SOFTWARE RELEASE DOCUMENT (SOFTDOC)

Product:	Shadowbase Audit Reader (SAR)
Release:	Gravic Version 6.600 HP NonStop Shadowbase: T1122-AAN (SB Repl/Guardian)
Release Date:	March 18, 2019
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NOTE: This release contains updated software for HPE Shadowbase Audit Reader (SAR) for HPE Integrity NonStop X, Virtualized NonStop, and HPE Integrity NonStop I Servers.

NOTE: If this is a TCD delivery, please see NOTE FOR TCDS for TCD delivery information.

NOTE: This softdoc applies to the HPE Shadowbase Audit Reader component. Other softdocs document the releases of the other components in T1122H06, including:

- HPE Shadowbase Compare for SQL,
- HPE Shadowbase Enterprise Manager,
- HPE NonStop Shadowbase Guardian replication, and
- HPE NonStop Shadowbase OSS replication.

You are advised to reference those other softdocs for the changes related to those specific components of T1122H06.

NOTE: This softdoc covers new features and corrected problems for Shadowbase Audit Reader for HPE Integrity NonStop I servers (H06 and J06 Guardian NonStop) and HPE Integrity NonStop X/Virtualized NonStop servers (L06 Guardian NonStop).

This softdoc is available in an Adobe PDF file (.PDF). Softdoc files for SAR are named IPMnnnn-SAR.pdf (where nnnn is the Shadowbase version number).

NOTE: The Shadowbase Audit Reader internally uses the nomenclature "TP-SPY" to reflect its original development roots. Hence, you will notice that the examples show a "tpspy" prompt, etc.

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Disclaimer

We are distributing this communication in an effort to bring important information to the attention of users of the affected products. We recommend that all users determine the applicability of this information to their individual situations and take appropriate action. We do not represent or warrant that this information is necessarily accurate or complete for all user situations and, consequently, we will not be responsible for any damages resulting from the user's use or disregard of the information provided. To the extent permitted by law, we disclaim all representations and warranties, whether express, implied, statutory, or otherwise, including the warranties of the merchantability, fitness for a particular purpose, title, and non-infringement.

We expect customers of the Shadowbase product suite to "stay current" on Shadowbase releases. This means that you, the customer, should periodically upgrade your Shadowbase software to a newer release that is under support before support ends on your current release. For most customers, this means that you will want to upgrade while your release is in 'ACTIVE' support. Otherwise, you run the risk of not being able to get full (or even any if the release has gone 'OBSOLETE' end-of-service-life) support for the version you are running.

The Shadowbase Software Policy for Software Versions is described here: https://shadowbasesoftware.com/support/shadowbase-software-product-release-and-support-policies/.

We encourage all customers to periodically review this material and plan for periodic upgrades to their Shadowbase software. Contact Support if you need additional information. You can check the support status of all Shadowbase releases here: https://www.shadowbasesoftware.com/product-delivery/supported-databases-and-platforms/.

Note for TCDs

TCD (Temporary Code Delivery) – A software update delivered via an SPR downloadable from an FTP dropbox. A TCD is an early version, intended for customer testing only (not production usage). A TCD by definition is restricted to certain customers. Note that a “Gravic TCD” is delivered directly from Gravic, not via HPE, but otherwise has the same attributes.

A TCD is provided only to the specified customer for the purposes agreed between the customer and Gravic as to how it will be used. A TCD is provided subject to the following terms and conditions in addition to the existing written license governing the use of Shadowbase:

- A TCD is provided for evaluation and test purposes only for no more than ninety (90) days use, and is not to be used in production systems
- A TCD may not have been fully tested by Gravic, no warranties are implied as to its behavior
- A TCD is delivered directly from Gravic to the customer, it is not available from HPE/SCOUT
- As testing proceeds, iterative TCD deliveries may be necessary as issues are identified/resolved
- A TCD is temporary, after evaluation it is to be withdrawn from use by the customer
- After testing completes, a TCD may or may not subsequently be released as a Shadowbase TCF or otherwise be included in the Shadowbase product line

Please see https://www.shadowbasesoftware.com/support/shadowbase-software-product-release-and-support-policies/shadowbase-software-release-glossary/ for additional information.

Special Notes for Version 6.600

None.

Changes in Release 6.600

This section summarizes the new features and problems fixed since the last General Availability release, version 6.310 for HPE Integrity NonStop X servers.

New Features

1) For field compressed update records, the before and after image lengths are now output.

2) Additional options were added to the ADJUST TIMESTAMP command. See the New and Modified Commands section for details.

3) The select command now supports selecting from temporary files for filtering.

Problems Fixed

1) SAR would fail to run on systems without a SQL license, due to dependency on ZCLIDLL. This dependency has been removed by providing versions for NonStop systems with and without SQL licenses. The INSTALL program will install the proper version based on the type of installation selected.

2) The physical file name displayed for audit on virtual disks was incorrectly displaying the value of the logical name instead.

3) SAR would fail to run on a system with 15 auxiliary audit trails. An SSGETTKN error -8 would occur while attempting to retrieve audit trail configuration information for audit trail id 16.

4) The HISTORY <n> command displayed n – 1 lines, instead of n lines of history.

5) Using a SQL/MX ANSI name with the WHERE command or the + TABLE command did not work. Matching events were not displayed. The workaround was to use the Guardian file name instead.

6) For wildcarded file selections (e.g. SELECT * FROM $VOL.SVOL.A*), Enscribe before and after image data was not displayed.

7) Attempting to load a saved interpretation file via the OBEY command failed with syntax errors.

8) Attempting to use WHEN clauses with the ADD VARIANT command resulted in a syntax error.

New and Modified Commands

ADJUST TIMESTAMP Command (Modified)

Syntax:

```
ADJUST TIMESTAMP LOCAL
ADJUST TIMESTAMP UTC
ADJUST TIMESTAMP GMT
ADJUST TIMESTAMP [-]<hours>[:<minutes>]
```

Semantics:
The audit trail contains timestamps in GMT. This command is useful if SAR is used to investigate audit trail files from a system that was in a different time zone from the one the customer is currently in. With this command you define the time difference between the SAR Console and the audit trail files.

The default setting is LOCAL. LOCAL mode is useful to handle audit trails from the local time zone LCT (Local Civil Time). In LOCAL mode the timestamps used in the Console (starttime and endtime commands) are interpreted as local times. SAR deals with the probably different audit trail time zone (UTC/GMT) and converts the audit trail record times to the local time before printing. The user doesn't have to take the difference between his local time zone and the audit trail time zone into account.

Time conversion is deactivated in UTC (GMT) mode. Console times (starttime, endtime) have to be defined in UTC in order to find matching audit trail records. Matching records are displayed in UTC.

Individual intervals are supported as well. An audit trail record matches, if the Console starttime is less or equal and the endtime is greater or equal than the audit trail record time plus the interval.

Example:

We assume, the local time zone is GMT + 2 hours and we are looking for the following record, stored in the audit trail:

MAT-Timestamp : 2018-06-26 10:17:14.521665 (212396761034521665)

There are three different ways to find it:

1.) Using local time zone

```
TP-SPY> ADJUST TIMESTAMP LOCAL
TP-SPY> STARTTIME 2018-06-26 10:17
TP-SPY> ENDTIME 2018-06-26 10:18
TP-SPY> START
```

```
…
Start AT-Location:
MAT-Timestamp: 2018-06-26 10:16:59.999149 (212396761019999149)
…
Record Type       : INSERT
MAT-Timestamp     : 2018-06-26 10:17:14.521665
(212396761034521665)
…
End AT-Location:
MAT-Timestamp     : 2018-06-26 10:18:00.022519
(212396761080022519)
```

2.) Using UTC/GMT time zone

```
TP-SPY> ADJUST TIMESTAMP UTC
TP-SPY> STARTTIME 2018-06-26 8:17
TP-SPY> ENDTIME 2018-06-26 8:18
TP-SPY> START
Start AT-Location:
MAT-Timestamp     : 2018-06-26 08:16:59.999149
(212396761019999149)
…
Record Type       : INSERT
MAT-Timestamp     : 2018-06-26 08:17:14.521665
(212396761034521665)
…
End AT-Location:
MAT-Timestamp     : 2018-06-26 08:18:00.022519
(212396761080022519)
```

3.) Using interval

```
TP-SPY> ADJUST TIMESTAMP 2:00
TP-SPY> STARTTIME 2018-06-26 10:17
TP-SPY> ENDTIME 2018-06-26 10:18
TP-SPY> START
Start AT-Location:
MAT-Timestamp     : 2018-06-26 10:16:59.999149
(212396761019999149)
…
Record Type       : INSERT
MAT-Timestamp     : 2018-06-26 10:17:14.521665
(212396761034521665)
…
End AT-Location:
MAT-Timestamp     : 2018-06-26 10:18:00.022519
(212396761080022519)
```

Installation Instructions (Shadowbase Audit Reader)

1) Binary FTP the TPSPYR file from your PC (if you obtained the files from a Gravic FTP site) or DVD. ASCII transfer the OINSTALL file.

2) To begin the Install process, enter the following at the TACL prompt:

OBEY OINSTALL

The following response will be displayed on the terminal screen. (Details of output will vary depending on your system):

```
$DATA1 JHSAR623 19> o oinstall
#frame
#push #informat
#set #informat tacl
#push filecode
#push tos
#set filecode 700
#set tos [ #tosversion ]
[#if (([ #charfind tos 1 R ] = 1) or
      ([ #charfind tos 1 T ] = 1)) |THEN| #set filecode 800]
[#if ([ #charfind tos 1 V ] = 1) |THEN| #set filecode 500]
fup alter tpspyr,code [ filecode ]
PID: $Z58C $SYSTEM.SYS10.FUP
STOPPED: $Z58C
CPU time: 0:00:00.007
run tpspyr,($*.*.INSTXT,$*.*.INSTALL,$*.*.INSTINI),vol [#defaults],myid,listall
PID: $Z58D \GRAVIC1.$DATA1.JHSAR623.TPSPYR
UNPAK - File decompression program - T1255H01 - (2014-04-29)

Archive version: 3
File Mode RESTORE Program - T9074H01 (16MAR2015) (AGL)
(C)2000 Compaq (C)2007 Hewlett-Packard Development Company, L.P.
Drives: (\GRAVIC1.$Z58D)
System: \GRAVIC1  Operating System: J06  Tape Version: 3
Backup options:  NO AUDITED, BLOCKSIZE 8, NO IGNORE, OPEN, PARTONLY OFF,
                 INDEXES IMPLICIT
*WARNING-7147*  Files created and stored via OSS and SQL/MX objects are not
                supported.
Restore time: 27Jun2016 10:09  Backup time: 23May2016 12:26           Page: 1

Tape: 1       Code             EOF      Last modif   Owner RWEP   Type   Rec Bl

$DATA1.JHSAR623
 INSTALL       800           110712 23May2016 11:25 150,12  NNNN
 INSTINI       101              662 23May2016 11:25 150,12  NNNN
 INSTXT        101            14532 23May2016 11:25 150,12  NNNN

Summary Information

Files restored = 3  Files not restored = 0
STOPPED: $Z58D
CPU time: 0:00:00.011
#unframe
```

The TPSPYR file is a self-extracting archive. During the execution of OINSTALL, the files contained within will be unpacked and restored to the system as shown above. The files restored in the step above include a customizing configuration file, INSTINI.

The INSTINI file is provided to allow for installation customization. You will have to edit this file and make the appropriate modifications to set items like the SQL catalog and the program subvolume. This can be done manually prior to continuing the installation process or during the installation process by selecting the appropriate step.

3) Follow the instructions in the Installation section of the Shadowbase on a NonStop System section of the ***HP Shadowbase Audit Reader (SAR) Manual***. After making any necessary system specific changes to INSTINI, the INSTALL script will be run.

****** End of Document ******