Oracle® Retail Extract, Transform, and Load

Release Notes

Release 13.2

January 2011

This document highlights the major changes for Release 13.2 of Oracle Retail Extract, Transform, and Load.

Product Overview

Oracle Retail Extract, Transform, and Load (RETL) is a high-performance, scalable, platform-independent, parallel processing data movement tool. RETL addresses several primary needs:

- Database-independent applications
- Platform-independent applications
- Developing applications more quickly than possible with conventional coding methods (such as custom-crafted C or C++ code)
- High-performance data processing

Hardware and Software Requirements

See the *Oracle Retail Extract, Transform, and Load Programmer's Guide* for information about the following:

- Hardware and software requirements
- Oracle Retail application software compatibility

Product Certification

See the *Oracle Retail Extract, Transform, and Load Programmer's Guide* for compatibility information about the versions of RETL that are compatible with Oracle Retail applications.

You should read the *Oracle Retail Extract, Transform, and Load Programmer's Guide* before you perform any installation or development work. In particular, read and understand Chapter 2, "Installation and System Configuration." Also note the "Known Issues" section of these Release Notes.

The build number for RETL 13.2 is **1812**. After a successful installation of RETL Release 13.2, running RETL with the -v command line option should produce the following output:

```
$ retl -v
retl 13.2.0 build 1812
```

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If you have installed prior releases or subsequent patch releases, you are strongly encouraged to upgrade to the RETL 13.2 release after you have performed a full regression test. No future releases of RETL 10.x, 11.x and RETL 12.x versions are planned.

Technical Enhancements

The following technical enhancements are included in Oracle Retail Extract, Transform, and Load Release 13.2.

Credential Storage

In RETL 13.2, release database user names and passwords are stored in an encrypted format inside a wallet file (cwallet.sso) using the CSF API. The wallet file must not be deleted, because it contains credentials required for RETL functionality.

To set up database credentials during installation, use the setup-security-credential.sh utility available in the rfx-13.2.0/bin directory.

To support backward compatibility, the credential-convert-utility.sh utility is available in the rfx-13.2.0/bin directory.

Oracle Exadata Database Machine X2 Support

Oracle Exadata Database Machine X2 is a combination of smart software and industry-standard hardware. It provides database-aware storage services, such as the ability to offload database processing from the database server to storage, transparently, without affecting SQL processing and your database applications.

RETL Release 13.2 is supported on Oracle Exadata Database Machine X2 through the binary compatibility with Oracle Linux Release 5 Update 3 and Oracle Database 11g Release 2 Enterprise Edition on Oracle Real Application Clusters (RAC) 11g.

Oracle WebLogic Server 11g (Java 6)

For Release 13.2, Oracle Retail Extract, Transform, and Load and the Oracle Retail merchandising operations management product suite use Oracle WebLogic Server 11g, which replaces Oracle Application Server used in previous releases. Oracle WebLogic Server 11g is the industry's most comprehensive, standards-based platform for developing, deploying, and integrating enterprise applications. It provides the foundation for an application grid, an architecture that enables enterprises to pool and share resources with dynamic adjustment across multiple applications, to lower operational costs.

Package Contents

The following is a brief description of the contents of rfx.13.2.0.tar.

bin/

This includes executables required for running RETL.

File	Description
credential-convert-utility.sh	Utility to convert all pre-13.2 RETL flow scripts
gsort.SunOS	gsort for SunOS
gsort.HP-UX	gsort for HP-UX
gsort.AIX	gsort for AIX
retl	RETL executable
rfx	Symbolic link to RETL provided for backward compatibility
verify_retl	RETL verification tool
README.verify_retl	README for verify_retl
install_graphing.ksh	Tool to install the GraphViz graphing package
setup-security-credential.sh	Tool to set up database credentials
test_funcs.ksh	Tool used by verify_retl to run test flows

Note: There is only one binary (retl/rfx) required for all database and platform combinations.

lib/

These are the .JAR files that are needed to run RETL.

File	Description
retl.jar	RETL runtime library
log4j-1.2.9.jar	log4j Logging Facility
ojdbc6.jar	Oracle JDBC driver
xercesImpl.jar	Xerces XML parser
xml-apis.jar	XML APIs
xmlParserAPIs.jar	XML APIs
tools.jar	Future enhancements
activation.jar	Future enhancements

etc/

This directory contains RETL configuration files.

File	Description
rfx.conf	Default RETL configuration file
logger.conf	Default logger configuration file
Security	Placeholder to store the wallet file

samples/

This directory contains the samples packaged with RETL. See the README in the samples directory for more information about the samples packaged with RETL. These are the samples that are run after the installation by verify_retl.

graphing/

This directory contains the Graphviz application suite for graphical visualization of RETL flows. See the "Producing Graphical Output of Flows with RETL" section of the *Oracle Retail Extract, Transform, and Load Programmer's Guide*.

Known Issues

The following are known issues in RETL 13.2.

General Issues

- RETL does not handle arbitrary precision math.
- The export operator defaults to use pipe-delimited (|) fields if a schemafile property is not specified. This issue can cause problems if the incoming data contains the '|'character. The recommendation is to use an export schemafile if it is possible for the data to contain a '|' character.
- JOIN operators can use a large amount of memory when the distribution of key-equivalent records is low and the number of records is high. It is important to test join operations with appropriate data volumes on each input side, to verify the maximum amount of memory your application may require.

Differences Between the 10.x and Later Versions of RETL

- Later versions of RETL are stricter on the enforcement of valid XML flow interfaces, input schemas, and data fields than the 10.x versions. In some instances, the later versions find data or flow errors that may have previously been unreported. The result may be more discarded or rejected records and error messages than previously identified.
- The output field order between 10.x and later versions of RETL may be different for those flows that do not specify a schemafile property in the EXPORT operator.
- RETL versions later than 10.x require additional properties for the ORAREAD and ORAWRITE operators. The properties hostname and port are now required properties and can be specified in rfx.conf for convenience. See the *Oracle Retail*

Extract, Transform, and Load Programmer's Guide for more information on syntax and usage.

- Later versions of RETL may require more physical memory for certain flows than RETL 10 releases.

Backward Compatibility Issues with 10.x and 11.x Versions

Oracle does not recommend upgrading to RETL 13 unless the product has been certified on RETL 13.

Known Defects in RETL 13.2

- Defect #610—Tests for table existence can return false matches if the user does not have sufficient privileges on a table.
- Defect #655—A pipe delimiter is used when paging datasets to disk. This defect causes a problem re-importing, if there are pipe characters in the data.
- Defect #737—SORT does not work with newlines in data.
- Defect #752—Invalid INPUT element results in StackOverflowError in flow parsing.
- Defect #809—EXPORT file schema can be broken when the input data is cached for numeric values and the export field length is less than the imported field length.
- Defect #923—The parallel direct datafile is ignored when partitioning.
- Defect #941—Loops in INPUTs and OUTPUTs cause infinite loop in schema resolution.
- Defect #1005—The removedup property of SORT does not work correctly when numsort is greater than one.
- Defect #1163—The statement property of the PREPAREDSTATEMENT operator must use at least one field from the input schema.
- Defect #1170—The ifnotfound property in DBLOOKUP does not work if set to 'reject'.

  If 'reject' is specified, a second output from DBLOOKUP is required for the rejected records. However, RETL throws an exception if more than one OUTPUT is specified. As a workaround, use 'continue' followed by a FILTER to check for the joined fields that get set to null when a matching record is not found. (DBLOOKUP with 'continue' functions like a left outer join.)
- Defect #1171—Multibyte character constants in SQL query get incorrect length, causing problems in SORT and EXPORT. See Defect #5201519 in BugDB.

Related Documentation

For more information, see the following documents in the Oracle Retail Extract, Transform, and Load Release 13.2 documentation set:

- *Oracle Retail Service Layer Programmer's Guide*