

H06.05 Release Version Update Compendium

Abstract

This compendium provides a summary of the products that have major changes in the H06.05 release version update (RVU), including the products' new features, migration issues, and fallback considerations. The compendium is written for system managers or anyone who needs to understand how migrating to H06.05 affects installation, configuration, operations, system management, maintenance, applications, networks, and databases.

Product Version

N.A.

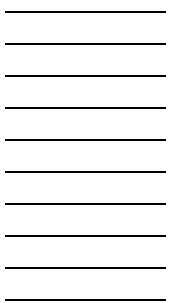
Supported Release Version Updates (RVUs)

This publication supports the H06.05 RVU only.

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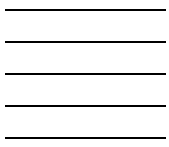
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What's New in This Manual

Manual Information

Abstract

This compendium provides a summary of the products that have major changes in the H06.05 release version update (RVU), including the products' new features, migration issues, and fallback considerations. The compendium is written for system managers or anyone who needs to understand how migrating to H06.05 affects installation, configuration, operations, system management, maintenance, applications, networks, and databases.

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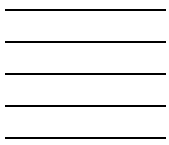
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New and Changed Information

This is a new manual.



About This Manual

This compendium provides categorized information about new features, migration issues, and fallback considerations for H06.05. It also includes references and sources for migration planning.

Who Should Use This Guide?

This compendium is written for system managers or anyone who needs to understand how migrating to H06.05 affects installation, configuration, operations, system management, maintenance, applications, networks, and databases.

Organization

Section	Description
Section 1, H06.05 Overview	An overview listing the products that have major changes
Section 2, Operating System Section 3, Application Development Products Section 4, Database and Transaction Processing Products Section 5, Installation and Configuration Products Section 6, Manageability Products Section 7, Hardware Products Section 8, Networking Products	Categorized product information that summarizes: <ul style="list-style-type: none">● New features● Migration issues (if available)● Fallback considerations (if available)
Appendix A, Sources for Migration Assistance and Information	References and sources for migration planning

Related Manuals

For a list of RVU and migration manuals, see [NonStop Technical Library \(NTL\)](#) on page A-2.

1 H06.05 Overview

This section provides an overview of the H06.05 RVU.

NonStop Servers Supported

H06.05 supports the HP Integrity NonStop NS16000 server and the Integrity NonStop NS14000 server.

Major New Features

[Table 1-1](#) summarizes the main changes in H06.05. For descriptions of new features, see the appropriate sections.

Table 1-1. Summary of the H06.05 RVU (page 1 of 2)

Sections and Categories	Major New Features	Migration Alerts	Fallback Alerts
Section 2, Operating System	<ul style="list-style-type: none"> ● Nonblocking Terminal I/O with OSS \$ZTTnn ● OSS Fileset ● OSS Security APIs ● POSIX Threads 	X	X
Section 3, Application Development Products	<ul style="list-style-type: none"> ● TNS/R Cross Compilers 		X
Section 4, Database and Transaction Processing Products	<ul style="list-style-type: none"> ● NonStop SQL/MX Release 2.2 ● SMF ● TMF 3.3 ● TRANSFER Q Manager ● TS/MP 2.1 (Controlled Availability) ● TS/MP PATHMON 	X X X	X
Section 5, Installation and Configuration Products	<ul style="list-style-type: none"> ● DSM/SCM Cross Platforms ● DSM/SCM Dial-Out Report ● DSM/SCM Hostname Change 	X X	

Table 1-1. Summary of the H06.05 RVU (page 2 of 2)

Sections and Categories	Major New Features	Migration Alerts	Fallback Alerts
Section 6, Manageability Products	<ul style="list-style-type: none"> ● Backup Restore 2 ● NetBatch ● SeeView ● SWID 	X	X
Section 7, Hardware Products	<ul style="list-style-type: none"> ● Integrity NonStop NS14000 Server ● LTO Fibre Channel Tape Drive ● ServerNet Cluster 	X	X
Section 8, Networking Products	<ul style="list-style-type: none"> ● DNS 9.3.0 	X	

Products Removed From the Site Update Tape (SUT)

Starting with H06.05, the NonStop Storage Management Foundation (SMF) products T0063 (SMINTRFCE) and T8467 (SMPM) are merged into T8472 (SMLOGVOL). For the installation alert, see [SMF](#) on page 4-2.

Also starting with H06.05, several products are replaced by T0744, Backup Restore 2. For the installation alert, see [Backup Restore 2](#) on page 6-1.

For recent product removal information, see the Discontinuation Notices at <http://h20223.www2.hp.com/NonStopComputing/cache/77208-0-0-225-121.aspx>.

Preparation, Planning, and Migration

- If you are migrating from G-series to H-series, before you begin migrating applications, contact your HP representative to analyze your applications and identify specific modules and program components that require changes for migration to an H-series TNS/E system.
- For the physical, electrical, and environmental specifications used by HP professional service providers for site preparation, see the *NonStop NS-Series Site Preparation Guide* in the HP NonStop Technical Library (NTL).
- For an H-series overview, see Section 1 of the *H06.03 Release Version Update Compendium*, which includes these topics:
 - NonStop advanced architecture
 - Operational differences between systems running H-series and G-series RVUs
 - Application differences between the H-series and G-series RVUs
 - Networking differences between the H-series and G-series RVUs

- SUT-based products migrating to H-series RVUs
- Independent Products (IPs) that become SUT products on H-series RVUs
- For descriptions of Integrity NonStop NS-series hardware and the ServerNet SAN and how to plan and configure the site in preparation for installation of the system, see the *NonStop NS-Series Planning Guide*.
- For changes in H-series installation, see the *H06.05 Software Installation and Upgrade Guide*.
- For the changes that are required to migrate a program from a G-series system to an H-series system, see the *H-Series Application Migration Guide*, which covers these migration paths:
 - Migrating G-series TNS programs to the TNS environment on an H-series system
 - Migrating G-series (TNS/R) native programs to the TNS/E native environment on an H-series system
- For compatibility and interoperability between the Integrity NonStop NS-series server and the NonStop S-series server, specific software product revisions (SPRs) are required. See the H-series overview page in the Interactive Upgrade Guide 2.
- For interoperability of SQL/MX releases between systems running G-series and those running H-series RVUs, see the *NonStop SQL/MX Database and Application Migration Guide*.

NTL Media Installation

The installation procedures for NTL CDs and DVDs have changed. For instructions, see the insert in the NTL package.

2 Operating System

The H06.05 RVU contains these operating system changes:

- [Nonblocking Terminal I/O with OSS \\$ZTTnn](#)
- [OSS Fileset](#)
- [OSS Security APIs](#)
- [POSIX Threads](#)

Nonblocking Terminal I/O with OSS \$ZTTnn

The HP NonStop Open System Services (OSS) environment includes a new terminal helper server process, \$ZTTnn (where nn is the processor number), in each processor. The terminal helper server provides support for application use of the select() function and the FILE_COMPLETE_ family of procedure calls on terminal device files such as Telserv and OSSTTY. Each terminal helper server process automatically starts when the processor it runs on is started. You cannot stop or start the new process independent of processor shutdown or startup.

OSS Fileset

The OSS environment now includes its former process checkpointing and caching features to improve fault-tolerance for OSS disk files. New fileset configuration options enable separate control of checkpointing and caching and are implemented according to whether the standard O_SYNC flag is used for an OSS file open. (The nonstandard S_NONSTOP flag is now ignored.) The new default configuration settings provide the recommended minimum level of fault tolerance, but it is possible to configure a fileset for legacy fault-tolerant behavior.

You use the OSS Monitor Subsystem Control Facility (SCF) module command options, rather than the storage subsystem SCF DISK command, to configure the checkpointing and caching features. (The new fault-tolerant behavior requires disk caching to remain enabled by the storage subsystem.) For more information, see the *Open System Services Management and Operations Guide*.

Migration

Recode applications that use S_NONSTOP to use O_SYNC.

If your site prefers legacy fault-tolerant behavior to the defaults used by the updated product modules, you must manually reconfigure that behavior after installation.

Fallback

If you fall back, filesets that you configured to use the new options before falling back no longer use those options.

OSS Security APIs

- The OSS environment now supports the C `setregid()` and `setreuid()` functions to make the porting of UNIX or Linux applications easier. Changes to the effective user ID or the effective group ID cause appropriate behavior across processors within a server and among servers. Safeguard auditing also tracks the changes.
- Functions are added to the OSS file system (T8620) to change the owner or access permissions for a file when the named file is a symbolic link:
 - `lchmod(2)`
 - `lchown(2)`

Some functions are changed and new functions are added to the OSS file system (T8620) to change the owner or access permissions for a file specified by a file descriptor:

- `fchmod(2)`
- `fchown(2)`

Changes to the effective user ID or the effective group ID cause appropriate behavior across processors within a server and among servers. Safeguard auditing also tracks the changes. For detailed information, see the *OSS System Calls Reference Manual*.

POSIX Threads

Some functions are changed and new functions are added to POSIX Threads product (T1248) to support several new features:

- Reentrant POSIX thread APIs
- Nonblocking file-descriptor POSIX thread APIs
- Enscribe POSIX thread APIs

For detailed information, see the *OSS System Calls Reference Manual*.

Fallback

If you fall back, you cannot use the new functions and must recode applications to remove them.

Application Development Products

The H06.05 RVU contains new features for this application development product:

- [TNS/R Cross Compilers](#)

TNS/R Cross Compilers

TNS/R native compilers, libraries, and development tools are supported on TNS/E systems. This support enables compiling and linking for the TNS/R architecture on a TNS/E system. You can now build code for both the TNS/R and TNS/E architectures using a single development platform — the TNS/E platform. (TNS/R object code cannot be executed on a TNS/E system).

The TNS/R cross compilers on the TNS/E platform have all the features of the TNS/R compilers since the G06.20 RVU and the same functionality as the G06.27 compilers. Using the cross compilers, you can build applications targeted for a specific G-series RVU starting with G06.20. Compilation for a pre-G06.20 RVU is not supported.

The TNS/R products supported on the TNS/E platform are:

- TNS/R native C/C++ compilers (NMC, NMCPLUS)
- pTAL compiler (PTAL)
- TNS/R native COBOL compiler (COBOL)
- OSS C/C++ compiler with flag to specify TNS/R compilation
(`c89 -Wtarget=tns/r`)
- TNS/R native non-PIC linker (`nld`)
- TNS/R native PIC linker (`ld`)
- TNS/R native object file utility (`noft`)

The cross compiler development environment includes all runtime libraries and header files required for application development. For both TNS/R and TNS/E compilation, the compiler run commands also provide a parameter to control the visibility of RVU-specific declarations.

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Database and Transaction Processing Products

The H06.05 RVU contains new features for these database and transaction processing products:

- [NonStop SQL/MX Release 2.2](#)
- [SMF](#)
- [TMF 3.3](#)
- [TRANSFER Q Manager](#)
- [TS/MP 2.1 \(Controlled Availability\)](#)
- [TS/MP PATHMON](#)

NonStop SQL/MX Release 2.2

NonStop SQL/MX Release 2.2 introduces this new functionality:

- ANSI Names support in File Utility Program (FUP) for INFO, RELOAD, LISTLOCKS, and LISTOPENS commands
- ANSI Names support in DP2 EMS messages
- FCHECK support for ANSI Names
- FCHECK support for verifying the integrity of individual SQL/MX data rows
- UPDATE STATISTICS - partitioned sample table for improved performance
- SQL/MX plan size reduction in unique queries for SQLMXBUFFER
- Dynamic SQL performance enhancement in JDBC/MX type 2 driver

Although NonStop SQL/MX Release 2.2 introduces new functionality, it remains interoperable with compatible releases of NonStop SQL/MX. NonStop SQL/MX supports interoperability between G-series and H-series RVUs on H06.03 and later RVUs. For more information, see the *SQL/MX Database and Application Migration Guide*.

NonStop SQL/MX Release 2.2 is delivered with the H06.05 SUT. If you have H06.05 on your system, you can install SQL/MX Release 2.2. However, if you have H06.04 on your system and you want NonStop SQL/MX Release 2.2 functionality, you must order and install the H22^ACF SPRs from Scout for NonStop Servers. For installation information, see the *SQL/MX Installation and Management Guide*.

Installation

Check that the HP NonStop Transaction Management Facility (TMF) is configured and running on the system node where you will install NonStop SQL/MX. For TMF installation instructions, see the *TMF Planning and Configuration Guide*.

Note. All NonStop SQL/MX objects must reside on volumes audited by TMF. NonStop SQL/MX program files do not need to reside on audited volumes.

Before installing NonStop SQL/MX Release 2.2, see the *SQL/MX Installation and Management Guide* and ensure that you performed all preinstallation instructions.

SMF

Installation Alert

SMINTRFCE (T0063) is removed from the NonStop Storage Management Foundation (SMF) product set. If you are installing the SMF bundle (T8472H01^ACW) without installing the entire SUT, T0063 might appear in the DSM/SCM configuration when you migrate to H06.05. If so, during the Copy To operation of DSM/SCM, do not select T0063 for retention in the H06.05 configuration.

For additional installation instructions, see the T8472H01^ACW softdoc.

TMF 3.3

The HP NonStop Transaction Management Facility (TMF) includes T2076, T2781, T8302, T8606, T8607, T8608, T8609, T8652, T8694, T8695, T8696, and T8698. TMF 3.3 provides these new features:

- You can use the TMFCOM ADD AUDITTRAILS command to add auxiliary audit trails to the TMF configuration while TMF is started.
- **Controlled Availability:** The commit-hold feature is available in the TMFCOM ALTER AUDITTRAIL command and is controlled through the COMMITHOLDMODE, RESET COMMITHOLDMODE, and COMMITHOLDTIMER options. This feature is available only on systems running the HP NonStop Remote Database Facility (RDF) product that guarantees Zero Lost Transactions (RDF/ZLT) and is solely provided to customers on a controlled basis. With this feature, if the components needed to ensure ZLT on the backup system in an RDF configuration become unavailable, commit-hold can be activated, and the Transaction Management Process (TMP) stops writing audit (which includes transaction commit and abort records) to the primary system. Therefore, when commit-hold is activated, no transactions are completed on the primary system without being copied to the backup system, and ZLT is guaranteed. The commit-hold condition prevails until the problem that activated commit-hold is resolved, a specified time-out duration expires, or a user explicitly suspends or terminates the

condition. Information about commit-hold is also displayed by the INFO AUDITTRAIL, STATUS AUDITTRAIL, and STATUS TMF commands.

- You can access performance-tuning functions, formerly available only through the SNOOP utility, with these options of the TMFCOM ALTER TMF command:
 - TRANSACTIONPROTOCOL
 - RESET TRANSACTIONPROTOCOL
 - GOREMOTE
 - RESET GOREMOTE
 - PIOBUFFER
 - RESET PIOBUFFER
 - TMPWAITTIMER
 - RESET TMPWAITTIMER

Information about attributes set by these options is also available through the INFO TMF and STATUS TMF commands.

- You can use file-name patterns as input to the TMFCOM DUMP FILES, INFO DUMPS, and RECOVER FILES commands. This feature is provided by the <file-name> specifier, which identifies an Edit-format or C-data file that contains the file-name patterns. These patterns, in turn, designate the files to be dumped, reported on, or recovered by TMF. They enable you to supply many more file names as command input than was previously possible. Another specifier, NOT <file-name>, allows you to designate files to be omitted from the dump, information retrieval, or recovery operation.
- You can use the SORT option of the TMFCOM STATUS TRANSACTIONS command to display transactions in a specified order.
- You can use the TMFCOM STATUS TRANSACTIONS command to display the name of the backout process assigned to an aborting transaction, shown in the Backout Assigned field.
- The default timer value for TMP work processing changed from AUTO to OFF.
- The TMFCOM and TMFSERVE programs changed to RISC objects.

TRANSFER Q Manager

The TRANSFER Q Manager product (T9654) is accelerated with TNS Object Code Accelerator (OCA) compilers and supports H06.05 and later RVUs.

TS/MP 2.1 (Controlled Availability)

HP NonStop TS/MP 2.1 provides Pathsend users higher link capacity to client processes by replacing the link management functions of the LINKMON (ROUT) process with functions provided by the Application Cluster Services (ACS) subsystem. NonStop TS/MP 2.1 is intended solely for Pathsend users using TS/MP 2.0. It does not apply to SCOBOL users or TS/MP 3.0 users.

Migration

In general, all TS/MP 2.0 applications that use Pathsend requesters and TS/MP 2.0 scripts (also called OBEY files) can run in a TS/MP 2.1 environment. However, you might need to modify the PATHMON environment configuration to achieve optimum TS/MP 2.1 performance (because of a new algorithm for link management that might require more or fewer links to server processes).

Fallback

You must consult HP support if you install TS/MP 2.1 and run applications that use Pathsend requesters, and then decide to fall back to TS/MP 2.0.

TS/MP PATHMON

The enhancement for TS/MP PATHMON (T8344) increases the concurrent openers of the PATHMON process from 300 to 800. The openers can be PATHCOMs, SPI requesters, terminal control processes (TCPs), external TCPs, or LINKMONs.

5

Installation and Configuration Products

The H06.05 RVU contains these new installation and configuration features:

- [DSM/SCM Cross Platforms](#)
- [DSM/SCM Dial-Out Report](#)
- [DSM/SCM Hostname Change](#)

DSM/SCM Cross Platforms

DSM/SCM now provides the ability to build a NonStop S-series (TNS/R) target configuration on an Integrity NonStop NS-series (TNS/E) host system.

Migration

You can use an Integrity NonStop NS-series host system to manage NonStop S-series target systems running:

- G06.28 or later RVUs
- G06.24 through G06.27 RVUs, if these SPRs or later are obtained from Scout for NonStop Servers and installed on the NonStop S-series system:
 - T5838G05 AAJ (NSKCOM)
 - T9023G08 AEH (SCUTIL)
 - T6017D45 ABD (NLD)
 - T8304D45 ABD (NMCGEN)
 - T9248D44 AAM (PTAL)

DSM/SCM Dial-Out Report

After ZPHIRNM runs successfully on a target, DSM/SCM sends a dial-out report to \$DSMSCM.ZDSMSCM.SWCONFIG. The report contains the list of product revisions that have been activated on the target. DSM/SCM does not send the dial-out report when ZPHIRNM is run in preview mode.

The generation of the dial-out report is enabled by default. You can use the NO-ACTIVATION-DIALOUT-REPORT param to disable this feature. For details, see the *DSM/SCM User's Guide*.

DSM/SCM Hostname Change

- The INITENV change option now allows you to:
 - On a target system, transfer management of the target system from one existing host to another. A system load is not required.
 - On a host system, change the host that is managing a target. A remote target can be managed by a different host. You can avoid re-initialization of the target and retain the configurations managed by DSM/SCM on the host for the target.
- Changes in Software Identification (SWID) now enable the Apply process to accurately determine if a system load is required.

Migration

When you upgrade the client and server SPRs for DSM/SCM, you must also upgrade the SWID product (T9298H02) at the same time to avoid a fingerprint or mismatched file problem. (DSM/SCM uses the SWID utility to determine if a file has changed by a method called fingerprinting.) If an existing file has a different fingerprint from a newer file, the newer version replaces the existing file.

6

Manageability Products

The H06.05 RVU contains new features for these manageability products:

- [Backup Restore 2](#)
- [NetBatch](#)
- [SeeView](#)
- [SWID](#)

Backup Restore 2

Backup Restore 2 adds three new features, Manual Restart, Parallel Backup, and Wildcarding:

- The Manual Restart feature enables you to resume the job from the point where it was stopped, aborted, or abended. This feature helps you save time because you do not have to restart from the beginning of a job.
- The Parallel Backup feature enables you to back up two different tapes simultaneously with a single backup command. This feature helps you save the execution time for generating multiple backup tapes.
- The Wildcarding feature enables you to specify the wildcard in the backup and restore object specification. Currently * and ? are supported. With this feature, you can perform backup or restore without knowing the complete file name to be backed up or restored.

Installation Alert

Starting with H06.05, these products are replaced with T0744, Backup Restore 2:

- T2721, BRCOM
- T2722, BR2 TAPE SERVICES
- T2749, BR2 DMA & CSP
- T2750, BR2 DATA SERVICE
- T2826, BR2 OSS Agent

T2721, T2722, T2749, and T2750 might appear in the DSM/SCM configuration when you migrate to H06.05. If so, during the Copy To operation of DSM/SCM, do not select these products for retention in the H06.05 configuration.

NetBatch

A new command for JOB facilitates the report-generation feature. The new command, REPORT JOB, can generate these nine types of reports:

- ABEND-REPORT: Jobs that have abended
- HOLD-REPORT: Jobs that have been put on hold
- LATE-REPORT: Jobs that started late

- MISC-REPORT: Jobs that are configured under a particular CLASS
- PRED-REPORT: Jobs that have WAITONS configured for them
- RUNNOW-REPORT: Jobs that are started by the RUNNOW command
- SUCCESS-REPORT: Jobs that have completed successfully
- SUCR-REPORT: Jobs that have successors
- TAPE-REPORT: Jobs that require tapes

For details, see the *NetBatch Manual*.

Migration

To use the new report command, you must:

- Run the NBSETUP macro supplied with this enhancement to create the report database before starting NetBatch.
- Provide the database file location as a run-time parameter while starting NetBatch.

The enhancement has a dependency on Enform Plus (T0295). To use the report feature, you must have Enform Plus installed on the system. If Enform Plus is not installed or licensed for the system, an error occurs.

SeeView

HP NonStop SeeView adds the LOGONSTRONG option to the ALTER statement to specify whether security authentication is attempted using the system procedure call USER_AUTHENTICATE_ (LOGONSTRONG ON) or VERIFYUSER (LOGONSTRONG OFF). VERIFYUSER supports only logons of the form *group.user* with limited password checking, whereas USER_AUTHENTICATE_ supports logon forms *group.user* and *alias*, in addition to strong password authentication. The default is LOGONSTRONG ON.

For details, see the *NonStop SeeView Manual*.

SWID

Software Identification (SWID) is changed to accurately fingerprint the OSIMAGE file, thereby enabling an Apply process to accurately determine if a new configuration can be applied to a running SYS*nn* and avoid an unnecessary system load. This new feature fingerprints only the functional areas of the OSIMAGE file. SWID computes the same fingerprint for OSIMAGE files generated from SYSGEN/OSBUILD with the same input.

7 Hardware Products

The H06.05 RVU contains new features for these hardware products:

- [Integrity NonStop NS14000 Server](#)
- [LTO Fibre Channel Tape Drive](#)
- [ServerNet Cluster](#)

Integrity NonStop NS14000 Server

The HP Integrity NonStop NS14000 server is a new midrange server using the NonStop advanced architecture (NSAA). The Integrity NonStop NS14000 server is intended for customers who require midrange processor performance and I/O capabilities. It also allows customers with midrange NonStop S-series 7X00 and 7X000 systems a migration path to the Integrity NonStop NS-series systems.

The major differences between an Integrity NonStop NS14000 server and the high-end Integrity NonStop NS16000 server are:

Component	NonStop NS14000 Server	NonStop NS16000 Server
Minimum RVU	H06.05	H06.03
Connection to S-series I/O	Not supported	Supported
Processor switch	None. LSUs are connected to IOAM enclosure.	LSUs are connected to processor switch.
Processor type	1.5 GHz / 4 MB cache	1.6 GHz / 6 MB cache
Maximum processors	8	16
Maximum Fibre Channel Disk Modules (FCDMs)	16	240
Maximum IOAM enclosures	1	6
Maximum I/O adapters	6	60
ServerNet cluster switch support	6780 cluster switch only	6770 and 6780 cluster switches

For details, see the *NonStop NS-Series Planning Guide*.

Migration

To upgrade from an Integrity NonStop NS14000 server to an Integrity NonStop NS16000 server, replace the NS14000 system with a new NS16000 system.

LTO Fibre Channel Tape Drive

Starting with H06.05, the Integrity NonStop NS-series system supports the HP Ultrium Linear Tape open (LTO) Fibre Channel tape drive (M8505). For details, see the *M8505 Tabletop Tape Drive Installation and User's Guide*.

ServerNet Cluster

The HP NonStop ServerNet Switch (model 6780) supports the long-distance option in a three-zone configuration of the layered topology. Before this RVU, the long-distance option was restricted to a two-zone configuration. In addition, this new feature allows you to select whether a zone-to-zone connection is configured for long-distance or not. As a result, a layered topology can have both short and long distances between zones. For installation and configuration procedures, see the *ServerNet Cluster 6780 Planning and Installation Guide*.

Migration

- To use the new ServerNet cluster long-distance option in a three-zone configuration, you must install the H06.05 RVU or the T0502H01^AAP SPR.
- HP recommends upgrading the Integrity NonStop NS-series servers to the H06.05 RVU if the servers will be connected to a long-distance ServerNet cluster. If the long-distance cluster also contains NonStop S-series servers, HP recommends upgrading those servers to the G06.28 RVU or later. H06.05 contains T9050H02^AQD, and G06.28 contains T9050G09^AQB. These two T9050 SPRs correct a performance defect that affects interprocessor communication (IPC) long-distance cluster transfers to and from Integrity NonStop NS-Series servers. For details, see the T9050H02^AQD and the T9050G09^AQB softdocs.
- Other than the T0502H01^AAP SPR, a three-zone long-distance configuration requires the same SPRs as a two-zone long-distance configuration.

8 Networking Products

The H06.05 RVU contains new features for this networking product:

- [DNS 9.3.0](#)

DNS 9.3.0

Domain Name System (DNS) 9.3.0 provides these new features:

- Based on BIND 9.3
- Security features, including:
 - RFC 2845 Secret Key Transaction Authentication Transaction Signatures for DNS (TSIG)
 - RFC 3658 Delegation Signer (DS) Resource Record (RR)
- DNS dynamic updates, including Incremental Zone Transfer (IXFR) and NOTIFY
- Support for IPv6 address resolution using A6 Resource Records (RR), DNAME RRs, and Bitstring labels
- A means to bind a name server with the user-specified TCP/IP process during run time
- A means to enable applications to choose a resolver configuration file other than the default
- The flexibility to add multiple sections in the `resolv.conf` file, where each section comprises a domain name and set of name servers
- Support for all features available in the previous DNS 4.8.3 without regression

For more information, see the *DNS Configuration and Management Manual*.

Migration

- While DNS 4.8.3 runs in the Guardian environment, DNS 9.3.0 runs in the OSS environment. You must start the DNS server from the OSS rather than from the Guardian environment.
- Configuration files must be modified. For instructions, see the *DNS Configuration and Management Manual*.

A

Sources for Migration Assistance and Information

This appendix describes the assistance HP provides when problems arise during the migration and testing process. HP also provides services that can help you develop a migration plan and implement migration tasks. Most migration and release documentation is available through the HP NonStop Technical Library (NTL).

This appendix includes information about these sources for migration assistance and information:

- [ExpressNotice](#)
- [Information on the Site Update Tape \(SUT\)](#)
- [Scout for NonStop Servers](#)
- [Global Customer Support Center \(GCSC\)](#)
- [NonStop Technical Library \(NTL\)](#)

ExpressNotice

ExpressNotice is an automated information delivery system that proactively sends information pertinent to your installed products and software release whenever there are any issues or changes. (ExpressNotice generates notices only for supported RVUs.) Use ExpressNotice to customize your information notification needs interactively online. You can access ExpressNotice through the HP NonStop eServices Portal at <https://onepoint.nonstop.compaq.com/buildpage.asp>.

ExpressNotice message types include:

- Software Revision Notifications summarize the content and impact of newly released, generally available time-critical fix software product revisions (SPRs).
- Hotstuff messages alert you to product problems that might have particularly serious consequences. The three types of Hotstuff messages are general, Outage Prevention Notifications (OPNs), and Software Recall/Withdrawal.
- Support Notes (SUPNOTES) provide information of a more routine nature than that provided in Hotstuff messages.

ExpressNotice messages are also available through Scout for NonStop Servers (see page [A-2](#)) and through NTL.

You can ask the Global Customer Support Center (GCSC) for the *ExpressNotice User's Guide*. You can also contact the ExpressNotice Help Desk by e-mail at express.notice@hp.com.

Information on the Site Update Tape (SUT)

- Content file
Contains a list of the product versions and software product revisions (SPRs) that are included on the site update tape (SUT).
- README
Contains information that was not yet available when the manuals or softdocs were published.

Scout for NonStop Servers

Scout for NonStop Servers is a Web-based SPR analysis and delivery tool available through Electronic Support Services. You can access Scout through the HP NonStop eServices Portal at <https://onepoint.nonstop.compaq.com/buildpage.asp>. Online help for using Scout is available on the Scout Web site.

By providing access to a data warehouse with SPR information for many different RVUs, Scout makes SPR analysis fast, easy, and accurate. Through the Scout main menu, you can display detailed information about:

- Release version updates (RVUs)
- Product versions (PVs) and software product revisions (SPRs)
- Outage Prevention Notifications, Hotstuff messages, and Support Notes
- Prerequisites for an SPR
- Available SUTs and Independent Products

After researching available SPRs, you can download those you consider appropriate for your systems directly to your workstation, or you can request tape delivery.

Global Customer Support Center (GCSC)

If you have questions or problems while implementing your migration plan or testing a new system, contact the Global Customer Support Center (GCSC) at 1-800-255-5010.

You can also access information on products and services at <http://support.nonstop.compaq.com/>.

NonStop Technical Library (NTL)

In addition to this compendium, RVU and migration information is available in several other documents and manuals that you can access through NTL. Information is provided about planning your site for a new NonStop server, product installation and configuration, product availability in a particular RVU, and performance information for a specific RVU.

- *H06.05 Software Installation and Upgrade Guide*

Provides procedures for upgrading to the H06.05 RVU. Instructions include installing the H06.05 SUT and other related installation tasks.

- **The Interactive Upgrade Guide 2**

A browser-based tool that is accessed through NTL, this guide provides customized migration planning information and highlights new features.

- *NonStop NS-Series Planning Guide*

Describes the Integrity NonStop NS-series system hardware and provides examples of system configurations to assist in planning for installation of a new system. It also provides a guide to other Integrity NonStop NS-series manuals.

- *NonStop NS-Series Operations Guide*

Describes how to perform routine system hardware operations for Integrity NonStop NS-series servers. These tasks include monitoring the system, performing common operations tasks, and performing routine hardware maintenance. This guide is written for system operators.

- *The NonStop System Console Installer Guide*

Provides information about upgrading a system console to the latest versions of the applications delivered on the NonStop System Console Installer CD.

- *Managing Software Changes*

Serves as an introduction and reference to TRM2000, the system migration and installation process, SPR analysis, and HP resources for evaluating new RVUs and SPRs.

- **Hotstuff Messages and SPR Notes**

If you do not enroll to receive ExpressNotice messages, you can view Hotstuff messages, SPR Notes, and other ExpressNotice messages in the NTL Support and Service library. For more information, see [ExpressNotice](#) on page A-1.

