NonStop Software Essentials Release 4.0



Marcus Pullen Account Support Manager GSD EMEA vTeam lead NonStop April 28th, 2015

© Copyright 2015 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.

NonStop Software Essentials

Plan, configure, install, and manage NonStop software

- Complete replacement of DSM/SCM Planner Interface with better and easier user interfaces
- Additional functionality beyond legacy Planner Interface
- Uses the same DSM/SCM server and database as used by the Planner Interface preserving existing software configurations and installation history
- Support of HP, third party and customer software
- Supported on 32-bit and 64-bit Windows and Linux physical and virtual CMS
- Install on NSC or external CMS
- Server component included on the NonStop OS RVU, and can be downloaded from Scout for NonStop Servers
- Windows and Linux client components included in HP Insight Control for NonStop (companion DVD to NonStop System Console Installer), and can be downloaded from Scout

DSM/SCM Planner Interface is NOT supported on 64-bit Windows, including the NSCs with Windows Server 2008 so NonStop Software Essentials must be used on those consoles



NonStop Software Essentials – Product updates

Defect Fixes

T0894H02^AAE

- SOAPSRVR abends while returning the pre-populated list of discrepancies from the last discrepancy report generated for the specified target. This symptom is observed only if there are product versions that are found to have file differences with the files on the target system as compared to the revision specified in the last discrepancy report run for this target.
- NSE does not allow users to log on if the password contains special characters.
- Aliases which are more than 18 characters in length cannot be used for logging in through NSE Client.
- Kernel process not configured for new systems in Manufacturing. No entry in manual on how to configure kernel
 process. Change the ZNSEGP file to configure CPUs for the HTTP server generic processes to use any available
 CPUs.

• T0894H02^AAG

- SOAPSRVR abends while fetching the tape drives' information during Receive Software operation if there are more than 20 tape drives on the host.
- Kernel process not configured for new systems in Manufacturing. No entry in manual on how to configure kernel
 process. Change the ZNSEGP file to configure CPUs for the HTTP server generic processes to use any available
 CPUs if the generic process already exists.



NonStop Software Essentials – Product updates

- TNS/X support
- Package software CNFGINFO replacement
- Planner Interface feature replacement
 - Custom reports
 - All reports available
- Target Interface feature replacement
 - Backout revisions
 - Preview and Apply software
 - Verify database
- Common Maintenance Interface feature replacement
 - Delete requests from Request List



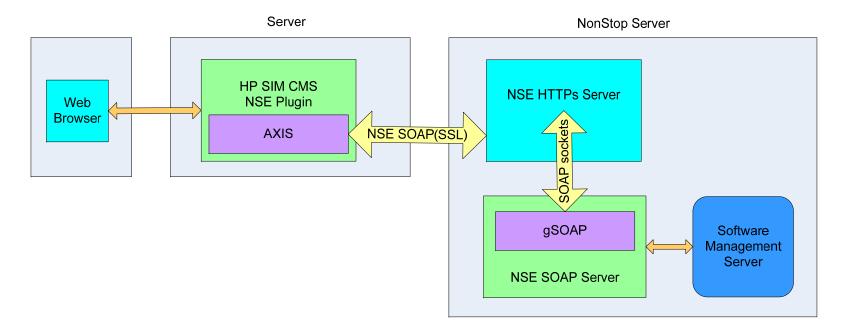
NonStop Software Essentials – Product updates

- UI and usability enhancements
 - Radio button / field state
 - Popup enhancements
 - Tab enhancements
 - Browser back behavior
- Add to group from all Archive pages
- Miscellaneous defect fixes



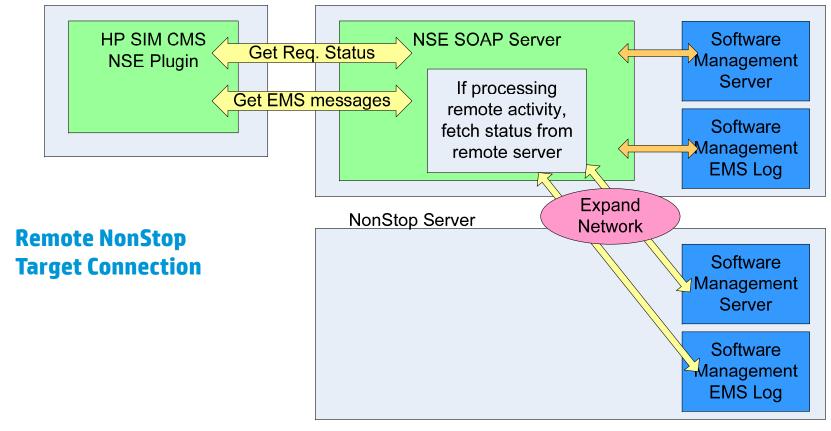
Architecture and Components

Architectural structure





Architecture and Components





Hardware and Software Requirements

Related products and product numbering

T0894 H02 AAF (Server)

- TNS/E and TNS/X. Not available for TNS/R
- On L15.02 and J06.19
- Base version available to download from Scout for use on older TNS/E SUTs

T0895 V02 AAF (Windows Client) and T0996 V02 AAF (Linux Client)

- On Console Companion DVD
- Not Installed on new NSCs

Overview of version changes

- 3.0 was an internal only release
- 4.0 Client will work with 2.x NSE servers with reduced functionality. Warning at logon lists unavailable functionality.
- 2.x Client will not work with 4.x Server. Must upgrade client.



Required hardware

Host: Supported NonStop Systems

- Integrity NonStop X Systems
- Integrity NonStop BladeSystems
- Integrity NonStop NS-Series Systems

Client

- PC that meets the HP SIM minimum hardware requirements
- 2GB Memory

Note: 64 bit OS's may require more memory. See HP SIM documentation for information on this requirement.



Required software

Host

- NonStop System Minimum RVU's
 - **H06.09 NonStop NS-Series Systems**
 - J06.03 NonStop BladeSystems
 - L15.02 NonStop X Systems
- Required SPR's NonStop X Systems, NonStop BladeSystems, NonStop NS-Series Systems
 - T0894H02 AAF NSE Server
 - T6031ADG DSM/SCM with improvements for NSE.
 - T0682ABI Event Viewer with SSL support
- DSM/SCM T6031 H03 ADG requires SWID T9298 H03



Required software (Continued)

Windows Client

- Windows OS that is supported for the version of HP SIM being used.
- HP SIM 7.1 or later with Hotfixes
 - We are currently shipping HP SIM 7.2 with the current hot fix kit on the NSC Installer DVD.
- T0895 AAF NSE Installer Windows
- IE Required. Verified on IE7, IE8 and IE9



Required software (Continued)

Linux Client

- T0996V02 NSE Installer Linux
 - Note: NonStop Essentials products are only qualified for use on Red Hat Enterprise Linux. There are a myriad
 of versions for 32 & 64 bit. We have qualified on a subset of those.
- Red Hat Enterprise Linux qualified versions:
 - -6.0-6.332 bit
 - 6.3 64 bit
- Red Hat Enterprise Linux pending qualifications:
 - 6.4 32 bit
 - 6.4 64 bit



TNS/X Software Packages

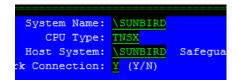
Distributed SubVolumes (DSVs)

- New AOCINFO file version "04"
 - New TNS/X processor type value
 - New file functions
 - DSM/SCM H03 or later required to read.
 - Receive Software was changed in T6031 ACV in H06.22 to display a new generic error indicating a newer version of DSM/SCM is needed whenever it encounters an AOCINFO file with a version higher than it understands.

The AOCINFO file in DSV <1> is version <2>, which <3> version of DSM/SCM cannot read. Processing of this DSV stopped. Upgrade to a newer DSM/SCM version and retry your request.



Processor Type TNS/X





New \SUNBIRD DEFAULT 13				
Software is for	TNS/X. Release level is L15.0	2.		
<u> </u>	Product Name 1	Number	Version	
	\$NULL	T6025	L01 ()	
	A035120	T6032	L15 ()	
	ACS Infrastructure	T0620	L01 ()	







Reports



Reports

Prepare, Add, Modify and Delete reports

View Prepared Reports

	Name ↑	SQLCI Command File
	Configuration Differences	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR09
	Configuration Product Files	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR05
	Configuration Products	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR10
✓	Configurations Using a Package	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR12
	Configurations Using a Product	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR14
	Contents of All Configurations	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR17
	Discrepancy	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR07
	Package and Config Differences	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR08
	Replaced Update SPRs	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR16
	Request EMS Log	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR02
	Request Log	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR01
	Required Update SPRs	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR06
	Required Update SPRs for Group	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR19
	Software Audit	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR07
	Software Contents	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR03
	Software Product Components	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR13
	Software Product Files	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR04
	Unused Software Packages	\SCUBA.\$DSMSCM.XPHIHDB.ZPHIR11

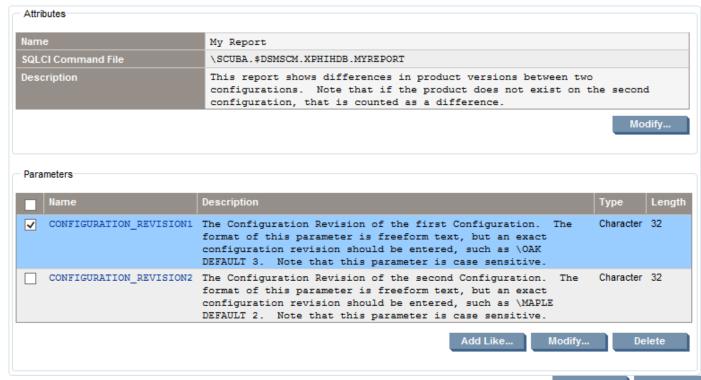


Reports

Add Report

Specify attributes and parameter information for the report.

Manage Reports



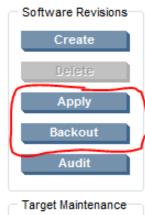


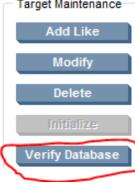
Apply, Backout, Verify Database

Configuration Revisions

The current configuration revision for each target.

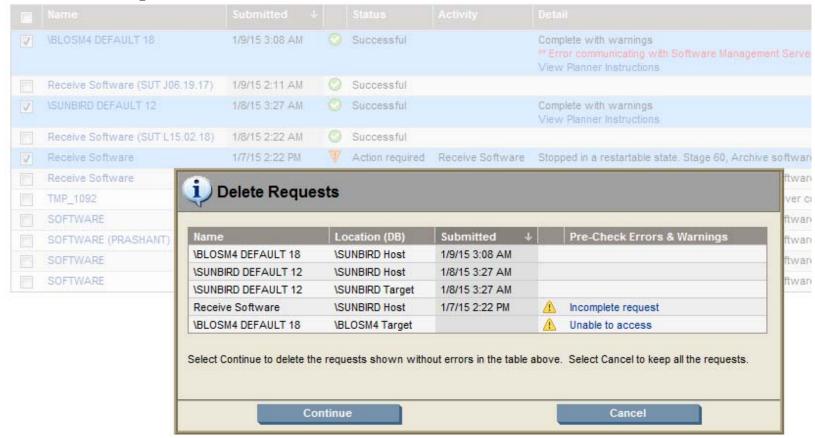
	System	Target	Clone Group (Role)	Revision	Applied
	\SIM	DEFAULT			Uninitialized, No Revisions
✓	\SIM2	DEFAULT		2	2/1/14 8:40 AM
	\SIM3	DEFAULT			Uninitialized, No Revisions
	\SIM4	DEFAULT	1 (Master)		Uninitialized, No Revisions
	\SIM5	DEFAULT	1 (Clone)		







Delete Requests





Add To Package Group from All Archive Pages

Update SPRs

All software packages in the archive where the first SPR received into the package is an Update SPR.

	Name	Received ↓	Received By	Туре	Vendor
	IPM T0005 H01 AAA	1/8/15 1:57 PM	SIM.ULATION	Update SPR	Hewlett-Packard Company, L.P.
✓	IPM T0004 H01 AAA	1/8/15 1:57 PM	SIM.ULATION	Update SPR	Hewlett-Packard Company, L.P.
✓	IPM T0003 H01 AAA	1/8/15 1:56 PM	SIM.ULATION	Update SPR	Hewlett-Packard Company, L.P.
	IPM T0001 H01 AAA	1/8/15 1:55 PM	SIM.ULATION	Update SPR	Hewlett-Packard Company, L.P.

Add to Group... Delete Export Files

Base SPRs

All software packages in the archive where the first SPR received into the package is a Base SPR. SUTs are not included in this

	Name	Received ↓	Received By	Туре	Vendor
	NPV T0006 H01 H01	1/8/15 1:59 PM	SIM.ULATION	Base SPR	Hewlett-Packard Company, L.P.
✓	NPV T0003 H01 H01	1/8/15 1:59 PM	SIM.ULATION	Base SPR	Hewlett-Packard Company, L.P.
	NPV T0001 H01 H01	1/8/15 1:56 PM	SIM.ULATION	Base SPR	Hewlett-Packard Company, L.P.





Product Group Sorting

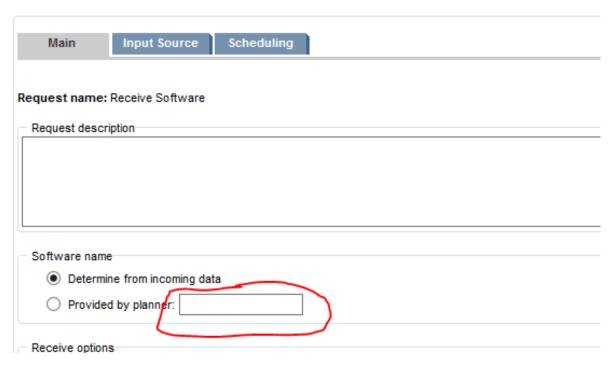
Product Name	Product Number ↑	Product Version	Archive Source
Apple			
□ C++			
C++ Common Headers	T2830	L01 (AAM)	SUT L15.02.07.1
C++ Common RTL DLL	T2831	L01 (AAH)	SUT L15.02.10
C++ V2 RTL DLL	T2832	L01 ()	SUT L15.02.08
C++ V3 RTL DLL	T2833	L01 (AAF)	SUT L15.02.08
C++ DEMANGLE	T7146	L01 ()	SUT L15.02.07.1
🚹 🗁 iProducts			
TSQL			
LDST	T0010	L01 ()	SUT L15.02.07.1
TAPEPROCESS	T0021	L02 ()	SUT L15.02.07.1
PTR/SNMP FORMAT MOD	T0238	L01 ()	SUT L15.02.11
SQL/MP COMP AGENT	T0246	L01 ()	SUT L15.02.12



Automatic Radio Button Selection

Receive Software (Request)

Perform a receive software request to bring new software into the archive from disk or tape.





Package Software



HP NonStop Software Essentials Package Software \SCUBA :9571



| User: SUPER.SUPER Sign Out

Select Distribution Subvolume (DSV)

Select the subvolume that contains the files you want to package.

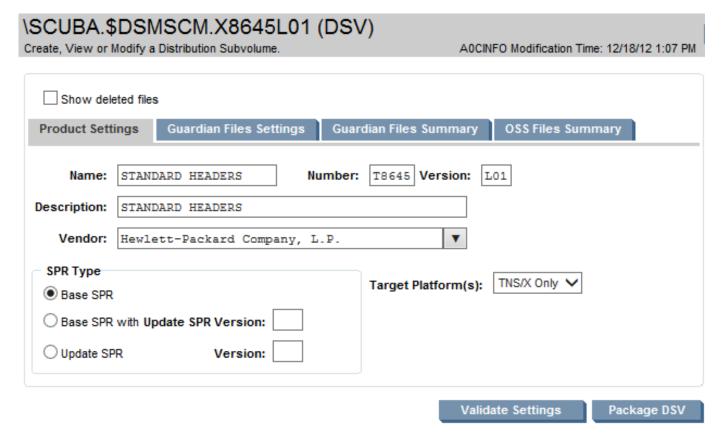


Find only subvolumes containing packaged software (DSVs).

	System	Volume	Subvolume	↑
0	\SCUBA	\$DSMSCM	X8626L01	
0	\SCUBA	\$DSMSCM	X8628L01	
0	\SCUBA	\$DSMSCM	X8628L99	
0	\SCUBA	\$DSMSCM	X8630L01	
•	\SCUBA	\$DSMSCM	X8645L01	

Open DSV

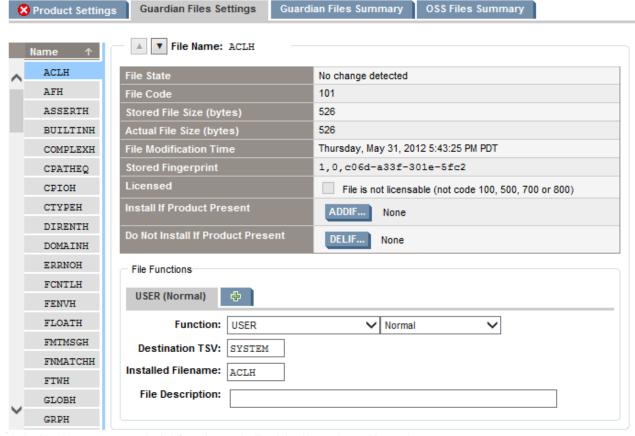






Show dele	eted files	
Product Setti	ings Guardian Files Settings Gua	rdian Files Summary OSS Files Summary
Name:	STANDARD HEADERS Number	: T8645 Version: L01
Description:	STANDARD HEADERS	
Vendor:	Hewlett-Packard Company, L.P.	▼
SPR Type Base SPR Base SPR Update SP	with Update SPR Version:	Target Platform(s): TNS/X Only ✓
Required SF Add Delete	PRS Number ↑ Version Update SPR T1234 L01 AAA	Replaced SPRs Add Defete Update SPR Version: <aaa>. Example: AA AAA</aaa>
		Validate Settings Package DSV







Product	Settings Guardian	n Files Setti	ngs Guardian	Files Summary	OSSF	iles Summary			_
Name	Function ↓	TSV	Installed Name	Lic Code Size	(bytes)	Modified	File State	FP ADD-IF DEL-IF	
NETHDRS	USER (OSS Archive)	ZOSSUTL		180	309,248	6/1/12 4:12 PM	Not Fingerprinted		
RELHDRS	USER (OSS Archive)	ZOSSUTL		180	563,200	6/1/12 4:12 PM	Not Fingerprinted		1
T8645MAN	USER (OSS Archive)	ZOSSUTL		180	143,872	6/21/10 7:46 PM	Not Fingerprinted		
ACLH	USER (Normal)	SYSTEM		101	526	5/31/12 5:43 PM	Not Fingerprinted		
AFH	USER (Normal)	ZTCPIP		101	1,706	5/31/12 5:43 PM	Not Fingerprinted		
ASSERTH	USER (Normal)	SYSTEM		101	740	5/31/12 5:43 PM	Not Fingerprinted		
BUILTINH	USER (Normal)	SYSTEM		101	1,624	5/31/12 5:43 PM	Not Fingerprinted		
COMPLEXH	USER (Normal)	SYSTEM		101	5,178	5/31/12 5:43 PM	Not Fingerprinted		
CPATHEQ	USER (Normal)	SYSTEM		101	6,686	7/15/10 1:06 PM	Not Fingerprinted		
CPIOH	USER (Normal)	SYSTEM		101	1,978	5/31/12 5:43 PM	Not Fingerprinted		
CTYPEH	USER (Normal)	SYSTEM		101	5,284	5/31/12 5:43 PM	Not Fingerprinted		
DIRENTH	USER (Normal)	SYSTEM		101	5,308	5/31/12 5:43 PM	Not Fingerprinted		
DOMAINH	USER (Normal)	ZTCPIP		101	1,184	5/31/12 5:43 PM	Not Fingerprinted		
ERRNOH	USER (Normal)	SYSTEM		101	8,348	5/31/12 5:43 PM	Not Fingerprinted		-

Validate Settings

Package DSV

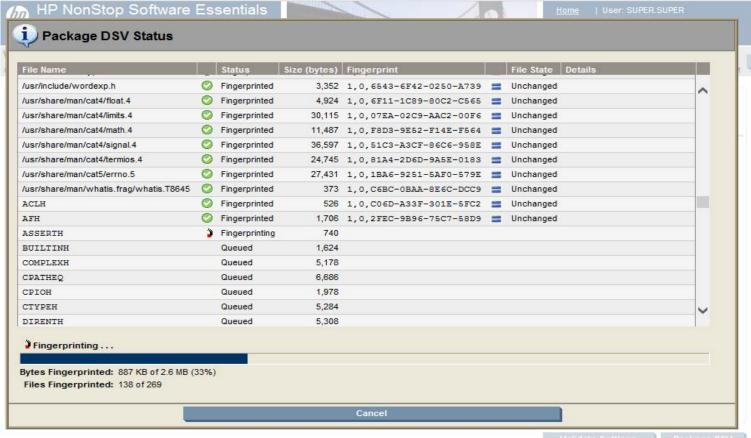


Guardian Files Settings Product Settings Guardian Files Summary OSS Files Summary File State FP Fingerprint Archive File File Path File Type | Size (bytes) | Modified /usr/include/tdmstd.h File 1.399 6/1/12 4:11 PM Unchanged RELHDRS 1,0,d12a-8243-2f50-bb83 RELHDRS /usr/include/termios.h File 5,380 6/1/12 4:11 PM Unchanged 1,0,0d90-2461-26eb-b77d File 5,263 6/1/12 4:11 PM Unchanged 1,0,3a6a-bda7-1280-8159 RELHDRS /usr/include/tgmath.h 4.224 6/1/12 4:11 PM RELHDRS /usr/include/time.h File Unchanged 1,0,17f9-e306-c3f4-993b RELHDRS /usr/include/tnsint.h File 1,433 6/1/12 4:11 PM Unchanged 1,0,4f2d-0748-fca6-0801 576 6/1/12 4:11 PM Unchanged 1,0,319e-2402-d47a-7a73 RELHDRS /usr/include/ulimit.h File /usr/include/unistd.h File 16.807 6/1/12 4:11 PM Unchanged 1,0,1461-cba9-3372-f10f RELHDRS Unchanged RELHDRS /usr/include/utime.h File 1,428 6/1/12 4:11 PM 1,0,e06e-862c-59d0-08c6 /usr/include/vararqs.h File 2,597 6/1/12 4:11 PM Unchanged 1,0,8f3f-2dd4-d621-1ef5 RELHDRS Unchanged 1.0.9d15-668f-3da6-446c RELHDRS /usr/include/wchar.h File 8.934 6/1/12 4:11 PM RELHDRS /usr/include/wctype.h File 1,412 6/1/12 4:11 PM Unchanged 1,0,02fa-5b08-8d35-0ce3 File 3.352 6/1/12 4:11 PM Unchanged 1,0,6543-6f42-0250-a739 RELHDRS /usr/include/wordexp.h T8645MAN /etc/install_obsolete/PINSTALL_REMOVE_LIST_T8645MAN File 0 6/21/10 7:42 PM Unchanged 1,0,0ed8-3508-9a4f-a54e T8645MAN /usr/share/man/cat4 Directory 6/21/10 7:42 PM Unchanged /usr/share/man/cat4/float.4 T8645MAN File 4,924 6/21/10 7:42 PM Unchanged 1,0,6f11-1c89-80c2-c565 30,115 6/21/10 7:42 PM /usr/share/man/cat4/limits.4 File Unchanged 1,0,07ea-02c9-aac2-00f6 T8645MAN T8645MAN /usr/share/man/cat4/math.4 File 11,487 6/21/10 7:42 PM Unchanged 1,0,f8d3-9e52-f14e-f564 /usr/share/man/cat4/signal.4 File 36.597 6/21/10 7:42 PM Unchanged 1,0,51c3-a3cf-86c6-958e T8645MAN

Validate Settings

Package DSV







References

Documentation:

NonStop Software Essentials Online Help -- available as online help from the NonStop Software Essentials pages within HP SIM.

NonStop Software Essentials User's Guide. This will be in the NonStop Technical Library (NTL).

NonStop Software Essentials Installation and Quick Start Guide



NonStop Software Essentials – HP SIM / HP OneView impact

Futures

- Continued support for launching NonStop Software Essentials from HP SIM
- NSE 5.0 work is underway and will include NSE launched and run outside of HP SIM.
- NSE 5.0 will also get some security enhancements.



NonStop Software Essentials – Tips and Tricks

Useful capabilities in NonStop Software Essentials beyond DSM/SCM Planner Interface

- Multiple windows
- Comparing revisions and SUTs with other revisions and SUTs
- Cleanup of requests
- Delete old SUTs and items in the archive
- Workaround list simpler execution



NonStop Software Essentials – Problem Solving Secrets

Workarounds to try when the problem is unknown and what action to take is unclear

- Restart activity if it is Stopped Restartable (sometimes it works the second time)
- Cancel and Restart the activity
- Cancel and Redo a new activity
- If ZPHIRNM SYS01 fails in the middle and you just want to undo everything it has done:
 - Run ZPHIRNM SYSnn FROM SYS01 where SYSnn is the previous config SYSnn (which may be the same as the current config, ie SYS01)
 - The ZPHIRNM log file contains all renames that ZPHIRNM performed. You could use this information to undo some or all of what ZPHIRNM has done, manually. This is not trivial.
- Check if ADDHDEFS and ADDTDEFS files accurately point to the DB tables

- Verify DB
- Check if the hometerm exists and is paused
- STOPSCM/STARTSCM
- STOPSCM, stop all processes running from ZDSMSCM, XPHIHDB, and X<target>, then STARTSCM
- Check TMF: TMFCOM STATUS TRANSACTION. If hung transaction, abort the transaction.
- PATHCOLD
- Check disk space
- Check swap space
- Check spooler space
- Check file security and Safeguard
- Run IPM6031
- Delete the activity

- Delete the Logical Target Delete Curr Config SYSnn's ZPHI6030 and Verify DB
- Delete the Physical Target (not yet an option for host) and INITENV target.
- Update Statistics UPDATES Fixes slow performance
- If files missing from target system, export them and manually put where required
- INITENV target (ZPHIUTLT support, init-target. Initialize target side of host)
- INITENV host



Thank you

