

Retek[®] Data Warehouse[™]

10.2.2

RETL 11 Upgrade Manual



The software described in this documentation is furnished under a license agreement, is the confidential information of Retek Inc., and may be used only in accordance with the terms of the agreement.

No part of this documentation may be reproduced or transmitted in any form or by any means without the express written permission of Retek Inc., Retek on the Mall, 950 Nicollet Mall, Minneapolis, MN 55403, and the copyright notice may not be removed without the consent of Retek Inc.

Information in this documentation is subject to change without notice.

Retek provides product documentation in a read-only-format to ensure content integrity. Retek Customer Support cannot support documentation that has been changed without Retek authorization.

Corporate Headquarters:

Retek Inc.
Retek on the Mall
950 Nicollet Mall
Minneapolis, MN 55403

888.61.RETEK (toll free US)
+1 612 587 5000

European Headquarters:

Retek
110 Wigmore Street
London
W1U 3RW
United Kingdom

Switchboard:
+44 (0)20 7563 4600

Sales Enquiries:
+44 (0)20 7563 46 46
Fax: +44 (0)20 7563 46 10

Retek® Data Warehouse™ is a trademark of Retek Inc.

Retek and the Retek logo are registered trademarks of Retek Inc.

This unpublished work is protected by confidentiality agreement, and by trade secret, copyright, and other laws. In the event of publication, the following notice shall apply:

©2003 Retek Inc. All rights reserved.

All other product names mentioned are trademarks or registered trademarks of their respective owners and should be treated as such.

Printed in the United States of America.



Customer Support

Customer Support hours:

Customer Support is available 7x24x365 via e-mail, phone, and Web access.

Depending on the Support option chosen by a particular client (Standard, Plus, or Premium), the times that certain services are delivered may be restricted. Severity 1 (Critical) issues are addressed on a 7x24 basis and receive continuous attention until resolved, for all clients on active maintenance.

Contact Method	Contact Information
-----------------------	----------------------------

Internet (ROCS)	www.retek.com/support Retek's secure client Web site to update and view issues
------------------------	--

E-mail	support@retек.com
---------------	-------------------

Phone	US & Canada: 1-800-61-RETEK (1-800-617-3835) World: +1 612-587-5800 EMEA: 011 44 1223 703 444 Asia Pacific: 61 425 792 927
--------------	---

Mail	Retek Customer Support Retek on the Mall 950 Nicollet Mall Minneapolis, MN 55403
-------------	---

When contacting Customer Support, please provide:

- Product version and program/module name.
- Functional and technical description of the problem (include business impact).
- Detailed step by step instructions to recreate.
- Exact error message received.
- Screen shots of each step you take.

Contents

RETL 11 Upgrade	1
New RDW Customers	1
Existing RDW Customers	1
XML Syntax Changes required by RETL 11	2
Filter Operator	2
SQL Query Where Clause	3
Operator Begin and End Tags	3
Missing Tags	4
Binop Operator	4
Fieldmod Operator	5
Incorrect number of fields	5
Code Standardizations	6
Modified Modules	7

RETL 11 Upgrade

A number of XML syntax changes are required in order to use RDW code with RETL 11 (Defect 353024). Customers at the RDW 10.2.2 patch level can use either RETL 10.3.3 or 11. However we would highly recommend RETL 11 as it contains the latest fixes and functionality.

New RDW Customers

New clients using only base code can simply install the RDW 10.2 base product and patches and use RETL 11.

- 1 Install RDW 10.2.
- 2 Install the RDW 10.2.1 and 10.2.2 patches.
- 3 Install and use RETL 11.

Existing RDW Customers

Existing clients using all base modules can simply install the 10.2.1 and 10.2.2 patches and RETL 11. However clients with customizations will need to test and most likely modify their code for use with RETL 11.

- 1 In a test environment install the 10.2.1 and 10.2.2 patch code for modules that have not been customized.
- 2 For modules that have been customized apply customizations to the patch code or apply patch changes to customized modules.
- 3 Install RETL 11 in the test environment.
- 4 Run all modules (base and custom) using RETL 11. Customized modules may fail.
- 5 Modify the XML flows in failed modules using the syntax changes described below.
- 6 Re-run the modified modules and verify that data is correctly processed.

XML Syntax Changes required by RETL 11

Filter Operator

Standard XML does not allow ‘>’ or ‘<’ as part of the property value. When using RETL 11, an error will occur if this syntax exists in the flow. When calling RETL’s filter operator replace the ‘>’ and ‘<’ with the following values. Also the “is null” syntax has changed.

- GT instead of ‘>’
- LT instead of ‘<’
- LE instead of ‘<=’
- GE instead of ‘>=’
- EQ instead of “=”
- NE instead of “<>” or “!=”
- IS_NULL instead of “is null”

Old Code (emptyex.ksh):

```
<!-- Filter out all Cashiers -->
<OPERATOR type="filter">
  <PROPERTY name="filter"
    value=" CASHIER_IND = 'Y' and SALESPERSON_IND = 'N' " />
  <INPUT name="cshr.v"/>
  <OUTPUT name="filtered_cshr.v"/>
</OPERATOR>
```

New Code (emptyex.ksh):

```
<!-- Filter out all Cashiers -->
<OPERATOR type="filter">
  <PROPERTY name="filter"
    value=" CASHIER_IND EQ 'Y' and SALESPERSON_IND EQ 'N' " />
  <INPUT name="cshr.v"/>
  <OUTPUT name="filtered_cshr.v"/>
</OPERATOR>
```


SQL Query Where Clause

When ‘<’ or ‘>’ is used in a query’s where clause in a database operator, the CDATA tag has to be used around the query. Below is an example of one code change in cmptrprcilddm.ksh.

Old Code (cmptrprcilddm.ksh):

```
<FLOW name = "${PROGRAM_NAME}1.flw">
  ${DBREAD}
  <PROPERTY name = "query" value = "SELECT t.*
                                FROM ${BA_OWNER}.${TEMP_TABLE} t,
                                ${DM_OWNER}.cmptr_pricing_il_cur_dm s
                                WHERE t.item_key = s.item_key
                                AND t.loc_key = s.loc_key
                                AND t.cmptr_loc_key = s.cmptr_loc_key
                                AND t.day_idnt < s.day_idnt"/>
```

New Code (cmptrprcilddm.ksh):

```
<FLOW name = "${PROGRAM_NAME}1.flw">
  ${DBREAD}
  <PROPERTY name = "query" >
    <![CDATA[
                                SELECT t.*
                                FROM ${BA_OWNER}.${TEMP_TABLE} t,
                                ${DM_OWNER}.cmptr_pricing_il_cur_dm s
                                WHERE t.item_key = s.item_key
                                AND t.loc_key = s.loc_key
                                AND t.cmptr_loc_key = s.cmptr_loc_key
                                AND t.day_idnt < s.day_idnt
                                ]]>
  </PROPERTY>
  $DBWRITE_TEMP2
  <PROPERTY name = "table" value = "${SRC_TEMP}"/>
</OPERATOR>
</OPERATOR>

</FLOW>
```

Operator Begin and End Tags

RETL 11 errors will occur if the operator begin and end tags do not match. Various modules were modified to add “/” and “>” where they were missing. In other cases a whole tag needed to be added.

Old Code (ivrildex.ksh):

```
<PROPERTY name="convertspec">
  <![CDATA[
    <CONVERTSPECS>
      <CONVERT destfield="LOC_IDNT"
        sourcefield="LOC_IDNT"
        newtype="string">
      <CONVERTFUNCTION name="string_from_int64"/>
    </CONVERT>
  ]]>
```

New Code (ivrildex.ksh):

```

<PROPERTY name="convertspec">
  <![CDATA[
    <CONVERTSPECS>
      <CONVERT destfield="LOC_IDNT"
        sourcefield="LOC_IDNT"
        newtype="string">
        <CONVERTFUNCTION name="string_from_int64"/>
      </CONVERT>
    </CONVERTSPECS>
  ]]>
</PROPERTY>

```

Missing Tags

Errors will occur if the flow tags are missing.

Old Code (time_static_load.ksh):

```
rfx -f - << EOF
```

```
{LOAD_TABLES}
```

```
EOF
```

New Code (time_static_load.ksh):

```
rfx -f - << EOF
```

```
<FLOW name="time_static_load.flw">
```

```
{LOAD_TABLES}
```

```
</FLOW>
```

```
EOF
```

Binop Operator

The nullable attribute of the binop operator should be removed.

Old Code (scrqtdex.ksh):

```

<OPERATOR type="binop">
  <INPUT name="innerjoin_ordloc_pack.v"/>
  <PROPERTY name="left" value="PACK_QTY"/>
  <PROPERTY name="operator" value="*"/>
  <PROPERTY name="right" value="F_ORDERED_QTY"/>
  <PROPERTY name="dest" value="F_ORDERED_QTY_TEMP"/>
  <PROPERTY name="desttype" value="dfloat" nullable="true"/>

```

New Code (scrqtdex.ksh):

```

<OPERATOR type="binop">
  <INPUT name="innerjoin_ordloc_pack.v"/>
  <PROPERTY name="left" value="PACK_QTY"/>
  <PROPERTY name="operator" value="*"/>
  <PROPERTY name="right" value="F_ORDERED_QTY"/>
  <PROPERTY name="dest" value="F_ORDERED_QTY_TEMP"/>
  <PROPERTY name="desttype" value="dfloat"/>

```

Fieldmod Operator

There should be one property tag for each column that is being dropped rather than listing several columns in one tag. Also the name attribute can be removed as a code standardization.

Old Code (pre_dwi_extract.ksh):

```
<OPERATOR type="fieldmod" name="fieldmod1,0">
  <PROPERTY name="keep" value="CONSOLIDATION_CODE"/>
  <INPUT name="c_sys_opt1.v"/>
  <OUTPUT name="o_sys_opt1.v"/>
</OPERATOR>
```

New Code (pre_dwi_extract.ksh):

```
<OPERATOR type="fieldmod" >
  <PROPERTY name="keep" value="CONSOLIDATION_CODE"/>
  <INPUT name="c_sys_opt1.v"/>
  <OUTPUT name="o_sys_opt1.v"/>
</OPERATOR>
```

Old Code (prdudaex.ksh):

```
<OPERATOR type="fieldmod">
  <INPUT name="innerjoin_item_uda.v"/>
  <PROPERTY name="drop"
value="ITEM_UDA_TYPE_CDE,ITEM_UDA_HEAD_DESC,ITEM_UDA_DTL_DESC"/>
  <OUTPUT name="fieldmod_uda2.v"/>
</OPERATOR>
```

New Code (prdudaex.ksh):

```
<OPERATOR type="fieldmod">
  <INPUT name="innerjoin_item_uda.v"/>
  <PROPERTY name="drop" value="ITEM_UDA_TYPE_CDE"/>
  <PROPERTY name="drop" value="ITEM_UDA_HEAD_DESC"/>
  <PROPERTY name="drop" value="ITEM_UDA_DTL_DESC"/>
  <OUTPUT name="fieldmod_uda2.v"/>
</OPERATOR>
```

Incorrect number of fields

When the number of fields being imported is different from what is in the import schema file, an error will occur. In the below example, cr_time_454.c creates a text file that is read in by time_load.ksh. Because there is an extra field, time_load.ksh fails with the following error:

```
time_load 12:19:00: ERROR: Loading time flat file rdw10dm.time_yr_dm failed
Exception in [import:1] : 4
```

Old Code (cr_time_454.c):

```
fprintf (lf_yr_file, "%s;%s;%s;%s;%d\n",
  la_yr_file[li_cnt].s_yr_idnt,
  la_yr_file[li_cnt].s_yr_desc,
  la_yr_file[li_cnt].s_yr_start_dt,
  la_yr_file[li_cnt].s_yr_end_dt,
  la_yr_file[li_cnt].i_yr);
```

New Code (cr_time_454.c):

```
fprintf (lf_yr_file, "%s;%s;%s;%s\n",
        la_yr_file[li_cnt].s_yr_idnt,
        la_yr_file[li_cnt].s_yr_desc,
        la_yr_file[li_cnt].s_yr_start_dt,
        la_yr_file[li_cnt].s_yr_end_dt);
```

Code Standardizations

Export Operator – In various modules the mode property tag was removed from the export operator. The name attribute of the export operator tag was also removed.

Funnel Operator – In various modules the name attribute of the funnel operator tag was removed.

Fact_agg.ksh - An additional log message was added to fact_agg.ksh.

Slildmex.ksh - The thread number was appended to the reject file name and variable exports were moved to a more standard placement in the module. An additional log message was also added.

Modified Modules

The following is a list of base RDW 10.2 modules that required code changes in order to utilize RETL 11. Clients are encouraged to run a difference report between the previous, base version of the module and the version changed for the RETL 11 upgrade.

- chk_status.ksh
- cmptrtex.ksh
- cmptrlmex.ksh
- cmptrlocex.ksh
- cmptrprcilddm.ksh
- cmptrprcildex.ksh
- convert_currency.ksh
- crncycdex.ksh
- cr_time_13.c
- cr_time_454.c
- cstisldex.ksh
- custacctdm.ksh
- custclupddm.ksh
- custdemogdm.ksh
- custdm.ksh
- default_load.ksh
- dim_lkup.ksh
- dim_low.ksh
- dim_mtx.ksh
- dim_top.ksh
- do_update.ksh
- emptyex.ksh
- exchngratex.ksh
- fact_agg.ksh
- fact_incr_upd.ksh
- fact_mtx.ksh
- factclosedm.ksh
- factopendm.ksh
- get_key.ksh
- invildex.ksh
- itmlkupdm.ksh
- ivaildex.ksh
- ivrcpildex.ksh
- prddivex.ksh
- prddtypdm.ksh
- prddtypex.ksh
- prdgrpex.ksh
- prdislex.ksh
- prditmclupddm.ksh
- prditmdm.ksh
- prditmex.ksh
- prditmlmx.ksh
- prditmltmex.ksh
- prditmsmdm.ksh
- prditmsmex.ksh
- prditmuddm.ksh
- prditmumdm.ksh
- prdlvldm.ksh
- prdpimdm.ksh
- prdpimex.ksh
- prdsbcex.ksh
- prdudaex.ksh
- pre_dwi_extract.ksh
- pre_dwi_temp.ksh
- prmevtex.ksh
- prmhdxex.ksh
- prmschex.ksh
- regngrpex.ksh
- regnmtxex.ksh
- rgstrdm.ksh
- rsnex.ksh
- savidex.ksh
- scmialdex.ksh
- scmioldex.ksh
- screlddm.ksh

- ivrildex.ksh
- ivtildex.ksh
- ivuildex.ksh
- lptldqdm.ksh
- lptotcdex.ksh
- lptotldex.ksh
- maralmdm.ksh
- mdepdm.ksh
- mitmdm.ksh
- mslsdlwdm.ksh
- mslsilwdm.ksh
- mt_prime.ksh
- ncstuildex.ksh
- nprftuiddm.ksh
- orapartseed.ksh
- orgaraex.ksh
- orgchanex.ksh
- orgchnex.ksh
- orgdisex.ksh
- orgllmex.ksh
- orglocex.ksh
- orglolex.ksh
- orgltmex.ksh
- orgltrex.ksh
- orgrgnex.ksh
- phasex.ksh
- plnsendm.ksh
- ploblwdm.ksh
- prcildex.ksh
- prdclsex.ksh
- prdcmpdm.ksh
- prdcmpex.ksh
- prddepx.ksh
- prddiffex.ksh
- scrqtlldex.ksh
- scrtlldex.ksh
- sctidex.ksh
- seasndm.ksh
- seasnex.ksh
- seasnopendm.ksh
- sfcilwex.ksh
- sincildex.ksh
- slsildmdm.ksh
- slsildmex.ksh
- slsmkdnildex.ksh
- spalldldm.ksh
- spalldldm2.ksh
- spallddm.ksh
- stlblwex.ksh
- subtrantypex.ksh
- supctrex.ksh
- supsupdm.ksh
- supsupex.ksh
- suptrmex.ksh
- suptrtex.ksh
- time_static_load.ksh
- time_load.ksh
- time_trnsfrm_load.ksh
- timelfldm.ksh
- tndrtypex.ksh
- ttldmdm.ksh
- ttldmex.ksh
- ttltypex.ksh
- tsildqdm.ksh
- vchragedm.ksh
- vchreschdex.ksh
- vchrmoveldsg.ksh
- vchrmoveldsgex.ksh
- vchroutlwex.ksh