Disaster Tolerant SAN Transition and Implementation Plan and Implementation
  - Disaster Tolerant SAN Training: consisting of a technical overview, operator and system manager overview, using the SAN management station, recovery from failures, disaster recovery workshop
  - Disaster Tolerant SAN Readiness Review
- Complete set of documentation customized for your environment

## Features and Customer Benefits

- A complete disaster tolerant/business recovery solution that minimizes the risk and associated costs of downtime
- Maximizes the use of your IT infrastructure by with a split site remote mirroring operation where both sets of equipment are used, and share the workload during normal operation
- Includes assessment and consultancy services as well as StorageWorks and SANworks by Compaq
- "Living" recovery solution ensures a live synchronized set of data at each site, providing the advantage of being able to perform routine maintenance at either site without interruption
- Highly scalable solution that can be increased and modified without business interruptions
- Provides the fastest recovery times available of any business continuity solution and allows businesses the ability to predict recovery times.
- No data loss in the event of an outage, as data is live in the secondary location
- Application independent - continuous computing for today's mission critical applications such as MS-Exchange, IIS, Oracle, and SQL Server.

## Business Value

For mission critical environments, zero downtime is the only acceptable continuity strategy. Traditional business continuity solutions offer a range of services that can help your business recovery after a disaster. However, with the DT-SAN, you can continue to operate during and subsequent to any outage - planned or unplanned. Downtime and loss of data can impact your organization in many ways: non-availability can lead to a decline in share price and revenue, can weaken your competitive position, damage your reputation, and lead to a loss of communication with staff, suppliers, and customers. Days, hours, or even minutes of downtime are no longer acceptable. Some applications are critical to the profitability or even survival of the business. It is the business impact that determines the importance of the application and the degree of availability required. The DT-SAN allows you to protect your most critical business data, and recover it immediately in the event of the unthinkable.

### Product Highlights

#### Platform, Software and Application Support

- |   |   |
|---|---|
| <b>Platform, Software and Application Support</b> | <ul style="list-style-type: none"> <li>● Windows 2000 (SP2)</li> <li>● Windows NT 4.0 (SP3, 4, 5 &amp; 6)</li> <li>● Compaq Tru64 UNIX</li> </ul> |
|---|---|
- 

- |  |  |
|--|--|
| <b>Heroix Management and Monitoring Software</b> | <ul style="list-style-type: none"> <li>● Supports all operating systems used in the DT-SAN Solution</li> </ul> |
|--|--|
- 

- |                          |  |
|--------------------------|--|
| <b>SANworks Software</b> | <ul style="list-style-type: none"> <li>● SANworks Data Replication Manager</li> <li>● SANworks Enterprise Volume Manager (optional)</li> </ul> |
|--------------------------|--|
- 

#### Hardware Support

Fibre Channel configurations

---

- |                              |  |
|------------------------------|--|
| <b>Minimum Configuration</b> | <ul style="list-style-type: none"> <li>● Two StorageWorks Enterprise Storage Array /Enterprise Modular Array 12000, StorageWorks RAID Array/Modular Array 8000 or StorageWorks Enterprise Modular Array 16000 subsystems – one at the target site and one at the initiator site.</li> <li>● Two Fibre Channel switches at each target and initiator site</li> <li>● Two Fibre Channel or ATM links between sites using Single Mode Fibre Optic cables</li> <li>● Two Host Bus Adapters per host with multiple-bus failover capability</li> <li>● StorageWorks Enterprise Backup Solution with StorageWorks MSL5052 Tape Library</li> </ul> |
|------------------------------|--|
- 

#### Solution Product Services

**Pre-Installation Visit**      The purpose of the pre-installation visit is to:

- Confirm the scope of the Disaster Tolerant Solution and the customization required to satisfy specific disaster tolerance requirements
- Outline the Disaster Tolerant SAN Solution training delivery and agree suitable dates and locations for training. Potential attendees will also be identified
- Review the Disaster Tolerant SAN Configuration
- Collect any outstanding information required in order to complete the transition plan
- Visit the two main customer data centers for familiarization purposes.

Following the pre-installation visit a short report will be produced which will summarize the visit and include any final recommendations regarding the commencement of the Disaster Tolerant SAN project implementation.

---

#### Disaster Tolerant SAN Transition or Implementation Plan

A detailed Disaster Tolerant SAN transition or Implementation plan that will include detail on all technical activities that are to take place in the delivery is one of the first major tasks in the delivery. This plan will highlight any risks for each of the following activities and describe the contingency plans for each case. This document will be offered for your review before any technical activity takes place.

Topics covered in this document will include:

- A full project plan, showing all of the key tasks and milestones
  - Identification of the people responsible for critical tasks
  - Identification of any technical constraints, specifically:
    - System requirements and registry settings for all servers
    - Patch and service release level requirements
    - Hardware firmware level requirements
    - Layered product versions restrictions
    - Disk and controller reconfiguration requirements
-

---

## Product Highlights

### Disaster Tolerant SAN Solution Training

The training includes the following modules:

- Disaster Tolerant SAN Technical Overview
- Disaster Tolerant SAN Operator & System Manager overview
- Using the Disaster Tolerant SAN Management Station
- Recovering from failures
- Disaster Recovery Workshop
- Disaster Tolerant SAN Readiness Review
- Disaster Tolerant SAN "Go-Live" Cluster support
- Disaster Tolerant SAN Software installation
- Disaster Recovery testing
- Documentation

---

## Solution Warranty

Product Support gives the customer access to HP experienced technical support resources as well as access to HP Information Services database for support on a variety of multi-vendor/multi-platform software products. Product support includes escalations and problem coordination with the appropriate engineering group. HP Services offer a variety of options to allow you to tailor your product service to meet the needs of your organization. Basic warranty on products can be uplifted from day one to ensure you receive the service you need when you need it.

Standard software product warranty is 90-day conformance to Software Product Description or equivalent documentation.

---

### Software Product Services

- Basic Per Product Telephone Support (annual support contract which includes standard business hours access (5 days x 9 hours), next business day response time and access to software patches)
  - Per Product Installation Service (installation, configuration and startup testing)
  - Subscription services to provide automatic distribution of new releases on a renewable annual contract basis
  - Telephone Service upgrades to basic per product support
  - 7x24 access
  - Faster response time (4 hour response)
  - Service duration (1, 3 or 5 years)
  - Tailored support contracts based on personalized statement of work: contact your local support center via <http://h71025.www7.hp.com/support/home/index.asp>
- NOTE:** This Web site is available in English only.

---

### HP Care Pack Services

- Upgrade of standard product warranty for hardware or software: 1 or 3 years duration; 5x9 access or 7x 24 access; next business day or 4 hour response
- Available during warranty period only
- Prepaid rather than annual contract

---

### DRM Solution Kits

User Guides, Release Notes, Application Notes and White Papers are available on the DRM web page for downloading <http://h18006.www1.hp.com/storage/saninfrastructure.html>

**NOTE:** This Web site is available in English only.

---

## Additional Information

Additional information about HP Business Continuity solutions can be found at:

<http://h18006.www1.hp.com/storage/continuity/> and

<http://www.hp.com/hps/continuity/>

**NOTE:** These Web sites are available in English only.

### Service and Support, HP Care Pack and Warranty Information

- Software Product Services**
- Stand-alone telephone support
  - Rights to a new license
  - Media and documentation updates

- Hardware Product Services**
- Installation services
  - On-site Maintenance (includes warranty support)
  - Response time upgrades during the warranty period
  - Post-warranty coverage

For additional hardware installation and maintenance information please refer to the URLs listed below:

[http://h18005.www1.hp.com/services/carepaq/us/install/cp\\_storage.html](http://h18005.www1.hp.com/services/carepaq/us/install/cp_storage.html)

[http://h18005.www1.hp.com/services/carepaq/us/hardware/cp\\_storage.html](http://h18005.www1.hp.com/services/carepaq/us/hardware/cp_storage.html)

- Warranty Upgrade Options**
- Response - Upgrade on-site response from next business day to same day 4-hours
  - Coverage - Extend hours of coverage from 5 days x 9 hours to 7 days x 24 hours
  - Duration - Select duration of coverage for a minimum period of 1 year or multiple years

**HP Care Pack Information** *Sample part numbers:*

3 year, uplift to 5 x 9, Next Day Response FM-\*\*XHW-36

3 year, uplift to 5 x 9, 4-hour Response FM-\*\*4HR-36

3 year, uplift to 7 x 24, 4-hour Response FM-\*\*724-36

\*\* represents a two-digit, product-specific code

- HP Care Pack is defined as an upgrade to the product warranty attribute, available for a specific duration and hours of coverage.
- HP Care Pack is not available for less than the products warranty duration.
- HP Care Pack is available for sale anytime during the warranty period for most products, but the commencement date will be the same as the warranty start date (delivery date to end user customer). Proof of purchase may be required.
- HP Care Pack services are prepaid.

For additional HP Care Pack (hardware & software) information, as well as orderable part numbers, please refer to the URL listed below:

<http://h18005.www1.hp.com/services/carepaq/index.html>

© Copyright 2003 Hewlett-Packard Development Company, L.P.  
The information contained herein is subject to change without notice.

Windows NT is a US registered trademark of Microsoft Corporation. Unix is a registered trademark of The Open Group.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.