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New Features in 11.1.1.1

Database-specific enhancements

Oracle

- Oracle GoldenGate now supports the capture of direct-load INSERTs for Oracle versions 9iR2, 10gR1, and 10gR2 and later. Supplemental logging must be enabled, and the database must be in archive log mode. The affected tables cannot contain LOBs if the database is 9iR2 or 10gR1, but LOBs are supported for later versions. The following direct-load methods are supported.
  - /*+ APPEND */ hint
  - /*+ PARALLEL */ hint (Non-RAC only)
  - SQLLDR with DIRECT=TRUE

- Oracle GoldenGate now supports the delivery of data to EHCC-compressed tables in Oracle Exadata. Capture from EHCC-compressed tables is not supported. In order for Replicat to apply data so that it is compressed with EHCC compression, you must use the INSERTAPPEND parameter for Replicat, which causes Replicat to use an APPEND hint for inserts. See the Oracle GoldenGate Windows and UNIX Reference Guide.

- Oracle TIMESTAMP WITH TIME ZONE with TZR (time zone region) is now supported fully for replication from a source Oracle database to another Oracle database, or to a non-Oracle database. To use this support, you must use one of two new TRANLOGOPTIONS options, depending on the database type and whether conversion is required. These options are INCLUDEREGIONID and INCLUDEREGIONIDWITHOFFSET. For more information, see the Oracle GoldenGate Windows and UNIX Reference Guide.

- Oracle Transparent Data Encryption (TDE) at the column and tablespace level are now supported. To support these features, a new dbms_internal_cklm.plb package is installed in the Oracle GoldenGate installation directory, and a new DECRYPTPASSWORD option was added to the DBOPTIONS parameter. Specific setup procedures must be followed by the Oracle Security Officer and the Oracle GoldenGate Administrator, and database patches are required. For more information, see the Oracle GoldenGate for Oracle Installation and Setup Guide.

- The Extract process by default now uses a new log reader mechanism that enables the parsing of log data to be performed by a producer thread at the same time as additional data is being read from the redo log files by a reader thread. The reading of more data while current data is being parsed is known as the “read-ahead” mechanism. This new feature reduces I/O latency, especially in the case where there is I/O contention on the redo log device.

- The default Replicat commit method has changed to take advantage of the Oracle asynchronous COMMIT feature whenever a checkpoint table is being used. When applying a transaction to the Oracle target, Replicat includes the NOWAIT option in the COMMIT statement. This improves performance by allowing Replicat to continue processing immediately after applying the COMMIT, while the database engine logs the transaction in the background. You can disable the default asynchronous COMMIT behavior by using the DBOPTIONS parameter with the new
DISABLECOMMITNOWAIT option in the Replicat parameter file. If a checkpoint table is not used for a Replicat group, the checkpoints are maintained in a file on disk, and Replicat uses the synchronous COMMIT option by default (COMMIT with WAIT). This feature is available for Oracle 10gR2 and later targets. For more information, see the Oracle GoldenGate Installation and Setup Guide for Oracle.

- DDL support was enhanced with the following:
  - A new IGNOREMAPPING option of DDLOPTIONS prevents Replicat from performing name mapping for DDL of MAPPED scope. This option improves performance in like-to-like DDL replication configurations, where source and target schema names and object names match, and where mapping functions are therefore unnecessary.
  - A new trigger-level filtering option has been added for Oracle sources. This method makes use of an Oracle function that is called at run-time by the DDL trigger when a DDL operation occurs. Information about the DDL is passed to this function, and you can use it to compute whether the DDL will be passed to Extract or not. (By default, all DDL is passed to Extract.) By sending fewer DDL operations to Extract, this method can improve capture performance and can also be used for any other purpose that requires filtering at an early stage of processing. This option can be used instead of, or in conjunction with, the filtering options of the DDL parameter. To use this feature, the DDL trigger must be compiled in INITIALSETUP mode. For more information, see the Oracle DDL chapter in the Oracle GoldenGate Administrator's Guide.
  - A new GGSCI command, ADD SCHEMATRANDATA <schema>, enables schema-level supplemental logging. This command operates on all objects in a schema to log key values in a way that ensures DDL continuity despite ongoing DML changes after DDL, or when Extract is stopped or lagging, and when keys are changed and tables are being added or deleted. This command calls underlying database procedures and table functions. EXECUTE_CATALOG_ROLE privilege is required for the user that issues the required DBLOGIN before issuing this command. Database patches are required. For more information, see the Oracle GoldenGate Windows and UNIX Reference Guide.
  - Additional new GGSCI commands DELETE SCHEMATRANDATA and INFO SCHEMATRANDATA enable you to delete supplemental logging for a schema and get information about schema-level logging.
- Improved support was added for Oracle sequences that are cached and cycled. To enable this support, see the upgrade instructions (for existing installations) or the Oracle GoldenGate for Oracle Installation and Setup Guide (for new installations).
- New Oracle defaults were established for the following TRANLOGOPTIONS parameters:
  - File-based redo (All Versions)
    - BUFSIZE is now 1000KB (1024000)
  - ASM redo (Oracle 11.2.0.1/10.2.0.4 and earlier)
    - BUFSIZE is now 1000KB (1024000)
ASMBUFSIZE is now 28KB (28672)

ASM DBLOGREADER-enabled redo (Oracle 11.2.0.2/10.2.0.5 and later)

- BUFSIZE is now 2MB (2097152)
- DBLOGREADERBUFSIZE is now 2MB (2097152)

- For Oracle Enterprise Editions of version 10.2 and later, Extract now works with Oracle Recovery Manager (RMAN) to retain the logs that Extract needs for recovery. By default, Extract retains enough logs to perform a Bounded Recovery, but you can configure Extract to retain enough logs for a normal recovery by using the TRANLOGOPTIONS parameter with the new LOGRETENTION option set to SR. This parameter also enables you to disable the log-management feature. For more information, see the TRANLOGOPTIONS parameter in the Oracle GoldenGate Windows and UNIX Reference Guide. In conjunction with this new feature, two new commands were added:

  - REGISTER EXTRACT with the LOGRETENTION option registers an Extract group to start log retention if the group was created without first using the DBLOGIN command. (Using DBLOGIN before ADD EXTRACT automatically registers an Extract group.)
  - UNREGISTER EXTRACT with the LOGRETENTION option unregisters an Extract group from the database and stops log retention for that Extract.

MySQL

A new ALTLOGDEST option was added to TRANLOGOPTIONS to specify the location of the MySQL log index file. This value overrides the database default location. Extract reads the log index file to find the binary log file that it needs to read.

Sybase

- The range of values for DBOPTIONS TDSPACKETSIZE has been changed. The new values are:
  - **Sybase version 12.5.4**: 512 to 65024. Default is 0 for Extract, 512 for Replicat.
  - **Sybase15 or higher**: 2048 to 65024. Default is 0 for Extract, 2048 for Replicat.

The value must be a mutiple of 512. The range of values that are set for the Sybase Adaptive Server max network packet size and additional network memory parameters must support the value that is set with TDSPACKETSIZE. See the Oracle GoldenGate for Windows and UNIX Reference Guide for more information.

- Two formerly internal parameters are now available for use in a TRANLOGOPTIONS statement:
  - TRANLOGOPTIONS MAXREADSIZE specifies how many records Extract reads from the transaction log at one time. It can be used to improve performance.
  - TRANLOGOPTIONS READQUEUESIZE specifies the internal queue size, in bytes, for transaction data. It can be increased to improve performance.
Be careful when using high values, particularly with MAXREADSIZE, because it will reduce the frequency of adjusting the secondary truncation point. See the Oracle GoldenGate for Windows and UNIX Reference Guide for more information.

**General enhancements**

- A new MAPSCHEMAS option of DDLOPTIONS was added for both Oracle and Teradata for use when MAPSESSIONSCHEMA is used. MAPSESSIONSCHEMA establishes a source-target mapping for session schemas and is used for objects whose schemas are not qualified in the DDL; whereas MAPSCHEMAS maps objects that do have qualified schemas in the source DDL, but which do not qualify for mapping with MAP, to the same session-schema mapping as in MAPSESSIONSCHEMA. Examples of such objects are the Oracle CREATE TABLE AS SELECT statement, which contains a derived object in the AS SELECT clause, or the Teradata CREATE REPLICATION RULESET statement. This mapping takes place after the mapping that is specified in the MAP statement. See the Oracle GoldenGate for Windows and UNIX Reference Guide for more information and examples.

- New REPERROR options provide error-handling at the transaction level. These options are available for use in a root-level REPERROR statement and in a MAP statement.
  - The TRANSDISCARD option causes Replicat to discard the entire replicated source transaction if any operation within that transaction, including the commit, causes a Replicat error that is listed in the error specification. This option is useful when integrity constraint checking is disabled on the target.
  - The TRANSEXCEPTION option causes Replicat to perform exceptions mapping for every record in the replicated source transaction according to its exceptions-mapping statement.

- **TIMESTAMP WITH TIME ZONE** data types are now supported for the following:
  - Extract for Oracle source databases.
  - Replicat for all target databases that are supported by Oracle GoldenGate.
    
    For more information, see the Oracle section of these enhancements.

- A new parameter named ENABLEMONITORAGENT enables Oracle GoldenGate Monitor to view and monitor Oracle GoldenGate instances. Without this parameter, no information is sent to Oracle GoldenGate Monitor clients.

- The GETTRUNCATES and IGNORETRUNCATES parameters will now be ignored by Extract for DB2 z/OS. It is not possible to ignore TRUNCATEs during capture from a DB2 on z/OS database. By default, TRUNCATEs are always captured from a DB2 on z/OS source, but they can be ignored by Replicat if IGNORETRUNCATES is used in the Replicat parameter file.

- The IGNOREMISSINGTABLES and ABENDONMISSINGTABLES options of DDLERROR were changed to IGNOREMISSINGOBJECTS and ABENDONMISSINGOBJECTS to more accurately reflect support for both tables and sequences.
New Features in 11.1.1.0

New supported databases

- **DB2 9.7**: Oracle GoldenGate now supports capture and delivery on DB2 up to version 9.7.
- **DB2 for iSeries**: Oracle GoldenGate supports the delivery of data changes from any database that is supported as a source by Oracle GoldenGate to a DB2 iSeries target using ODBC from an intermediate Windows system. IBM iSeries Access for Windows must be installed on the intermediary Windows system. See the new Oracle GoldenGate DB2 for iSeries Installation and Setup Guide for more information.
- **SQL Server 2008**: Oracle GoldenGate now supports extraction from and replication to SQL Server 2008. For more information, see the SQL Server Installation and Setup Guide.
- **MySQL Capture**: Oracle GoldenGate now supports log based capture from MySQL 5.1.15 or higher. For more information, see the MySQL Installation and Setup Guide.

Database-specific enhancements

**DB2 z/OS**

- Oracle GoldenGate now supports delivery to a DB2 z/OS target by using a remote Replicat that is installed on any platform that can host a DB2 LUW instance and is supported by Oracle GoldenGate. Replicat connects to DB2 z/OS through DB2 Connect. For more information, see the Oracle GoldenGate DB2 z/OS Installation and Setup Guide.

**MySQL**

- Oracle GoldenGate now supports TEXT and BLOB data types.
- Dynamic SQL is now supported for MySQL through the DYNSQL parameter.
- Oracle GoldenGate now supports capture from MySQL 5.1.15 and later.

**Oracle**

- DDL support was enhanced to:
  - Support ANALYZE for TABLE, INDEX, and CLUSTER.
  - Allow WILDCARDRESOLVE IMMEDIATE to be used with DDL EXCLUDE ALL. Now, DDL that is read by Replicat can be ignored.
  - Support replication of passwords in DDL and their encryption by means of a new PASSWORD option of DDLOPTIONS.
  - Better handle unqualified objects names in DDL statements. Now, Replicat does the following:
    - If the unqualified object is of MAPPED scope (that is, its name satisfies a MAP specification), Replicat does one of the following: If the actual schema of the unqualified object is the same as the source session schema, Replicat
sets the schema to the schema that is specified in the TARGET clause of the MAP statement. If the actual schema of the unqualified object is different from the source session schema, Replicat sets the schema to the source session schema.

- If the unqualified object is of UNMAPPED or OTHER scope, Replicat sets the schema to that of the source session schema.

- Map a source session schema to a different target session schema. Session schema mapping might be required for some DDL to succeed on the target, such as CREATE TABLE AS SELECT. This mapping is global and will override any other mappings that involve the same schema names. To map session schemas, use the DDLOPTIONS parameter with the MAPSESSIONSCHEMA option.

- Support DDL in an active-active bi-directional configuration. A new UPDATEMETADATA option of the DDLOPTIONS parameter notifies Replicat on the system where DDL originated that this DDL was propagated to the other system, and that Replicat should now update its object metadata cache to match the new metadata. This keeps Replicat’s metadata cache synchronized with the current metadata of the local database. For more information, see the chapter on Oracle DDL replication in the Oracle GoldenGate Windows and UNIX Administrator’s Guide.

- A new COMPLETEARCHIVELOGONLY option was added to TRANLOGOPTIONS to control when Extract starts processing an archived log: whether it starts immediately when the log becomes available or waits for the log to be written to disk first. This parameter applies when copying production (source) archive logs to a secondary database where they will serve as the data source. Some Oracle programs do not build the archive log from the first byte to the last byte in sequential order, but instead may copy the first 500 MB, then the last 500 MB, and finally the middle 1000 MB, for example. If Extract begins reading at the first byte, it will abend when it reaches the break in the byte sequencing. Waiting for the whole file to be written prevents this problem.

- A new COMPLETEARCHIVEDLOGTIMEOUT option was added to TRANLOGOPTIONS to control the number of seconds that Extract waits, when in COMPLETEARCHIVELOGONLY mode, to try again if it cannot validate that a redo log is being completely written to disk.

- Oracle GoldenGate now supports direct-load INSERTs. The redo logs must have compatibility 10g or later. A new SKIPDIRLOADINSERT option of TRANLOGOPTIONS causes Extract to skip all Oracle direct-load INSERTs.

- Support for embedded XML in UDTs was added. A new LOBBUFSIZE option was added to DBOPTIONS to control the memory buffer size to allocate for each embedded LOB attribute.

- BASICFILE LOB support was enhanced for Oracle versions 10g and later. All BASICFILE LOB modifications, in which a complete LOB image is modified by insert/update/merge statements, are captured from the redo log, whether stored in-row or out-of-row. For SECUREFILE LOBs, these operations are captured from the redo log only when the LOB is stored out-of-row. Partial LOB updates done with the dbms_lob package cause BASICFILE and SECUREFILE LOBs to be fetched. In addition, SECUREFILE LOBs that are compressed, encrypted, or deduplicated are
captured using the fetch mechanism. SECUREFILE LOBs stored in-row are always fetched.

- A new SUPPRESSTRIGGERS option was added to DBOPTIONS to prevent triggers from firing on target objects that are configured for replication with Oracle GoldenGate. You can use this parameter instead of manually disabling the triggers and constraints. For 10gR2, SUPPRESSTRIGGERS is only available in Oracle 10.2.0.5 and later patches to 10.2.0.5. It is not available in 11gR1. For 11gR2, it is available in 11.2.0.2 and beyond. The default is NOSUPPRESSTRIGGERS. To use [NO]SUPPRESSTRIGGERS, the Replicat user must be an Oracle Streams administrator, which can be granted by invoking the following grants:
  - For Oracle 10.2.0.5, use dbms_streams_auth.grant_admin_privilege.
  - For Oracle 11.2.0.2, use dbms_goldengate_auth.grant_admin_privilege.

- A new DEFERREFCONST option was added to DBOPTIONS to delay the checking and enforcement of referential integrity constraints on the target tables until the Replicat transaction commits. This avoids the need to disable those constraints on the target. You can use this parameter for an Oracle 9i database that is version 9.2.0.7 and later, and for an Oracle 10g database that is 10.1.0.1 or later.

- A new Bounded Recovery feature was added that guarantees an efficient recovery after Extract stops for any reason, planned or unplanned, no matter how many open (uncommitted) transactions there were at the time that Extract stopped, nor how old they were. Bounded Recovery sets an upper boundary for the maximum amount of time that it would take for Extract to recover to the point where it stopped and then resume normal processing. A new parameter named BR was added to support this feature.

- A new DBLOGREADER option was added to TRANLOGOPTIONS to enable Extract to use a newer API for capturing from an Oracle ASM instance. This feature is available as of Oracle 10.2.0.5. The API enables Extract to use a read buffer size of up to 4 MB in size and uses the database server to access the redo and archive logs, so that they do not have to reside in ASM. A larger buffer may improve the performance of Extract when redo rate is high. You can use the new DBLOGREADERBUFSIZE option of TRANLOGOPTIONS to specify a log read size. For more information, see the TRANLOGOPTIONS documentation.

**SQL Server**

- Oracle GoldenGate now supports SQL Server IDENTITY columns, VARDECIMAL, DATE, TIME, DATETIME2, and DATETIMEOFFSET.

- Oracle GoldenGate Replicat now uses OLE DB by default to connect to the target database, instead of ODBC. You can configure OLE DB to use the replication user by using the DBOPTIONS parameter with the USEREPPLICATIONUSER option, which provides additional options for bypassing IDENTITY updates and certain integrity constraints to support a bi-directional configuration. You can override the default connection to use ODBC with the new USEODBC option of the DBOPTIONS parameter.

- Oracle GoldenGate now supports tables that use data compression. This includes row compressed format in both ROW and PAGE mode.
Oracle GoldenGate now supports partitioned tables, but has limitations if there are different physical data layouts for individual table partitions (SQL Server 2005 and 2008 only). All table partitions are handled as if they had the same physical layout. This assumption is true in the vast majority of cases, but you should examine the definitions of the tables you want to replicate to detect any differences. If possible, you can rebuild the relevant partitions so that all match.

Extract now logs a warning when a DDL operation is made to a source object for which Extract is capturing data, so the problem can be corrected. A new NODDLCHANGEWARNING option was added to TRANLOGOPTIONS to force Extract not to log this warning.

Oracle GoldenGate now supports positioning by timestamp in the SQL Server transaction log. Limitations apply. For more information, see the ADD EXTRACT documentation.

Sybase

Oracle GoldenGate now supports the capture and replication of Sybase user defined types, UNICHAR, and UNIVARCHAR.

A new LOBSALWAYSNOINDEX option has been added to ADD TRANDATA for Sybase version 15 and later. The current LOBSALWAYS option will now, by default, supply the use_index parameter to the calls to sp_setreptable and sp_setrepcol. LOBSALWAYSNOINDEX (the new parameter) assumes the old behavior of LOBSALWAYS. The use_index parameter will only be supplied if the database is Sybase 15 or later. For versions earlier than 15, the behavior is unchanged.

The replication of LOB columns to Sybase non-LOB columns (CHAR, VARCHAR, LONG VARCHAR, BINARY, LONGBINARY, VARBINARY) are now supported by the DYNSQL parameter. Formerly, NODYNSQL was required to support that configuration.

Dynamic SQL is now supported for Sybase through the DYNSQL parameter.

Other enhancements

General

The terminology that is used to describe the data format of the Oracle GoldenGate trail has been changed from universal data format to canonical format. This change is reflected in the Oracle GoldenGate documentation.

New Parameters

This section highlights new parameters not discussed in previous sections of these notes.

A MAPEXCEPTION option was added to the MAP parameter to allow the mapping of processing anomalies (known as exceptions) to a file. When REPERROR is set to EXCEPTION, the errant operations are written to the file.

An OUTPUTFILEUMASK parameter for GLOBALS was added to specify an octal umask that will be used by GoldenGate processes to create trail files and discard files. This parameter is not valid for WIN32 systems.
• A TRANSACTIONTIMEOUT parameter was added to prevent an uncommitted Replicat target transaction from holding locks on the target database and consuming its resources unnecessarily. You can change the value of this parameter so that Replicat can work within existing application timeouts and other database requirements on the target.

• A SYSLOG parameter was added to control the types of messages that GoldenGate sends to the system logs on a Windows or UNIX system. You can include all GoldenGate messages, suppress all GoldenGate messages, filter to include information, warning, or error messages, or any combination of those types. You can use SYSLOG as a GLOBALS or Manager parameter, or both. When present in the GLOBALS parameter file, it controls message filtering for all of the GoldenGate processes on the system. When present in the Manager parameter file, it controls message filtering only for the Manager process. If used in both the GLOBALS and Manager parameter files, the Manager setting overrides the GLOBALS setting for the Manager process.

• A [NO]TRIMVARSPACES option was added to control whether or not trailing spaces in a source VARCHAR column are truncated when applied to a target CHAR or VARCHAR column. The default is NOTRIMVARSPACES. TRIMVARSPACES and NOTRIMVARSPACES can be used within individual MAP and TABLE statements and also at the root level of a parameter file for one or more groups of those statements.

• An UNLOCKEDTRAILFILES parameter was added for GLOBALS as a workaround for problems with trail files that remain locked by Collector if there is a network outage that affects the target system. As of GoldenGate version 10.4, Collector began locking a trail file when writing data to it, to prevent corruption from other processes that may attempt to write to the same trail. UNLOCKEDTRAILFILES prevents Collector from locking the trail files. A new -UL parameter for Collector has the same functionality.

• A VAMCOMPATIBILITY option of the TRANLOGOPTIONS parameter for c-tree, MySQL, SQL M/X, SQL Server, Sybase, and Teradata was added to allow different metadata structures to be passed across the Vendor Access Module (VAM), depending on the needs of the individual VAM implementation: A value of 1 specifies that the original VAM API metadata structure is being used. A value of 2 specifies the use of an enhanced VAM API metadata structure, based on the original but with additional fields. For more information, see the TRANLOGOPTIONS documentation.

New Commands
This section highlights new commands not discussed in previous sections of these notes.

• A new ALLOWNESTED command enables the use of nested OBEY files. A nested OBEY file is one that contains another OBEY file. The maximum number of nested levels is 16.
Deprecated/Discontinued Parameters or Features in 11.1.1.1

The following items have been deprecated in the OGG 11.1.1.1 release. Any parameter that has been deprecated or discontinued will cause Extract or Replicat to abend with an appropriate error message.

**ALTER TABLE MOVE TABLESPACE**

Oracle GoldenGate no longer supports this command in its DDL replication feature.

**[NO]CHECKSEQUENCEVALUES**

This parameter is now deprecated.

**DDLOPTIONS NOEXPLICITSCHEMAMAPPING**

The NOEXPLICITSCHEMAMAPPING option of DDLOPTIONS has been deprecated. This option prevented a schema name from being added to the target master and/or derived object when the source DDL had no schema name for them. It was only implemented temporarily.

**TRANLOGOPTIONS UNPRIVILEGED**

(DB2 on z/OS) This Extract parameter forced the use of the non-APF-authorized log reading API. That API does not support data sharing or compressed tables, which are supported by Oracle GoldenGate.

**THREADOPTIONS MAXCOMMITPROPAGATIONDELAY (Oracle 11.2 and later only)**

THREADOPTIONS MAXCOMMITPROPAGATIONDELAY is deprecated for Oracle versions 11.2 and later, because the corresponding Oracle MAX_COMMIT_PROPAGATION_DELAY parameter was made obsolete in Oracle 11.2. However, THREADOPTIONS MAXCOMMITPROPAGATIONDELAY remains valid for earlier Oracle versions.

**stdout**

(DB2 on z/OS) When a process opens a report file, there no longer is redirection of stdout. Anything that is written to stdout will probably be lost. If any expected output seems to be missing, this could be the cause. See Bug #9820544.

Deprecated/Discontinued Parameters or Features in 11.1.1.0.0

The following items have been deprecated in the OGG 11.1.1 release. Any parameter that has been deprecated or discontinued will cause Extract or Replicat to abend with an appropriate error message.
SQL Server 2000 and 2005
Effective September 30, 2012, Oracle GoldenGate 11.1.1.x and 10.x will no longer support Microsoft SQL Server 2000 and 2005. Customers will need to upgrade to GoldenGate 11.1.1.x and Microsoft SQL Server 2008 or later versions.

VARWIDTHNCHAR
VARWIDTHNCHAR parameter has been deprecated. The product will now automatically detect if this parameter is necessary and internally write all NCHAR and NVARCHAR data to the trail with the 2 byte length information.

TRANLOGOPTIONS CONVERTUCS2CLOB
It is no longer necessary to set this parameter in any Oracle GoldenGate configurations.

USETHREADS / NOUSETHREADS
This parameter has been deprecated and should not be used.

DDLGEN
DDLGEN utility will be discontinued in Oracle GoldenGate release 11.1 for open system environments. This includes all databases on Windows, Unix and IBM Mainframe. It will still be included and supported in the Oracle GoldenGate for HP Nonstop platform, and can be used to convert DDL from those environments to open system databases.

Documentation Addendum
This section serves as an addendum to the Oracle GoldenGate for Windows and UNIX Administration Guide and Reference Guide. It includes items that have not been covered in the manuals due to changes made to the product or the documentation after the documentation has been published.

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Documentation Errata

This section contains corrections to errors in the documentation that were found after this version of the documentation was published.

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Installation and Upgrades

The installation file downloaded from Oracle is not compressed using gzip, instead it is a standard .zip file. To uncompress the download, please use the following methods:

- **Windows** – Please use winzip or other method that can support files with the .zip extension.
- **Unix / Linux** – Please use the ‘unzip’ command utility to uncompress the downloaded file.
- **Mainframe** – Please use the ‘unzip’ command utility to uncompress the downloaded file.

If you do not have any of these utilities on the server, you can download them from Oracle’s website at [http://updates.oracle.com/unzips/unzips.html](http://updates.oracle.com/unzips/unzips.html)

For upgrade instructions, see the separate *Oracle GoldenGate for Windows and UNIX Upgrade Instructions*.

Corrected Problems

For questions on specific bugs or ticket numbers, please consult Oracle Customer Support. SR is the Oracle Support SR number, and BugDB is the bug identification number.

**Version 11.1.1.1.1 – 30 August 2011**

Bug – 12366456 – Fixed an issue that was causing Extract to hang when an instance in RAC is shutdown.

Bug – 12693824 – Fixed an issue that was causing Extract to hang when an instance in RAC is shutdown.

Bug – 12680371 – Fixed a problem in Extract when a sequence was more than 8 digits.

Bug – 12610027 - MySQL replicat incorrectly assumes that UTF8 columns are NCHAR.

Bug – 11799665 – Fixed an issue that was causing abends due to SQLEXEC operations where the OUT value was larger in size (storage bytes) than the IN parameter.

Bug – 12387049 – Fixed a situation where Replicat may not use bind variables on some of its catalog queries.

Bug - 9430579 – Fixed a UDT/VARRAY issue that was causing ORA-22812 errors.

Bug - 12589511 – Oracle – Fixed an issue that was causing Extract to abend when it encountered a rollback done on the symbol table of a compressed block.

Bug – 12547936 – Fixed a problem that was causing Extract to abend with “FAILED TO RETRIEVEOVERFLOW SEGMENT DATA” errors when there was a combination of varchar columns and pctthreshold for IOTs with overflow which might lead to this issue when a QMI insert of multiple rows is being performed.
Bug - 12340415 – Fixed a regression issue with recursive DDL operations on chained rows which was causing Extract to fail with failed to retrieve all chained rows errors.

Bug – 12322319 – Fixed a problem in Extract that was causing it to complain about a compressed table when the table was clustered.

Bug - 12693183 – Fixed an issue that could cause Extract to checkpoint in between two records in the redo logs.

Bug – 11895174 – Rollback of LMN records were not being handled correctly in explicit rollbacks during recovery.

Bug – 12629456 – Fixed a problem that was causing Extract to abend with ‘inconsistent pdata’ errors.

Bug – 12565779 – Fixed an issue that was causing SQLEXEC to ignore BEFORE images if the operation type was not a primary key update.

Bug - 10395913 – Absolute values of hours, minutes and seconds are now using when formatting date values. This corrects an issue using @DATE functions on DATE datatypes.

Bug – 12341751 – Fixed several issues in ASCII to EBCDIC conversion.

Bug – 12561702 – Fixed an issue that was causing Replicat to abend when there was a long MAPEXCEPTIONS clause.

Bug - 12589511 – Oracle – Fixed an issue that was causing Extract to abend when it encountered a rollback done on the symbol table of a compressed block.

Bug - 12839999 – Fixed an issue that was causing Extract to abend when retrieving chained rows.

Bug – 12535051 – Fixed an extract abend issue that was causing LSN’s to get shifted by 2 bytes during restart.

Bug - 11931575 – DB2 z/OS – Fixed a FETCHCOLS issue on decimal data type key.

Bug - 12432903 – DB2 z/OS – Fixed an issue in handling ODBC error codes that was causing fetching to fail.

Bug – 10636870 – DB2 LUW – Changed the behavior of failed stored procedures to TRANSABORT instead of RAISED ERROR when a procedure call fails due to a deadlock error so that data integrity can be maintained.

Bug - 12712158 – Fixed a crash in GGSCI when using Director

Bug – 12544071 – Fixed a problem in Extract in Oracle that was causing some DML operations that were done via DDL operations (like internal creation of partitions when new data comes in) to be skipped.

Bug - 11677952 – Fixed a trail file sequencing issue when reaching the maximum number of trail files.

Bug – 12365499 – Fixed a problem that was causing MySQL Extract to abend when reading the
binary log.

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Initial GA release of 11.1.1.0
Getting help with My Oracle Support

Use My Oracle Support to find knowledge solutions, workarounds, and other information that is reported by customers, partners, and Oracle employees. My Oracle Support also enables you to open a Service Request. If a patch is required to resolve a service request, you will receive instructions on how to download it from My Oracle Support.

*Note:* If you purchased Oracle GoldenGate and support through a distributor, contact your distributor instead of attempting to create a service request through My Oracle Support.

To view the Oracle GoldenGate Knowledge Base

1. Go to [http://support.oracle.com](http://support.oracle.com).
2. Select your language and then log in with your email and Oracle password.
3. Click the Knowledge tab.

You can:

- Browse the Oracle GoldenGate knowledge base by typing “Oracle GoldenGate” in Browse Any Product or by selecting Middleware>Business Intelligence>GoldenGate under Browse Knowledge.
- Type a search word or phrase in Search Knowledge Base to search for a specific topic. If needed, use the Product Category option under Refine Search to narrow the scope of the results to just Oracle GoldenGate tickets (Middleware>Business Intelligence>GoldenGate). Use other options as needed.
- Refine Search contracts and expands with every search refinement that you make, and then refreshes the refinement options and results each time for further action, if needed.

If you need help with My Oracle Support, click Help at the top of the application window.

To open a service request

1. Click the Service Requests tab.
2. Click Create SR.
3. Complete the form, referring to the Help at the top of the application window if necessary.