

Release Notes for Oracle GoldenGate for HP NonStop (Guardian)

This document contains the release notes for the 12c (12.2.0.1) release of Oracle GoldenGate for HP NonStop on the Guardian platform.

You can find additional information about the parameters and options described in these release notes in the *Reference Guide for Oracle GoldenGate for HP NonStop (Guardian)*.

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New Features in 12c (12.2.0.1)

This section outlines the new features that are being introduced in this release and include the following:

Enabling FAR Trail Recovery

By default, Extract operates in an append mode. If there's a process failure, then a recovery marker is written to the trail and the Extract appends the recovery data to the file. This ensures that the history of all prior data is retained for recovery purposes.

X86 Chipset

This release supports HP Non-Stop systems running on the X86 Chipset architecture and new operating system L06.

Event Actions

The `EVENTACTIONS` option was added to the `FILE` (table) and `MAP` parameters and can be used to trigger an event based on a file or table receiving a DML record.

`REPERROR` Additions

The `PURGETARGET` option allows you to purge the target then retry creating it.

The `IOTYPE` option allows you to identify IO error types.

Add Options To `LAGINFO` and `LAGCRITICAL` Parameters

Two new reporting options, `REPORTTASKS` and `REPORTSTOPPED`, were added to the `LAGINFO` and `LAGCRITICAL` parameters.

New `ADD/ALTER EXTTRAIL` Option

A new option `CREATE | NOCREATE` was added to the `ADD EXTTRAIL` and `ALTER EXTTRAIL` parameters. The default is `CREATE`.

New Parameters

This section lists the parameters that have been added for this release.

`DOWNINFO`

In earlier releases, there was no information classified when a process terminated abnormally. Now you can use the `DOWNINFO` parameter to classify a process that has terminated abnormally as informational in the report generated by `DOWNREPORT`.

`NOCONTROLTABLELOCKOFF | CONTROLTABLELOCKOFF`

The `NOCONTROLTABLELOCKOFF | CONTROLTABLELOCKOFF` parameter can be used as a global-level toggle before and after map statements and as an option of a `MAP`.

Parameter Changes

This section explains the parameter changes that are included in this release.

Default Option to `LAGINFO` and `LAGCRITICAL`

The default options, `IGNORESTOPPED` and `IGNORETASKS` , were added to the `LAGINFO` and `LAGCRITICAL` parameters.

Metadata Log Dump Commands Added In Oracle GoldenGate

The `METADATA DETAIL ON`, `METADATA SQLFORMAT ON`, and `METADATA DEFGENFORMAT ON` commands were added to Logdump, see *Logdump Reference for Oracle GoldenGate*.

Additional `DEFGEN` Option

A new `FORMAT LEVEL` option was added to `DEFGEN` for use with a definition file produced to be used for the `TARGETDEFS` of an OpenSys Extract to map from another database to NSK.

`RMTHOST` Option Timeout

The new `TIMEOUT` option was added to the `RMTHOST` parameter to time-out the connection when it is not made within the specified time limit.

`FORMATASCII` User Specified Delimiters

You can now specify an arbitrary character using the `ColumnDelimiter` and `RecordDelimiter` options. The character specified for these options cannot be the same.

File Aging Parameter Options

In earlier releases, the parameter was restricted to days. Now, you can specify with the hours and minutes with the new `FILEAGEHOURS [n]` and `FILEAGEMINUTES [n]` options.

Deprecated Parameters and Programs

This section lists the parameters and parameter options that are deprecated as of release 12c (12.2.0.1).

No parameters or options were deprecated in this release.

Installation and Upgrades

The installation file downloaded from Oracle is a standard ZIP file.

Topics:

- [Installation Instructions Changes](#)
- [Upgrade Process](#)

Upgrade Process

The upgrade process for Oracle GoldenGate has not changed.

Installation Instructions Changes

The installation instructions for release 12c (12.2.0.1) were changed to direct the user first to My Oracle Support (MOS), Patches and Upgrades to see if any patches are available for the requested release. If there are no available patches, the user is directed to <https://edelivery.oracle.com>.

Corrected Problems and Enhancements

For questions on specific bugs or ticket numbers, consult Oracle Customer Support. SR is the Oracle Support SR number, and BugDB is the bug identification number. You can obtain Patches from the My Oracle Support site or you can contact support by opening an SR to obtain the current patch.

Topics:

- [Release 12.2.0.1.5 — April 2018](#)
- [Release 12.2.0.1.4 — February 2018](#)
- [Release 12.2.0.1.3 — October 2017](#)
The release 12.2.0.1.3 is for the Oracle GoldenGate Veridata product — Oracle GoldenGate for HP Nonstop.
- [Release 12.2.0.1.2 — September 2017](#)
- [Release 12.2.0.1.1 — April 2017](#)
- [Release 12.2.0.1 — February 2017](#)
- [Initial Release — September 2016](#)

Release 12.2.0.1.5 — April 2018

Bug 27846450 — NSK: EXTRACT SHOULD REJECT A SOURCE SPECIFIED AS AN ENSCRIBE SECONDARY

Corrected the issue by rejecting the source file when it is specified as an enscribe secondary partition.

Bug 27833433 — NSK: PROCESS ABENDS ON FILEOP WITH PARTITION OF 8 AND HIGHER

Bug 27646618 — NSK: DEF NOT LOADED IN EXTRACT

Release 12.2.0.1.4 — February 2018

26929020 LOGDUMP nsk: logdump fix encryption detection

27012565 LOGDUMP nsk: `logdump` should not count file header and metadata as transactions

27208027 EXTRACT nsk: prevent `flushsecs` from flushing extract
trails during recovery

27248374 EXTRACT nsk:fix day one bug in `check_colmap_keys()`

27376400 EXTRACT nsk: update `tcipip` errors to show name details

27464535 EXTRACT nsk: change extract/replicat to reject trails in little endian format

Corrected both Extract pump and Replicat from trying to process trails created in little endian.

REPLICAT nsk:fix scanforobjectdefs bad record and OGG error 112 READ_EXTRACT_RECORD TDR_lookup returned NULL

- Corrected both Extract pump and Replicat from abending with OGG ERROR 112 Bad record.
- Corrected Replicat from abending with OGG error 112 `READ_EXTRACT_RECORD TDR_lookup` returned NULL on a fileop or bulkio record.

27376345 EXTRACT nsk:replace server abends in trail recovery with a return error to extract

Corrected a problem in server collector that resulted in Extract abending with `EXTRACT_remote_getlastcsn TCP/IP error 4120` (Connection reset by remote host)

27186561 REPLICAT nsk: replicat adds stats for ignores for before images returned from user exit

Corrected Replicat from incrementing statistics for ignores when returned from a user exit on before image records.

27371436 REPLICAT nsk: extract and replicat can abend with dictionary not open error

Corrected both Extract and Replicat from abending with `DICTIONARY not open`, when using parameters `DICTIONARY`, `DEF` or `TARGETDEF` for Enscribe files.

Release 12.2.0.1.3 — October 2017

The release 12.2.0.1.3 is for the Oracle GoldenGate Veridata product —Oracle GoldenGate for HP Nonstop.

Bug 26307629 — CAGT - CAgent: Agent message (999): null

The error message has been corrected. This can occur from the NSK agent when the table being evaluated has a large number of partitions.

Release 12.2.0.1.2 — September 2017

Bug 25178508 — GGSCI NSK: Allow 63 auxtrails

Added feature to support the HP enhancement of 63 Transaction Management Facility Auxiliary Audit Trails.

Bug 25981145 — OTHER NSK: Complete enhancement to HP changes for large block entry sequence Enscribe files

Certified compliance with the HP enhancement for large block entry sequenced Enscribe files.

Bug 26102719 — EXTRACT NSK: Fix recovery for scanning too much data.

Corrected the Extract restart logic to scan less data from the output trail to determine the correct restart point.

Bug 26267532 — GGSCI NSK: Fix rollover recovery for multiple

ETROLLOVER

Corrected restarting an Extract after multiple commands of ETROLLOVER from GGSCI are issued.

Bug 26626360 — Extract NSK: Pump abend- 112 Recovery scan

`failed (5) in trail file xxx, rba xxxx`

Corrected an Extract recovery (restart positioning), when a pump is outputting current trail format and the source was either logger captured or a lower version trail format.

Bug 26761362 - Direct read Extract sent incorrect file.

Direct read Extract incorrectly captures the data of files with names similar to the listed file to capture then outputs them with the filename of the file you wanted.

Release 12.2.0.1.1 — April 2017

Bug 25752941 — Fix V11.1 Fileheader Tokens

Corrected an issue with Extract writing file header tokens that were incompatible with the older trail versions causing Extract pump and or Replicat to abend with the error, `File header failed to parse tokens.`

Bug 24368944 — Handle Empty TDR Records

Corrected an issue to handle the condition of reading an OpenSys created a trail that was extracted with `NO_OBJECTDEFS`.

Bug 24712817 — Propagate Fabricated CSN Information For Fileops In A Pump

Corrected an issue with the Extract pump to write out the CSN that was fabricated for fileops.

Bug 24757916 — Put Back A Portion Of Checkpoint Conversion

Corrected an issue when you run `MIGRATE` during an upgrade, the resulting new checkpoints still pointing to objects, reports, and parameter files to the old location.

Bug 24815620 — Pump Trapped At Startup

Corrected an issue with the Extract data pump starting after `ETROLLOVER`.

Bug 24966785 — `CONTROL 21` Error 72

Corrected an issue to handle `CONTROL 21` for allocate and deallocate.

Bug 25204612 — Add `SCANFORMETADATA`

Added a new command, `SCANFORMETADATA`, for use with metadata records.

Bug 25225355 — Extract Stats For `SOURCEISTABLE` Showing Zeros For Wrong File Output

Corrected an issue for statistics output from `SOURCEISTABLE` when multiple tables are written to multiple files.

Bug 25263152 — `SOURCEISFILE` to `RMTASK` Needs Group Name Check From Parameter File

Added support for a bounds check on the group name being present in the parameter file.

Bug 25292668 — Generic `REPERROR` Errors Missing Value For `FILEOP`

Corrected an issue of bounds check on the syntax for `REPERROR FILEOP`.

Bug 25381197 — Fix Uninitialized TACL Variable

Corrected an issue that causes the `MIGRATE` portion of installations to execute more than once.

Bug 25424005 — Extract Pump Corrupts Existing Tokens When Reading And Mapping Tokens

Corrected issues with the Extract data pump propagating user tokens to the output trail.

Bug 25661031 — NSK Extract Data Pump Doesn't Propagate Existing Tokens To Output Trail

Corrected issues with the Extract data pump propagating user tokens to the output trail.

Bug 25458581 — Derived View Map Is Corrupted After Attributes Are Refreshed.

Corrected an issue when you Extract a view and an `ALTER` to the base table occurred.

Bug 25491591 — Fix Parsing Issue With Begin Time

Corrected an issue with the `GGSCI ADD EXTRACT BEGIN NOW` command retrieving up the incorrect records on idle systems.

Bug 25550591 — Add Timestamp To GGSCI Lag Display

Added support for informational timestamp in the reply from `GGSCI LAG group` command.

Bug 25676878 — Replicat Heap Corruption If the Table Has More than 256 Partitions

Corrected an issue when you Replicat a SQL/MP table that has more than 256 partitions so that 900 is valid again.

Bug 25677559 — Fix Multiple Entries On File Free List

Corrected an issue for file aging that can cause duplicate or corrupted data. This also manifests as a Replicat Error 21 when the file or table name does not match the record length expected.

Bug 25830352 - Replicat Traps With Error 2, in

`apic_scanforobjectdefs()`

Corrected a Replicat abend that traps with error 2 when scanning for metadata and none was in the input trail.

Bug 25831012 - Fix Capturing `sortprog` Writes to An Unstructured File

Corrected how `GGSLIB` captured a non-audited write to an unstructured file from `sortprog`, causing a downstream Replicat toabend with an error 21.

Release 12.2.0.1 — February 2017

Bug 22478185 — Fix Replicat `ESEQ` Error Message

Corrected an issue that fixes problems with the files with a block size greater than 4K as a result of the 32K block changes.

Bug 23557196 — Fix An Error 2 On DUP/LOAD For Files With Less Than 4K Block Size

Corrected an issue to use `SETMODE 141,1` for exclusive open on files with a greater than 4K block size.

Initial Release — September 2016

Bug 21836256 — MGR Allow `LOGFILESBEHIND` To Check EXTTRAILS

Corrected an issue where Manager did not apply `LOGFILESBEHIND` to Extract trails. Manager now shows Extract trails, not just logger files for `LOGFILESBEHIND`.

Bug 21778854 — Intercept Of Control Operation From SORT Causes Zero Length Trail Record

Corrected an issue to set the `unstructopen` flag in the context for opens on `unstruct` files.

Bug 21475744 - LOGGER debug, Switch Process When Application Crash Not Enough Stack Space

Corrected an issue to better handle stack space errors in `BASELIB` and have Logger report a bad filename received from `BASELIB` if it occurs.

Bug 20976346 - Manager Consistently Display `LAGCRITICAL` Messages When There Seems To Be No Lag

Corrected an issue with Manager incorrectly reported lag, it now resets to zero (0) when at EOF.

Bug 20799603 - Allow File Aging To Happen When Configured With `@functions` and Filters

Removed restrictions on `FILEAGEDAYS` for MAP statements containing `SOLEXEC`, `@functions`, or filters.

Bug 20230635 - Process Trail Metadata

Added support to read and process trail metadata generated from OpenSys Extract v12.2.

Bug 20230617 - Generate Trail Header

Added support for Extract to write a trail file header.

Bug 19430508 - Fix `ENCKEYS` Error Response

Fixed an error message when the encryption keyname is not found by showing the correct keyname.

Bug 19187929 - Extract `SOURCEIS` And `RESTARTCHECKPOINTS` Corrupts Checkpoint On Missing File

Corrected Extract from corrupting its checkpoint when used with `SOURCEISTABLE/` `SOURCEISFILE` and `RESTARTCHECKPOINTS`, and one of the file and/or tables is missing.

Bug 18827236 - Handle Processing OpenSys URF Record

Implemented an enhancement that allows OpenSys unified records to be processed by Guardian Extract Pump and Replicat.

Bug 18707922 - Do not Attempt To Create `EXTTRAIL` During GGSCI > ADD EXTTRAIL

Added option to GGSCI to skip `EXTTRAIL` creation.

Bug 18345841 - RFE: Purge Current Target File If Enscribe `CREATEFILE` Gets An Error 10

Changed the `REPERROR` options to allow the purging of a target Enscribe file on a Create error 10.

Bug 16773609 - Enhancement Support Event Actions On HP NonStop

Implemented an enhancement that allows new support for event marker event actions.

Bug 14845421 — RFE: Extract To Support Volume Name > 6 Characters

Corrected problems with long volume names.

Bug 13961867 - Using Unprintable Characters For `FORMATASCII` Delimiter

Changed `FORMATASCII` options to allow you to specify column and record delimiters.

Bug 12558226 - Need All SQL Statements With Control Table Tablelock Off

Added a new parameter `CONTROLTABLELOCKOFF` for issuing `CONTROL TABLELOCK OFF`.

Bug 11887421 - Change Extract/Server To Use Non Blocking Sockets

Implemented an enhancement for Extract, Replicat, and Server to use nowaited socket calls to time out orphaned server collectors, and initial load Replicat.

Bug 9870271 - Ability To Define Different Lag Intervals In MGR For Each Group

Implemented an enhancement for Manager to configure `LAGINFO` and `LAGCRITICAL` by group.

Bug 9430365 - NSK-3743-GG: Lag Is Not Reported While Replicat Is Waiting For File Open

Corrected an issue in Manager not reporting lag for a running Replicat that is not checkpointing.

Bug 9427846 - Report `DOWNCRITICAL` , `ALLOW` Skip Of Stopped

Added an option `IGNORESTOPPED` to `DOWNINFO` and `DOWNCRITICAL` to skip reporting on gracefully stopped processes.

Bug 9417227 - NSK-4269-GG: RFE: `ALLOW` `REPERROR` BY IO Type

Implemented an enhancement that allows `REPERROR` to be processed configured by IO type.

Known Issues

The following are known issues for this release:

User Exits

If you are using user exits to do primary key updates, you must change the key length fields to a long instead of a short. This is due to the support for the larger records of DDL2.

DEFGEN and DDLGEN

The DEFGEN and DDLGEN utilities incorrectly type Enscribe Binary-8 as Char (1).

Replicat Mapping

When Replicat is mapping a subset of target columns from and to Enscribe files using differing source and target DDL layouts, the data may be truncated or corrupted while processing updates because of COMPENSCRIBEMAPS.

Direct Read Extract

Direct read Extract incorrectly tries to capture SQL/MP tables that exist in the same subvolume as the wanted Enscribe files, resulting in a file system error 1028.

Getting Help with Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Information

The Oracle GoldenGate Product Documentation Libraries are found at

[Oracle GoldenGate](#)

[Oracle GoldenGate Application Adapters](#)

[Oracle GoldenGate for Big Data](#)

[Oracle GoldenGate Plug-in for EMCC](#)

[Oracle GoldenGate Monitor](#)

[Oracle GoldenGate for HP NonStop \(Guardian\)](#)

[Oracle GoldenGate Veridata](#)

Oracle GoldenGate Studio

Additional Oracle GoldenGate information, including best practices, articles, and solutions, is found at:

Oracle GoldenGate A-Team Chronicles

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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