

XDEMO Account v1.01 - Readme

Rocket U2 Software – October 1, 2010

Primary Purpose

The XDEMO Account is a group of test files primarily used for U2U Presentations. It will also be used on the U2 DeveloperZone site. This account will not be included in any of the formal U2 Products, like UniVerse, UniData, etc. It will also not be formally supported (see Contact Info section below). Changes to the dictionary and data structures may change in future versions of the account.

The minimum database releases required for this account are:

UniData: 6.1.15 or 7.1.2

UniVerse: 10.1.15

Changes in this edition

This data account was used in the U2U 2009 conference for examples. Several changes were done based on comments from that conference. The changes include:

- Data has been cleaned up in all core files. See the 'Core File Details' section for more details.
- Data cleanup included removing any gaps in data fields (ie. data fields at position 17 then 52).
- Any IBM references have been rebranded to Rocket Software including fictional email addresses.
- All dictionary fields have been converted to uppercase format.
- The XDEMO account now includes an initialization routine, see 'XDEMO Initialization Routine' section. This allows the base directory to be small and will build the necessary files when you login the first time to the account. A flag is set so that the next time you login, the same routine won't run again.
- Data/Dictionary files are created from XML files using DBTOXML/XMLTODB functionality. This will also allow users to export data/dictionary information and send it to support if needed when testing an issue. See the section 'Data & Dictionary Exporting and Importing'.
- A record called XDEMO.VERSION has been included to tell you what version the account is set to. At this release it will report 1.00. It reads it from a file in the account called 'xdemo.version'.
- Data files have been sized properly
- All add-on components for the account have been removed (SB, WDE, BDT, etc.)
- The MEMBERS file contains no real information. All information was created randomly for that file.
- The PRODUCTS file now includes a synopsis for all records.

Items that will not be included in XDEMO Accounts

It has been asked if the XDEMO account will include options to enable it, for example, SBXA, U2 DataVu or other U2 add-ons. This will not be done in this version of the account or future versions of the account. The account will only include base data files for the two databases. If a U2U presenter or other Rocket U2 individual wants to show an example for an add-on, then they will need to document what needs to be done to enable the XDEMO account for their example. This limitation is in place because it is not possible to create one account for all scenarios. Also, various incarnations of the same base account for the various add-ons will be not available. A common example of this is if it is SB+/SBXA enabled by default and is copied to another system, you will get open file errors from any of the Eclipse tools like BDT.

Core File Details

In the various new programs, there are references to what is called the 'core files'. These files include: LOCATIONS, MEMBERS, PRODUCT.REVIEW, PRODUCTS, REGION, RENTAL.DETAILS, STATES and TRANSACTION.ACCUM. Here are some further details on these files:

- **LOCATIONS**: Same record count as before. Addresses were updated in this file. Phone/Fax number don't go to real numbers.

- **MEMBERS**: Old record count was 502. This has been increased to 2500 records. It includes imaginary credit card information and other data. The data is generated randomly. For the PASSWORD and CARDNUM fields, there is an additional ENC.PASSWORD and ENC.CARDNUM field that contain encrypted versions of those fields. In the dictionary of the MEMBERS file is a record called ENC.PARAMS that report what parameters were used for these fields. In the U2BP directory, there is a DECRYPT.EXAMPLE program that shows how the data can be decrypted again for passwords and credit card numbers. Records in this file contain no real life data.
- **PRODUCT.REVIEW**: No significant changes were done to this file.
- **PRODUCTS**: Old record count was 509. New record count is 390. The reduction was due to two reasons: 1) Duplicate editions of titles were removed and 2) Only movies that have a synopsis were included. The file had wide gaps in data fields, this issue has been fixed.
- **RENTAL.DETAILS**: Original record count was 2269. New record count is 2240. Fields have been fixed to not have any gaps. The dictionary items have been changed to be similar syntax. The various sets of Star ratings had different naming conventions previously.
- **STATES**: Same record count as before. It now includes a REGION and DIVISION field.
- **REGION & TRANSACTION.ACCUM**: These files were included with no data records. The exact purpose of these files is not currently known but is included just in case.

XDEMO Initialization Routine

Included with this version of the XDEMO account is an initialization routine that builds the core data files. If you look at the file structure in the zipped version you will see that the core files are missing. To initialize the account you will need to login to the account with the necessary database shell. On initial login, it will populate the files. Subsequent logins will not call the initialization routine (assuming control records are in place). It may take several minutes to complete.

In the LOGIN and XDEMO records in the VOC file, there is a call to a program called 'CHECK.XDEMO'. This program does a check for the control record (in XDEMO.CONTROL file, CHECK.XDEMO.FLAG record), if the XDEMO.CONTROL file is missing or if line 1 of the CHECK.XDEMO.FLAG is not set to 1, then the INITIALIZE.XDEMO program is executed. By default the flag is set to 0, so the initialization routine will run. Source code for CHECK.XDEMO and INITIALIZE.XDEMO are not included in the account.

The INITIALIZATION.XDEMO routine does the following:

- Creates the XDEMO.CONTROL file
- Delete and recreate the BP file in the account. On UV, it creates it as a type 19 file.
- Clears non-default records from U2BP, U2INCLUDE and _XML_ (or &XML&)
- Clears the various savedlists files
- On UniData it will delete any schema files in the account
- Sets control flag to 0, to mark it as an uninitialized account.
- Compiles and catalogs default programs in the U2BP file
- Calls BUILD.XDEMO.FILES program to build core XDEMO files
- Sets control flag to 1, to mark the account as initialized.

You can run 'INITIALIZE.XDEMO' again after the initial time to clear the account back to the original values. If you have been adding records to the BP directory then it is recommended to back it up first.

Another way to force the CHECK.XDEMO program to not be called again is to add a record to the VOC file called SKIP.CHECK.XDEMO. It does not need to contain any data.

Data & Dictionary Exporting and Importing

There are three programs that the INITIALIZE.XDEMO routine uses. These programs are BUILD.XDEMO.FILES, BUILD.XDEMO.DATAS and BUILD.XDEMO.DICTS. The BUILD.XDEMO.DATAS and BUILD.XDEMO.DICTS programs allow the user to import and export data/dictionary files to an xml file.

With these programs and the INITIALIZE.XDEMO program, you can run the command with the '-HELP' option to get the syntax options. There is also a '-VERSION' and a '-DEBUG' option. The debug option will show the output of the various commands used. These programs can be called with no options to ask prompt interactively. All prompts in these programs accept 'Q' to quit the program.

Details on the BUILD... programs:

BUILD.XDEMO.FILES: This program was created before the INITIALIZE.XDEMO program as a way to call the other two build programs. Where the INITIALIZE.XDEMO forces all files to be recreated, this program allows the user to pick which file to work with. It does limit the files to the core XDEMO files. This program also only imports data. It does not allow exporting of data. Order of execution for this file is:

- Delete and recreate given file or all files
- If either of the -SKIP.DATA or -SKIP.DICT options are used then the opposite type is cleared and not recreated.
- Clears the various savedlists files and the _PH_ or &PH& files
- Recreates &TEMP& on UniVerse as a type 18 file.
- Compiles & catalogs the BUILD.XDEMO.DICTS and BUILD.XDEMO.DATAS programs
- Calls BUILD.XDEMO.DICTS to populate dictionary files from the given xml file
- Calls BUILD.XDEMO.DATAS to populate data files from the given xml file.

Syntax Example for BUILD.XDEMO.FILES:

To recreate all files:

BUILD.XDEMO.FILES -F ALL -XML.DATA MY.DATA.XML -XML.DICT MY.DICT.XML

To repopulate MEMBERS file and keep same dictionary:

BUILD.XDEMO.FILES -F MEMBERS -XML.DATA MY.DATA.XML -SKIP.DICT

BUILD.XDEMO.DATAS & BUILD.XDEMO.DICTS: These programs allow the user to import and export the data or dictionary info to/from the XDEMO files. This will be useful if support would like a copy of the data/dictionary for a support case. Only the XML file generated from these programs is needed. The programs use the XMLTODB and DBTOXML functionality to import and export to a temporary work file before copying the various records to the necessary XDEMO file. Order of execution for these programs is:

- Prompt for data/dict file, XML file, and process type (Export or Import)
- Builds work file, it will either be called BUILD.XDEMO.DATAS.WORK or BUILD.XDEMO.DICTS.WORK
- Determines max number of lines all records
- Creates a .MAP file for the xml file. This is done dynamically on each call to the program.
- For Importing, it reads the XML file using the MAP file into the Work file and copies the data or dictionary info to the needed XDEMO files.
- For Exporting, it copies the data from the XDEMO files into the work file and exports the info to the xml file.
- Work file is deleted.

Examples of syntax:

Importing data into the PRODUCTS data file:

BUILD.XDEMO.DATAS -I PRODUCTS -X INPUT.DATA.FILE.XML

Exporting items from the MEMBERS dictionary file:
BUILD.XDEMO.DICTS -E MEMBERS -X OUTPUT.DATA.FILE.XML

Review the default files in the _XML_ or &XML& directories for the layout used in the xml files.

Additional Items Found During Development

- The BUILD.XDEMO... routines that export/import from xml files have been tested on Windows only. Some testing was done on unix, but it appears the exporting and importing will need additional work in a future edition of the XDEMO account. If you want to use this account on unix/linux then it is best to initialize the account on Windows, then copy to unix.
- The export/importing uses temporary work files, either called BUILD.XDEMO.DATAS.WORK or BUILD.XDEMO.DICTS.WORK to move data between U2 files and xml files. If the expected result doesn't occur (ie. no records in dictionary files) then the appropriate work file could not be deleted or created for some reason. This usually was due to a part of the file being in use at the time of the execution. To workaround, log out of the account and back then re-run which ever process you used.
- The PRODUCTS file structure will most likely change in a future release of the account as the source for this info will change.

Contact Info

The XDEMO account is maintained by the U2 Support group. If you have any questions/issues with the account please contact Brian Kupzyk, Senior Technical Support Engineer (bkupzyk@rs.com).