

Oracle® Retail Extract, Transform, and Load

Release Notes

Release 13.0

April 2008

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

There have been no changes to RETL since the previous release.

Product Certification

RETL Release 13.0 has been certified with RMS Release 13.0, RDW Release 13.0, and RPM Release 13.0. See the "Certification" section that follows for a list of Oracle Retail products and the version of RETL that is certified with each product version.

Oracle Retail strongly recommends that you read the RETL Release 13.0 Programmer's Guide in its entirety before you perform any installation or development work. In particular, read and understand Chapter 2, "Installation and System Configuration." In addition, pay special attention to the "Known Issues" section of these Release Notes.

The build number for RETL is 870. After a successful installation of RETL Release 13.0, running RETL with the -v command line option should produce the following output:

```
$ retl -v
retl 13.0.0 build 870
```

Clients that took delivery of prior releases or subsequent patch releases are strongly encouraged to upgrade to the RETL Release 13.0 release, once a full regression test has been performed. No future releases of RETL 10.x, RETL 11.x, and RETL 12.x are planned.

Compatibility Matrix

The following table shows the operating system/database combination that is supported and on which RETL has been certified to work properly.

Operating System	Version	Architecture	Database	Version
Oracle Enterprise Linux	4	32/64	Oracle	10.2.0.3

Note: RETL requires only one binary and installation for the database/platform combination listed above.

Certification

The following table lists Oracle Retail products that have been certified to work with specific RETL versions.

Product	RETL Version
RMS 13.0	RETL 13.0
RDW 13.0	RETL 13.0
RPM 13.0	RETL 13.0
ReIM 13.0	RETL 13.0
RPAS 13.0 and associated templates (such as RDF)	RETL 13.0
Oracle Retail Allocation 13.0	RETL 13.0

Installation

For the RETL 13.0 version, Java 2 Platform, Standard edition, v 1.5 (J2SE 1.5) is required. This version can be downloaded from the following link:

http://java.sun.com/javase/downloads/index_jdk5.jsp

See the *Oracle Retail Extract, Transform, and Load Programmer's Guide* for installation and configuration instructions.

Package Contents

Note: Some files in the package below are not supported in this release. Please see the *RETL Programmer's Guide* for a complete list of supported technical specifications.

The following is a brief description of the contents of retl.13.0.0.tar.gz.

bin/

This includes executables required for running RETL.

File	Description
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 backwards compatibility
verify_ret1	RETL verification tool
README.verify_ret1	README for verify_ret1
install_graphing.ksh	Installs the GraphViz graphing package
install_jre.ksh	Installs the Java Runtime Environment
test_funcs.ksh	Used by verify_ret1 to run test flows
setup	Used to configure environment variables and verify RETL installation
linux.install	Symbolic link to gsort to Linux has been provided

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

lib/

These are the jar files that are needed in order to run RETL.

File	Description
retl.jar	RETL runtime library
log4j-1.2.9.jar	log4j Logging Facility
ojdbc14.jar	Oracle JDBC driver
xercesImpl.jar	Xerces XML parser
xml-apis.jar	XML APIs
xmlParserAPIs.jar	XML APIs
tools.jar	Future enhancements
activation.jarh	Future enhancements

etc/

This directory contains RETL configuration files.

File	Description
rfx.conf	Default RETL configuration file
logger.conf	Default logger configuration 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 install 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 *RETL Programmer's Guide*.

JRE/

This directory contains the Java Runtime Environment (JRE) required by RETL.

Known Issues

The following issues occur in this release.

General Issues

- RETL does not handle arbitrary precision math.
- The export operator defaults to use pipe-delimited (`|`) fields if a `schemafilename` property is not specified. This issue can cause problems if the incoming data contains the `'|'` character. The recommendation is to use an export `schemafilename` 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 `schemafilename` 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 Retail does not recommend upgrading to RETL 13 unless the product has been certified on RETL 13.

Other Defects in RETL 13.0

- 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.

Copyright © 2008, Oracle. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software--Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

Value-Added Reseller (VAR) Language

(i) the software component known as **ACUMATE** developed and licensed by Lucent Technologies Inc. of Murray Hill, New Jersey, to Oracle and imbedded in the Oracle Retail Predictive Application Server - Enterprise Engine, Oracle Retail Category Management, Oracle Retail Item Planning, Oracle Retail Merchandise Financial Planning, Oracle Retail Advanced Inventory Planning and Oracle Retail Demand Forecasting applications.

(ii) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.

(iii) the **SeeBeyond** component developed and licensed by Sun Microsystems, Inc. (Sun) of Santa Clara, California, to Oracle and imbedded in the Oracle Retail Integration Bus application.

(iv) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Store Inventory Management.

(v) the software component known as **Crystal Enterprise Professional and/or Crystal Reports Professional** licensed by Business Objects Software Limited ("Business Objects") and imbedded in Oracle Retail Store Inventory Management.

(vi) the software component known as **Access Via™** licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.

(vii) the software component known as **Adobe Flex™** licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

(viii) the software component known as **Style Report™** developed and licensed by InetSoft Technology Corp. of Piscataway, New Jersey, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(ix) the software component known as **WebLogic™** developed and licensed by BEA Systems, Inc. of San Jose, California, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(x) the software component known as **DataBeacon™** developed and licensed by Cognos Incorporated of Ottawa, Ontario, Canada, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.