

SOFTWARE RELEASE DOCUMENT (SOFTDOC)

Product:	Shadowbase
Release:	Gravic Version 6.412 HP NonStop Shadowbase: T1122-AAL (SB Repl/Guardian)
Release Date:	June 1, 2018
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NOTE: This softdoc covers new features and corrected problems for Shadowbase for H and J series Guardian NonStop operating system versions. This softdoc is available in an Adobe PDF file (.PDF). Softdoc files are named IPMnnnn (where nnnn is the Shadowbase version number).

NOTE: This softdoc applies to the HPE NonStop Shadowbase Replication for Guardian component. Other softdocs document the releases of the other components in T1122H06, including:

- HPE Shadowbase Audit Reader,
- HPE Shadowbase Enterprise Manager, and
- HPE Shadowbase Compare for SQL.

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

NOTE: **Supported Release Version Updates (RVUS):** This softdoc applies to all currently supported database and operating system versions as described by the [Shadowbase Supported Versions Cross-Reference](#). In addition, visit the <http://www.ShadowbaseSoftware.com> web site for the list of supported platforms and databases, and the Shadowbase Software Support Policy for Software Versions by clicking here <https://shadowbasesoftware.com/support/shadowbase-software-product-release-and-support-policies/>.

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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.

Mature and Deprecated Features

This section provides a list of mature features (“*mature features*”) and deprecated features (“*deprecated features*”) for HPE NonStop Shadowbase. Gravic will continue to support *mature features* and will continue to include them in future releases; however, Gravic will not enhance those features further or qualify them on newer versions of operating systems and databases as they become available. If you are using a *mature feature*, Gravic highly recommends moving off the *mature feature* to the suggested replacement approach as soon as possible. New installations should avoid using *mature features*; please discuss this issue with Gravic if you feel you must use a *mature feature*.

Gravic will also continue to support *deprecated features* in the current release. However, Gravic plans to eliminate the deprecated features in a future release and strongly recommends that customers begin the planning and implementation to move off the feature immediately. Contact Gravic if you need assistance in planning your migration.

[Table 1 - Mature Features in HPE NonStop Shadowbase](#), below, lists the features that are currently considered ‘mature’ by Gravic, along with the release/date where they were declared mature. Again, please note that the *mature* designation means the feature will not be enhanced and will eventually be deprecated (retired).

[Table 2 - Deprecated Features in HPE NonStop Shadowbase](#), below, lists the deprecated features. The deprecated features are no longer being enhanced, and are on a schedule to be retired. The table also contains a column indicating the date of the last release that will contain the deprecated functionality (the last release before this end date will be the last release to contain this functionality). Please note that release plans are subject to change without notice and delivery dates are not guaranteed. However, Gravic currently expects that all general availability releases up to and including the date of the last release will contain the deprecated feature(s).

Please see [Shadowbase Software Product Release and Support Policies](#) on www.shadowbasesoftware.com for additional information regarding the Shadowbase Software Support Policy.

Table 1 - Mature Features in HPE NonStop Shadowbase

Feature	Description	Mature Release
AUDCOLLN	The original native mode collector, AUDCOLLN is now mature and is being replaced by the new SBCOLL collector. AUDCOLLN will continued to be maintained for critical issues and tested, but will no longer be enhanced with new features and capabilities.	NSB 6.410
Format 1 TMF Audit Trails	While still supported, Gravic recommends that any customers still using Format 1 Audit Trails migrate to Format 2 TMF Audit Trails.	NSB 6.410

Table 2 - Deprecated Features in HPE NonStop Shadowbase

Feature	Description	Deprecated Release	Last Release Date
Non-native Consumer	The non-native version of the consumer (AUDCONS) is deprecated. Customers still using the non-native version of the consumer should immediately begin planning to move to the native version (AUDCONSN).	NSB 6.410 April, 2018	April, 2020
Loader	The original Shadowbase Loader (LOADER) is deprecated. Customers still using LOADER to load files and tables should immediately begin planning to move to the Shadowbase Online Loader (SOLV).	NSB 6.300 May, 2017	May, 2019
SBLINK	The original program used to connect SEM to a NonStop environment, replaced by listener AUDCOM process.	NSB 6.220 May, 2016	NSB 6.320 May, 2017
SBQFILE	Program used in conjunction with replicating Enscribe queue files to target non-queue key-sequenced files, replaced with exact queue file replication.	NSB 6.220 May, 2016	NSB 6.320 May, 2017
SQL92	Protocol used by Shadowbase components between the NonStop and Other Servers, replaced by SQLSBV1.	NSB 6.320 May, 2017	NSB 6.410 April, 2018

Supported Database and Operating System Versions

The database and operating systems versions supported by HPE Shadowbase can be found on the Gravic Shadowbase website. Please see [Supported Databases and Platforms](#) on www.shadowbasesoftware.com for additional information regarding Shadowbase support for databases and operating systems.

Special Notes for Version 6.412

1) Version 6.412 (T1122^AAL), is being released to correct a critical error in Shadowbase Replication Version 6.410(T1122^AAJ) when using the SBCOLL collector program that could prevent it from reading audit trail events at startup, or following a restart, without logging an error. Version 6.412(T1122^AAL) is a full release that includes the changes from the previous partial release, Version 6.411(T1122^AAK). It does not require any version to be installed previously.

2) **Due to the nature of the error fixed in this patch, ALL customers replicating uni-directionally from a NonStop SQL/MX source using the SBCOLL collector program with Version 6.410 (T1122^AAJ) or Version 6.411 (T1122^AAK) are urged to upgrade to this release.** For Enscribe or SQL/MP replication, it is recommended to use the AUDCOLLN collector program rather than the SBCOLL collector program at this time. For SQL/MX replication, the issue does not occur for bi-directional replication due to differences in operation with the SBCOLLBIDIRGOBACK processing. For uni-directional SQL/MX replication, however, the SBCOLL collector program must be used, which is affected by this issue. As such, customers are urged to upgrade to this patch for any use of the SBCOLL collector program outside of strict SQL/MX bi-directional replication. Releases prior to Version 6.410(T1122^AAJ) are not affected by this issue.

Changes in Release 6.412 (since Version 6.410)

Problems Fixed

- 1) There was an issue in Version 6.410 where the TNS-E version (H and J series Guardian NonStop operating systems) of AUDCOLLN would fail to start on systems without SQL installed. Attempting to start the collector resulted in a process create error 75, 11 on ZCLIDLL. This issue has been corrected, and ZCLIDLL is no longer required.
- 2) A race condition existed in certain scenarios during the SBCOLL (re)start process that could prevent SBCOLL from starting to read from the audit trail. In this case, it would continue running, but would not read audit. This scenario is evidenced by the collector not logging an audit reading started message to EMS following the RUN command being issued, and by STATS COLL output showing an invalid value (-1) in the last event position statistics. To begin reading audit, the collector would need to be stopped and restarted until a collector started reading audit at message was output, indicated that it successfully started reading audit. Alternatively, starting based on event time could be used to force a successful start, but care must be taken in this scenario as audit trail timestamps can be inexact.

This race condition occurred if all of the following criteria were met:

- a. The SBCOLL collector program is being used.
- b. The SBCOLL process is restarting, or initially starting at a specific audit trail position (not counting EOF or based on a start time).
- c. It is not a bi-directional SQL/MX replication environment.

In one outcome of the race condition, SBCOLL started reading audit correctly as normal. In the other, SBCOLL did not start reading audit.

3)

Installation Instructions (HPE NonStop Shadowbase)

Shadowbase is now built for HPE NonStop installations using the HPE PAK and UNPAK utilities – refer to the G06.16 and above operating system documentation (or contact Shadowbase Support) for more information. The SBPAK file described below is delivered as a self-extracting file.

- 1) Binary FTP the SBPAK from your PC (if you obtained the files from a Gravic FTP site) or DVD. If FTP was used, enter the following commands to alter the file code.

For H-based and J-based systems:

FUP ALTER SBPAK, CODE 800
For L-based systems:
FUP ALTER SBPAK, CODE 500

2) To “unpak” the files from the self-extracting SBPAK, enter the following command:

```
RUN SBPAK, *.*.*, VOL <restore volume and subvolume>, LISTALL, MYID
```

Where <restore volume and subvolume> is the location you want the Shadowbase files installed into, e.g. \$DATA.SHADBASE

3) Follow instructions in the Installing Shadowbase on a NonStop System section of the *HPE Shadowbase NonStop Installation and Planning Manual*. You must now run either the INSTALL or ENSINST script.

IMPORTANT NOTES ABOUT USER EXITS:

IF YOU HAVE USER EXITS DEVELOPED WITH COBOL, YOU MUST RECOMPILE THE USER EXIT “PROGRAMS” SO THAT THE LATEST VERSION OF USRXLIBO OR USRXLIBN (the native library) IS ADDED TO THE RESULTING OBJECT FILE THAT WILL SUBSEQUENTLY BE INCLUDED IN THE FINAL BIND OR LINK.

AFTER COMPILING THE USER EXITS (IF NECESSARY AS DISCUSSED ABOVE), RUN BINDUSRX, BINDXYPR OR LINKUSRX TO GENERATE THE CUSTOM CONSUMER (AUDCONS OR AUDCONSN). NOTE THAT THIS SHOULD BE DONE AFTER THE STANDARD INSTALL IS RUN.

Known Problems Remaining

Please see the Software Release Document for Shadowbase Version 6.410 for a list of known problems remaining.

[*** End of Document *****]**