



NEC

Reality V15.6

Product Updates

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Document control

| Software Version | Document Status | Document Revision | Issue Date | Reason for Change |
|------------------|-----------------|-------------------|------------|---|
| V15.6 | Published | Revision 0 | 08/09/2025 | Added the following new section: <ul style="list-style-type: none">Product updates > Reality V15.6 product updates . |

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Section 1: Overview

1.1 Introduction

To install the updates, the following should serve as a guideline. Full instructions are available on the website. Please note that instructions will vary between machine type.

UNIX/LINUX platforms:

The update file is delivered in a compressed format to save download time. Once the compressed file is loaded onto the target machine it must be uncompressed. Use the UNIX 'uncompress' utility on Solaris and AIX, use `gzip -d` on Linux. The resulting file will be a UNIX 'tar' file. This 'tar' file needs to be extracted into a directory. Change the directory using 'cd' to a suitable place to hold the contents of the tar file and then use 'tar -xvf <path to filename>' to extract the contents of the tar file. Once the contents of the 'tar' file have been extracted you are then ready to proceed with the installation.

To install all of the fixes, whilst logged in as the user 'realman', run 'install_fix - ay<absolute path to directory holding the fixes>'.

Windows Platforms:

The file delivered is a self-installing archive and can be run directly from the latest browser available. Alternatively, it can be downloaded and run as normal (double-click it in browser or type the name from command prompt).

Run a Windows Command Prompt, using right-click and selecting 'Run as administrator' and enter 'install_fix directory_path\file_name'.

You can also run the extraction using Explorer, however, you need to right-click Explorer and select 'Run as administrator'. Then run the file as normal by double-clicking the file_name.

The requirement to use 'Run as administrator' is due to Windows security changes. This should be used even if you have logged in as an Administrator.

1.2 Support

In case of any problems with either the software or the documentation, please send an email or visit the customer support portal website.

- reality@necsws.com
- <https://reality.necsws.com/contact-us>

Section 2: Product updates

2.1 Reality V15.1 product updates

The following fixes were released on 3rd August 2011.

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0001 | 91077 | Make SYS-UPDATE from V14.0 more resilient. |

The following fixes were released on 17th February 2014.

| Fix No | Bug No | Description |
|--------------|-------------------------|---|
| V15.1.0.0002 | 91084 91094 | Correct restore of non-Dptr items into SYSTEM. |
| V15.1.0.0003 | 91059 | Prevents error messages being displayed during verbs such as FIND when querying SQL-VIEW files for item-ids that do not obey SQL rules. |
| V15.1.0.0004 | 85687 | Solaris: Mount shadow fails fsck on zfs file system. |
| V15.1.0.0005 | 91075 | Resize existing AFS files during ACCOUNT-RESTORE. |
| V15.1.0.0006 | 91087 | Windows: Cannot create a database using realfstab. |
| V15.1.0.0007 | 90994 | Prevents RIF abort when SQL compiles "SELECT *". Now reports "Column '*' not found". |
| V15.1.0.0008 | ----- | Add ability to import .reg file. |
| V15.1.0.0009 | 85684 | Windows: realdump can hang trying to freeze the database. |
| V15.1.0.0010 | 91090 | Enable mini web server to support % escape in URL and pdf documents. |
| V15.1.0.0011 | 85695 | Skip logoff messages when aborted by RDB. |
| V15.1.0.0012 | 85697 | Correct problems with updates of partial indexes. |
| V15.1.0.0013 | 85699 | Fix sporadic issue where SP-JOBS fails to open jobs file. |
| V15.1.0.0014 | 85698 | GET-LIST could display incorrect list length. |
| V15.1.0.0016 | 85688 | Allow PERFORM or EXECUTE to optionally input from dynamic array data. |
| V15.1.0.0017 | 85700 | Fix verification of multi clog save to remote tape. |
| V15.1.0.0018 | 91086 85665 91072 | Enable HTTPS to access non validated server realprof fails to return any data realevent fails to send notification emails. |
| V15.1.0.0019 | 91097 | Correct OPTIMUM-FRAME-SIZE and OPTIMUM-MODULO TCL verbs. |
| V15.1.0.0021 | 91106 | Fix netadmin list all hosts with large number of hosts. |

| Fix No | Bug No | Description |
|--------------|----------------|------------------------------------|
| V15.1.0.0023 | 91088 91105 | Enhance SYS-UPDATE error recovery. |

The following fixes were released on 29th May 2014.

| Fix No | Bug No | Description |
|--------------|----------------|--|
| V15.1.0.0020 | 85698 91096 | Correct 64bit optimisation of scan and move virtual instructions. |
| V15.1.0.0024 | 85713 | Inhibit DataBasic history logging on a single level source file. |
| V15.1.0.0025 | 85711 | Do not try to release any locks on a DataBasic Index or select variable. |
| V15.1.0.0026 | ----- | Improve info reported if parallel trestore fails. |
| V15.1.0.0027 | 91109 | Allow DataBasic Object to operate with binary strings. |
| V15.1.0.0029 | 85724 | Stop realcd core dump when using session licences. |
| V15.1.0.0030 | 85718 | Allow 8GB raw log to be used. |
| V15.1.0.0031 | 85718 | Fix various problems when malloc arena exceeds 4GB. |
| V15.1.0.0032 | 85299 91131 | Enable ISTAT of large files. |
| V15.1.0.0033 | 91135 | The DataBasic debugger is unable to stop or see the statement following an ECATCH Statement. |
| V15.1.0.0034 | ----- | NFM CDE full clean log access. |
| V15.1.0.0035 | 85727 | Allow DR to continue after failover of failsafe master. |
| V15.1.0.0036 | 91138 | Fix problem with DataBasic substring with -ve starts of binary strings. |
| V15.1.0.0037 | 90609 | DELETE, EDELETE, PROC F-W and F-D now report if a file is update protected. |
| V15.1.0.0038 | 85731 | Fix core dump when nesting index selects. Fix size of index key when reading index. |
| V15.1.0.0039 | 91148 | Enable fix 31 to be installed correctly. |
| V15.1.0.0040 | 85732 85734 | Fix indexes with a translate conversion and fix CREATE-INDEX (N of huge files. |

| Fix No | Bug No | Description |
|--------------|----------------|--|
| V15.1.0.0041 | 85729 85730 | Stop TL-REJECTs when deleting clean logs. Enable tlmenu to deconfigure Failsafe. |
| V15.1.0.0043 | ----- | Completely remove Reality from Windows system. |
| V15.1.0.0044 | 85727 | Add database instance with -i or -a. |
| V15.1.0.0046 | 85735 | Reinstate CHARGE-TO display to WHO and U50BB. |
| V15.1.0.0047 | 91151 | A DataBasic ACCESS abort could corrupt the DataBasic runtime stack. |
| V15.1.0.0048 | 91150 | Fix creating multiple partition database in Windows. |
| V15.1.0.0049 | ----- | PCL TO PDF CDE. |
| V15.1.0.0050 | ----- | PF99.27 - Add initial support for despooler filters. |

The following fixes were released on 20th June 2014.

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0051 | 85736 | Fix SQL view for 64 bit reality to SQLserver 2008. |
| V15.1.0.0052 | ----- | Correct issues seen ODBC/SQL in VB prog on 64 bit. |
| V15.1.0.0053 | 85714 | Correct item body length of partial read of unchanged item. |
| V15.1.0.0054 | 85738 | Diagnostic to help resolve SQL view problem. |
| V15.1.0.0055 | 91158 | SQL DROP INDEX causes core dump. |
| V15.1.0.0056 | 85740 | Add DataBasic session amd object variables to VARVAL and VARVALTYPE functions. |
| V15.1.0.0057 | 85743 | Enable new despooler filter feature. |

The following fixes were released on 12th November 2014.

| Fix No | Bug No | Description |
|--------------|----------------|---|
| V15.1.0.0042 | 85733 | Improve error messages if spinlock fails. |
| V15.1.0.0058 | 85745 85736 | Correct issues seen ODBC/SQL in VB prog on 64 bit. |
| V15.1.0.0059 | 85714 | Correct item body length of partial read of unchanged item. |

| Fix No | Bug No | Description |
|--------------|-------------------------|--|
| | 85747 | |
| V15.1.0.0060 | 91169 | DBO - Fix mishandling of numbers ending in D. Fix memory leak. |
| V15.1.0.0061 | 85471 85472 85780 | Move DR delayed delete file to database and fix various hangups. |
| V15.1.0.0062 | 85749 | Ensure A*L*L FCB starts on a SR aligned boundary. |
| V15.1.0.0063 | 91172 | Enable XML.GENERATE to handle multivalued data including subvalues. |
| V15.1.0.0064 | 85753 | Correct restore of V14.0 DataBasic object items. |
| V15.1.0.0065 | 91175 | Correct print-catalog with no file but 2 or more items. |
| V15.1.0.0066 | 85754 | Fix bug where OG items in an AFS file can be corrupted after upgrading to 15.1. |
| V15.1.0.0067 | 91178 | Enable ISTAT ... (U to work on an active file. |
| V15.1.0.0068 | 85755 | Suppress benign daemon log errors for remote files. |
| V15.1.0.0069 | ----- | PCL2PDF - Add font map, properties and back sheet configuration. |
| V15.1.0.0070 | 85757 | Fixes PERFORM TERM after PRINTER ON. |
| V15.1.0.0071 | 85754 | Preserve update time when AFS moves an item. |
| V15.1.0.0073 | 85765 | The realroot script now works ok in Bourne shell. |
| V15.1.0.0074 | 85719 | Enable RealEdit to select account/item name. |
| V15.1.0.0075 | 85766 | Correct DataBasic debugger Trace on 64 bit Solaris. |
| V15.1.0.0076 | 85771 | Correct AND-LISTS and AND-ITEMS when used with a null list/item. |
| V15.1.0.0077 | 85772 | Stop closing remote index from disconnection session. |
| V15.1.0.0078 | 85778 | This fixes loss of keyboard data from Accuterm. |
| V15.1.0.0079 | 85779 | Aborting window @ logon no longer causes 100% cpu. |
| V15.1.0.0080 | 91031 91207 | Enhance BVERIFY to fully compare objects while handling date and times separately. |

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0081 | 85777 | Provide support for NpuRetries & NpuDelay configs. |
| V15.1.0.0083 | 91208 | Stop LICENCE SFAM responding to junk item ID's. |
| V15.1.0.0086 | 91217 | Correct ALL SORT xmode problem. |
| V15.1.0.0087 | 85787 | Fix SELECT/COUNT of DIR-VIEW on latest RedHat/Centos. |

The following fixes were released on 12th November 2014.

| Fix No | Bug No | Description |
|--------------|--|--|
| V15.1.0.0085 | 85777 | Diagnostic tracing for npu delays. |
| V15.1.0.0089 | 91214 | Unix: Allow debug build to include/exclude fixes. |
| V15.1.0.0093 | 91219 | Fix perl script warnings on Centos 7. |
| V15.1.0.0094 | 85789 | Ensure that the ALL window CB is on 8-byte boundary. |
| V15.1.0.0097 | 91222 | Enable DIR-VIEW to list large items. |
| V15.1.0.0098 | 91187 | Enable build of reality on Centos 7. |
| V15.1.0.0099 | 84797 | Enable read of pre V14.0 compressed tape. |
| V15.1.0.0100 | 85792 | Correct BVERIFY of V14.0 or earlier object code. |
| V15.1.0.0101 | ----- | Fix corrupt dbfile on 32 bit Windows. |
| V15.1.0.0102 | 85702 | Add SQLPRIV to SQL.DEMO. |
| V15.1.0.0103 | 85756 85776 91197 91227 91226 91225 | Various updates to tlmenu. |

The following fixes were released on 27th February 2015.

| Fix No | Bug No | Description |
|--------------|-------------------------|--|
| V15.1.0.0072 | 91177 | Allow database to be created with non AFS system files. |
| V15.1.0.0082 | 91200 91201 91205 | DataBasic Dump CDE and various DataBasic debugger fixes. |

| Fix No | Bug No | Description |
|--------------|-------------------------|---|
| | 91183 99.29 | |
| V15.1.0.0088 | 91215 | Windows: Enable DBUPDATE to run correctly when telneted into database. |
| V15.1.0.0104 | 85795 | Fix TL-STATUS (B corruption of secondary status. |
| V15.1.0.0105 | 85792 | Correct BVERIFY of V14.0 or earlier object code. |
| V15.1.0.0106 | 91232 | Fix RealWeb insert item after DataBasic objects changes. |
| V15.1.0.0107 | 85748 | Fix issue of SERVICE-LOG items not wrapping at 999. |
| V15.1.0.0108 | 91234 | Stop binary DIR-VIEW on Unix clearing binary flag. |
| V15.1.0.0109 | 85804 | Correct DataBasic CONVERT function if oldCharList is NULL. |
| V15.1.0.0111 | 85794 | Allow DataBasic DUMP to work with external DataBasic. |
| V15.1.0.0112 | 91249 | Enhance RESTORE to skip truncated DataBasic object items. |
| V15.1.0.0113 | 91242 | Enhance DataBasic compiler to test string quotes in EQUATES at define time. |
| V15.1.0.0115 | 85808 | Fix realdbck "ReloadPage Invalid argument" error. |
| V15.1.0.0116 | 85809 | Correct passing of a common array as a subroutine parameter. |
| V15.1.0.0117 | 91256 | Maintain registers over an "Non-numeric" warning error message. |
| V15.1.0.0118 | 85698 91096 85798 | Correct 64bit optimisation of scan and move virtual instructions. |

The following fixes were released on 29th May 2015.

| Fix No | Bug No | Description |
|--------------|----------------------------------|---|
| V15.1.0.0114 | 91200 91210 91235 99.30 | DataBasic Debugger CDE. |
| V15.1.0.0119 | 91218 | Correct ALL interface when reading an item that is not there. |

| Fix No | Bug No | Description |
|--------------|-------------------------|--|
| V15.1.0.0120 | 91267 91236 91283 | Various fixes and enhancement to install_fix. |
| V15.1.0.0121 | 85810 | Windows: tlmenu diagnostic for hang after redual. |
| V15.1.0.0122 | 85812 85813 | Windows: fix buffer overrun in smanager when logging server reject. Stop 'Lock 6' error message in Windows event log when starting realserv. |
| V15.1.0.0123 | 85814 | Raw printing fixed on Windows 8 / 2012. |
| V15.1.0.0124 | 85811 | Correct return of file variable via a passed common variable assigned to a file variable. |
| V15.1.0.0125 | 91280 | Correct DataBasic IPM timeout of 255, and add timeout validation. |
| V15.1.0.0126 | 91282 | Fix T-STATUS after T-DEVICE clears local definition. |
| V15.1.0.0127 | 85788 91284 | Ensure IPM sessions are correctly disconnected. |
| V15.1.0.0128 | 85825 | Resolve problem where databases built on ZFS file system may be corrupt after system reboot. |
| V15.1.0.0129 | 91288 | Windows: Fix DIR-VIEW problem where zero length files may not be visible. |
| V15.1.0.0130 | 91285 | Enable millisecond time for DataBasic CONNECT/ACCEPT. |
| V15.1.0.0131 | 85823 | Enable tlrestore to move an open file. |
| V15.1.0.0132 | 85820 | Ensure sort context workspaces are correctly cleaned up. |
| V15.1.0.0133 | 85826 | Fix PCL2PDF graphic fills when watermark used. |
| V15.1.0.0134 | 85828 | Fix SIGSEGV when performing create of two indexes. |
| V15.1.0.0135 | 91297 | Allow DataBasic Functions to use temp space. |
| V15.1.0.0136 | 91299 | Fix bug in TCL stacker if max depth set to one. |

The following fixes were released on 6th of November 2015.

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0137 | 91272 | Correct fault in an internal support option of the BASIC verb. |
| V15.1.0.0138 | 91134 | Enhance NC.LIST to display number of named descriptors. |

| Fix No | Bug No | Description |
|--------------|----------------|--|
| V15.1.0.0139 | 85832 | Enable generation of more than 100 clean logs in a day. |
| V15.1.0.0140 | 85831 | Add Reality SYSTEM(117) and SYSTEM(118) and mvBase SYSTEM(35) to return program line number. |
| V15.1.0.0141 | 91304 | Correct capture of a PERFORM SYS if result has no trailing LF. |
| V15.1.0.0142 | 91308 | Remove name restriction on External User Functions when not saving result. |
| V15.1.0.0143 | 85835 | Correct test for single or double quotes for PROCS & TCL2 verbs. |
| V15.1.0.0144 | 91309 | Fix COPY-LIST with valid source account and invalid destination filename. |
| V15.1.0.0145 | 85836 | Windows: Fix GPF when trying to read non-existent binary DIR-VIEW item. |
| V15.1.0.0146 | 85837 | Stop 'Overwrite filesystem ...' prompt from mkdbase. |
| V15.1.0.0147 | 85839 91314 | RealEdit custom buttons. |
| V15.1.0.0148 | 85838 | DR: Recover form corrupt image response from master. |
| V15.1.0.0149 | 91317 | Fix hang of account restore when restoring DIR-VIEW. |
| V15.1.0.0150 | 91324 | Fix number of items displayed when using SELECT with View Compiled Programs option set. |
| V15.1.0.0151 | 91334 | Fix database daemon abort on Linux when events enabled. |
| V15.1.0.0152 | 85845 | Close vulnerability in mini web server where it could access any file on server. |
| V15.1.0.0153 | 91341 | Correct DataBasic READPREV when used on a dynamic array. |
| V15.1.0.0154 | 91342 | Clear confirm FD message in DESPOOLER.CONTROL file maintenance. |

The following fixes were released on 25th of February 2016.

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0155 | 91340 | Improve BASIC compile error handling in LOOPS and CASE structures. |
| V15.1.0.0160 | 91336 | Fix several SQL server issues including loss of rows. |

| Fix No | Bug No | Description |
|--------------|----------------|---|
| V15.1.0.0161 | 91349 | Install DataBasic V15.1 compiler fix for DataBasic objects. |
| V15.1.0.0167 | 91321 | Ensure CREATE-TRIGGER checks in correct account for trigger code. |
| V15.1.0.0168 | 85849 91353 | Correct output of TL-AUTOSWITCH to report new clean log. |
| V15.1.0.0170 | 91354 91363 | Windows: Enable shadow database to be configured. |

2.2 Reality V15.2 product updates

The following Reality V15.2 service pack was released 29th of February 2016.

| Fix No | Bug No | Description |
|--------------|---|---|
| V15.1.0.0156 | 91339 | Allow DB verb to accept lower case commands. |
| V15.1.0.0157 | PF12 | Resilience Monitoring. |
| V15.1.0.0158 | 91348 91362 91350 | Release HyperFiles. |
| V15.1.0.0159 | | Enable multi clean log delete from tlmenu. |
| V15.1.0.0162 | 85710 90244 91328 91329 | V15.2 DataBasic enhancement including FORMAT, MATCH{ES} and MATCHFIELD. |
| V15.1.0.0163 | 91335 90666 91364 91365 | Supply the password definition feature. |
| V15.1.0.0164 | 85549 85842 85840 91248 85717 | Productise the DataBasic debugger module trap CDE. |
| V15.1.0.0165 | 85859 | Productise the DataBasic dump enhancement. |
| V15.1.0.0166 | 3.17.1 | Simple DataBasic Email API. |
| V15.1.0.0169 | ---- | Enable Internal DataBasic Objects with JSON interface. Trial Only |

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0171 | 91000 | Link default DataBasic compiler to user environment. |
| V15.1.0.0172 | 91277 | SYS-UPDATE leaves T-DEVICE assigned. |
| V15.1.0.0200 | V15.2 | Reality 15.2 Release. |

The following fixes were released on 4 May 2016.

| Fix No | Bug No | Description |
|--------------|--|--|
| V15.1.0.0173 | 85863 | Only display the extended VARVALTYPES when configured to do so. |
| V15.1.0.0174 | 85867 | Allow SEL-RESTORE of spooler items. |
| V15.1.0.0175 | 85862 | Stop Reality crash when reading index after file save. |
| V15.1.0.0201 | 91371 | Remove spurious "Password rejected" message from CREATE-ACCOUNT. |
| V15.1.0.0202 | 91368 91369 91370 91366 91378 91380 | HyperFiles: Fix copy file handle in DataBasic. Fix for case insensitivity. Suppress RENAME-FILE and MOVE-FILE. |
| V15.1.0.0203 | 91373 | Fix JSON parser when string starts with [. Fix missing "," after array definition. Allow creation of null fields. Fix bug in number detection in parameters. Fix GPF when returning long string. |
| V15.1.0.0204 | 85865 | PCL2PDF fails to convert raster graphic when no start GL code present. |
| V15.1.0.0205 | ----- | Updates RealHttp API to include RESTful service functions and utility functions. |
| V15.1.0.0206 | ----- | Add RESTful services to RealWeb. |
| V15.1.0.0207 | ----- | Incorporate customer feedback to DEFINE-ENVIRONMENT & PASSWORD DEFINITIONS. |
| V15.1.0.0208 | 91296 91086 | RHTTP interface - fix secure sockets connections on all platforms. |
| V15.1.0.0209 | 91377 | Correct DataBasic debugger view of include source with alt file. |
| V15.1.0.0210 | 91381 | Correct MATCHFIELD with out of range field. |
| V15.1.0.0211 | 85866 | Correct COPY-LIST (D. |
| V15.1.0.0212 | 85873 | Correct Unassigned Variable in OPTIMUM-MODULO (L. |
| V15.1.0.0213 | 91379 | Add CAfile.pem to list of files updated by realclone -u. |

The following fixes were released on 23rd May 2016.

| Fix No | Bug No | Description |
|--------------|----------------|---|
| V15.1.0.0214 | 91388 | Allow initial null password in SSM USER field 17 Remote Systems. |
| V15.1.0.0215 | 91389 | Fix index update for zero length key when numeric descending encoding used. |
| V15.1.0.0217 | 91391 | LOAD-LANG now effective multiple times. |
| V15.1.0.0218 | 85858 | mkdbase: Fix handling of -F to set frame size. Fix resizing database with alternate SYSTEM modulo. Lock database earlier to prevent access. |
| V15.1.0.0219 | 91395 91384 | Fix handling of special methods in DataBasic Objects. |
| V15.1.0.0221 | 91393 | Unix: Fix install_fix handling of new Unix files. |
| V15.1.0.0222 | 91296 91086 | Windows: Supply correct .dlls for secure sockets operation. |
| V15.1.0.0223 | 91396 | Fix various cosmetic issues with SSM Define Password Definitions & Logon msg. |

The following fixes were released on 31st August 2016.

| Fix No | Bug No | Description |
|--------------|----------------------------------|--|
| V15.1.0.0216 | 91386 | Correct licence expiry + reporting. |
| V15.1.0.0220 | 91392 91397 91426 85883 | Enhance DataBasic Object usage syntax. |
| V15.1.0.0224 | 85857 | Enable database creation on file systems greater than 1TB. |
| V15.1.0.0225 | 91400 | Improve error handling in SSM (6. Define Password Definitions. |
| V15.1.0.0226 | 91401 91404 85863 | Only display the extended VARVALTYPEs when configured to do so. |
| V15.1.0.0227 | 91403 | Stop RHTTP_SOAP_REQUEST reporting unassigned variable error. |
| V15.1.0.0228 | 85876 91405 91406 | Enhance OPTIMUM-MODULO to cope with *'s in account and file names. |
| V15.1.0.0229 | 91399 | Correct the SLEEP until DataBasic code. |
| V15.1.0.0230 | 91398 | De-reference Qptr into DataBasic catalog item for BVERIFY. |

| Fix No | Bug No | Description |
|--------------|----------------------------|---|
| V15.1.0.0231 | 91407 | Correct WRAPUP of BASIC of include item. |
| V15.1.0.0232 | 091372 091408 091409 | Simple DataBasic Email API with Authentication. |
| V15.1.0.0233 | 91422 | Stop RHTTP functions reporting SESSION_COOKIES as unassigned. |
| V15.1.0.0234 | 91413 | Stop tmenu generating perl warnings when starting TL. |
| V15.1.0.0235 | 91416 | Return the correct resilience settings from listdb |
| V15.1.0.0236 | 91419 | Extend initial source item verification of LOAD-BNF. |
| V15.1.0.0237 | 91423 91303 | Stop install_fix generating error message when updating Unix file. |
| V15.1.0.0238 | 85882 | PCL2PDF fails to convert raster graphic with short lines. |
| V15.1.0.0239 | 85884 | Speed up initial connect to raw partition database. |
| V15.1.0.0240 | ----- | Add new script show_fix. |
| V15.1.0.0241 | 91383 | Windows: Stop install_fix -a getting confused about service pack. Always update history record when updating fix. |
| V15.1.0.0242 | 91427 | Enhance migration of POINTER-FILE to only timeout each remote account once. |
| V15.1.0.0243 | 85848 | Enable sizemon to calculate new modulo for files larger than 2GB. |
| V15.1.0.0244 | 91402 91412 | Enable mkdbase to change frame size when Vendor Emulation set. |
| V15.1.0.0245 | 91394 | Allow Hyper Files to open QPTRs and remote files. |

The following fixes were released on 20th March 2017.

| Fix No | Bug No | Description |
|--------------|----------------|--|
| V15.1.0.0095 | 85790 | Enable error recovery after failure to generate ROS index key. |
| V15.1.0.0247 | 91436 | Enable DR restart after master TL-STOP START. |
| V15.1.0.0248 | 91437 91420 | Speedup and add active list support for CSV-COPY. |

| Fix No | Bug No | Description |
|--------------|-------------------------|---|
| | 91418 | |
| V15.1.0.0250 | 85888 | Handle error if password definition file missing from database or Denat. |
| V15.1.0.0251 | 91444 | Add additional tests for an empty stack in English conversions. |
| V15.1.0.0252 | 85861 91414 91410 | Isolate Basic Debugger from External and Embedded DataBasic contexts. |
| V15.1.0.0253 | 85891 85895 | Add new priority 2 SYSMAN only LOGOFF-ALL TCL commands. Enable logoff. |
| V15.1.0.0254 | 91447 | Enable realdbck on windows to use cache size greater than 0.5GB. |
| V15.1.0.0255 | 91450 | Improve error handling around 2GB max workspace size. |
| V15.1.0.0256 | 85893 | AIX Linux fix handling of ANALYZE after DataBasic PAUSE statement. |
| V15.1.0.0257 | 85894 | Add filter to stop multiple DataBasic error dumps. |
| V15.1.0.0258 | 91448 | Correct RND with requested numbers > 32k. |
| V15.1.0.0259 | 85896 | Correct possible memory leak in index code. |
| V15.1.0.0260 | 85897 | Opening files with indexes to named common can cause a core dump after a LOGTO. |
| V15.1.0.0261 | 91155 | Fix killreal -l and netadmin permissions problems. |
| V15.1.0.0262 | 91451 91452 91474 | Fix problems with DataBasic string numbers in CAT, CRT, NUM, ABS, INT, NEG and FOR. |
| V15.1.0.0263 | 91453 | Enable core dumps on Windows. |
| V15.1.0.0264 | 85860 | Stop minor state being cleared when process still waiting. |
| V15.1.0.0265 | 91456 | Serial number installation enhancements. |
| V15.1.0.0266 | 91456 | Serial number installation enhancements. |
| V15.1.0.0267 | 91457 | Correct MCBX conversion when string is (8x)+1 characters long. |
| V15.1.0.0269 | 85901 | Use frame size in calculation of STAT-FILE data definition of new modulo. |
| V15.1.0.0270 | 91465 | Fix realfuser core dump on AIX. |
| V15.1.0.0271 | 91466 | Allow empty object in JSON document. |
| V15.1.0.0272 | ----- | Fix problems in RHTTP ENCODE DECODE PARSE URL. |
| V15.1.0.0273 | 91466 | Enable HTTP-SERVER to be shut down cleanly. |
| V15.1.0.0274 | 91468 | DataBasic READT, WRITET not taking ELSE clause if unassigned tape. |
| V15.1.0.0275 | 91471 | Add error handling to MCNP output conversion. |
| V15.1.0.0276 | 91472 | Correct display of SSM 2) Define User Profile 7) Default Account Name. |
| V15.1.0.0277 | 91469 | Speed up installing fixes on database. |

| Fix No | Bug No | Description |
|--------------|----------------|---|
| | 91476 | |
| V15.1.0.0278 | 85898 | Add PLID to SamPortNew max ports warning. |
| V15.1.0.0279 | 85908 85910 | Fix PCL2PDF GL x axis scaling. Fix slope calculation. |

The following fixes were released on 17th August 2017.

| Fix No | Bug No | Description |
|--------------|----------------|--|
| V15.1.0.0280 | 85906 | Add Verbose display option to BUILD.PRINTERS. |
| V15.1.0.0281 | 91480 | Various paths through the DataBasic FOR code treat a zero step differently. |
| V15.1.0.0282 | 91481 | Report session licence expiry on logon + fixes to expiry reports. |
| V15.1.0.0283 | 91482 | Allow LICENCEGRACEPERIOD to be superseded. |
| V15.1.0.0284 | 85905 85913 | Windows: Fix malloc arena corruption causing core dump. |
| V15.1.0.0285 | 85915 | Updating very badly sized AFS file can lock up holding group lock. |
| V15.1.0.0286 | 91485 | Fix problem causing occasional duplicate items. |
| V15.1.0.0287 | 85911 | Allow the PASSWORD command to go interactive if run from a program. |
| V15.1.0.0288 | 85914 | Cannot break multithreaded tlrestore using ^C. |
| V15.1.0.0289 | 91486 | Fix SIGSEGV for 'SYS xxx' by user level 0 1. |
| V15.1.0.0290 | 91367 | Provide server to port mapping feature PF11.6.1. |
| V15.1.0.0291 | 85918 | Enable TL-RESTORE to clear restoring status when it exits. |
| V15.1.0.0292 | 91360 | Prevent database owner impersonation. |
| V15.1.0.0293 | ----- | Changes to allow onsite Reality build with UXC 2.2. |
| V15.1.0.0294 | 85921 | Reduce memory usage of fsr. |
| V15.1.0.0295 | 85920 | Suppress 'Post connection failure' messages in daemon.log when no verification required. |
| V15.1.0.0297 | 85919 | Add option to CATALOG to suppress full path expansion of a Q-pointer source. |

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0298 | 85922 | Add item name to error 402 if called from DataBasic. |
| V15.1.0.0299 | 91490 | Reject sentence macros with same format as data definition. |
| V15.1.0.0300 | 85923 | Fix LOGON port after it has died. |
| V15.1.0.0301 | 91456 | Serial number installation enhancements. |
| V15.1.0.0302 | 85926 | Enable use of REALLOGLEVEL in realityrc file on Windows, with fix 303. |
| V15.1.0.0303 | 85926 | Reduce swamping of daemon log with TERM RD errors, with 302. |
| V15.1.0.0305 | 85881 | Diagnostic to resolve multi-threaded restore issues. |
| V15.1.0.0306 | 85924 | Allow DBSTART proc to run when password on SYSMAN account. |
| V15.1.0.0307 | 85928 | Enable tlrestore on Windows to restore large images. |
| V15.1.0.0308 | 85929 | Stop http probe test causing realserv to fail. |
| V15.1.0.0310 | 85932 | Prevent unnecessary DataBasic garbage collection. |
| V15.1.0.0311 | 85933 | Correct T-DUMP T option. |

The following fixes were released on 15th May 2018.

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0296 | 49260 | Trigger CDE. |
| V15.1.0.0312 | 85935 | tlmenu: Enable copy restore of all logs in recovery mode. |
| V15.1.0.0313 | 91493 | Activate DataBasic split screen debugging. |
| V15.1.0.0314 | 91494 | Correct minor SQLM bugs. |
| V15.1.0.0315 | 91501 | Stop MOVE-FILE black holing file if destination is access protected. |
| V15.1.0.0316 | 85851 | Correct ROSFS case insensitive Ilock handling. |
| V15.1.0.0317 | 85936 | Fix issue logging on to specified port. |
| V15.1.0.0318 | 85937 | Allow REMOVE and REMOVE.POS to work with a numeric variable. |
| V15.1.0.0319 | 91507 | Correct File despooler with multiple jobs. |

| Fix No | Bug No | Description |
|--------------|----------------|---|
| V15.1.0.0320 | 91508 91511 | Correct DataBasic debugger hex display of package and other variables. |
| V15.1.0.0322 | 85940 | Fix Err 14 abort during LOGOFF, due to ACCESS(16) on named common file var. |
| V15.1.0.0323 | 85941 | Fix issue of Reality core dumping in log off. |
| V15.1.0.0324 | 85939 | Fix realdump not deleting shared memory on exit. |
| V15.1.0.0325 | 85942 | Resolve issue with time in milliseconds wrong around midnight. |
| V15.1.0.0327 | 85943 | Remove diagnostic fix 0305. |
| V15.1.0.0328 | 85944 | Fix unassigned variable error in PCL2PDF. |
| V15.1.0.0329 | 91513 | Fix build menu when unpacking libraries. |
| V15.1.0.0330 | 85946 | Fix issue with SQLSRVR logging off when rowset exceeds 100 rows. |
| V15.1.0.0331 | 85949 | Prevent cloned instance connecting to database in base instance. |
| V15.1.0.0333 | 91521 | Correct date picture conversion code. |
| V15.1.0.0334 | 91519 | Cannot bind database on Windows. |
| V15.1.0.0336 | 85948 85945 | Fix DR delay between clean logs. Fix saving of recovery file. |
| V15.1.0.0338 | 85951 | Avoid deleting clogs if not successfully saved. |

The following fixes were released on 13th May 2019.

| Fix No | Bug No | Description |
|--------------|--|--|
| V15.1.0.0304 | 90770 91191 91496 91498 91502 91510 | Extend global md use to Qfiles and programs and restrict access. |
| V15.1.0.0321 | 91509 | Ensure SYSTEM(15) always returns the correct information. |

| Fix No | Bug No | Description |
|--------------|---|---|
| V15.1.0.0326 | 91042 90757 91516 85712 91514 91523 91524 | Add application keys & fix remote instant Q pointers etc. |
| V15.1.0.0332 | 85950 91522 | Fix dedicated port ranges for ports > 400 and use of reserved ports. |
| V15.1.0.0335 | 90971 | Ensure overlay items in ISIS{.TE} and REALLINK remain after a SYS-UPDATE. |
| V15.1.0.0337 | 91518 | Fix internal objects problems with %ARRAY and %TYPE accessing arrays. |
| V15.1.0.0339 | 85176 | Increase INPUT, inactivity and login timeouts to 45.5 hours. |
| V15.1.0.0340 | 85952 | Stop substring extract of zero length being marked as binary. |
| V15.1.0.0341 | 85954 | Fix DR client hang after clean log switch. |
| V15.1.0.0342 | 91530 | Extend range of SYSTEM(9) CPU usage figure. |
| V15.1.0.0343 | 91531 91532 | Ensure tidy up occurs when interrupting create index. |
| V15.1.0.0344 | 85953 | Stop old restore clog being protected in multi clog list. |
| V15.1.0.0345 | 91536 | Validate devices file against correct db config file. |
| V15.1.0.0346 | 91538 | Possible problem with sequential access when splitting group. |
| V15.1.0.0347 | 85956 | Serial number check fails after reboot of RedHat running on SSD. |
| V15.1.0.0348 | 91539 | RealEdit Debugger enhancement. |
| V15.1.0.0349 | 91541 | Make the DSPMON.CONTROL data section DL instead of DY for FILE-SAVE. |
| V15.1.0.0350 | 91470 | Improve display of remote hosts in SSM USER configuration. |

| Fix No | Bug No | Description |
|--------------|----------------------------------|---|
| V15.1.0.0351 | 91543 85958 85720 | Fix SE format command, item locks on rename and item locked message SE ED ME. |
| V15.1.0.0352 | 91544 | Optimise File name string space. |
| V15.1.0.0353 | 91545 91547 91553 91555 | Various DataBasic Debugger enhancements. |
| V15.1.0.0354 | 91546 | Ensure WHERE options are always passed to verb. |
| V15.1.0.0355 | 85960 | Item lock taken in transaction persists after TRANSEND. |
| V15.1.0.0356 | 91547 | Add VB style Interpolated Strings to DataBasic. |
| V15.1.0.0357 | 91548 | Fix web server re-accept. |
| V15.1.0.0358 | 91550 91504 | Do not update despooler device name when interface script does not exist. |
| V15.1.0.0359 | 91552 91555 | Correct DataBasic debug LP and stop ? output going to printer. |
| V15.1.0.0360 | 85961 | Enable hyper files to be created with a descending table. Allow Hyper Files to use compound correlatives. |
| V15.1.0.0361 | 91549 | Enable multiple database update using tlmenu. |
| V15.1.0.0362 | 91551 | Allow DataBasic PERFORM CAPTURING to capture results of child PERFORM's. |
| V15.1.0.0363 | 91554 | Allow READBLK to correctly use specified or open block size. |
| V15.1.0.0364 | 91557 | Ensure consistency with 5 and 10 character user and account passwords. |
| V15.1.0.0365 | 85962 91559 | Fix core dump on severed connection. Add DDA 'write buffering' command. |
| V15.1.0.0366 | 91560 | Fix NET-LOGON on Windows. |
| V15.1.0.0367 | 85963 | Ensure temporary file names are unique to process. |
| V15.1.0.0368 | 91177 | If no modulo in CREATE-FILE then always force AutoFile Size on. |

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0369 | 91561 | Allow logon if no available item-locks and TCL logging active. |
| V15.1.0.0370 | 91563 | Refinements to REST-ENABLE. |

The following fixes were released on 30th April 2020.

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | |
|--------------|--|--|-----|--------------------|---------|---------|---|-------------------|----------|---|-----------------------|----------|---|------------------------------|----------|---|---|-----------|----|-------------------|
| V15.1.0.0371 | 91565 | Enable use of session licences on ssh connections. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0372 | 91567 | Enable tlmulti selection of primary secondary database. Prevents the deletion of Clean Logs (tlmulti) if the database is defined as a secondary. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0373 | 91569 91566 | Correct DataBasic debugger L and V commands when listing more than one include line. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0374 | 85965 | Enable RealEdit V1 to connect to database after enabled debugger on RealEdit V2. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0375 | 91573 | Add BITAND, BITOR, BITXOR, BITNAND, BITNOR, BITXNOR and BITNOT DataBasicfunctions. Documentation for these items is available on the Reality website on the usual documentation page. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0376 | 85966 | Resolve memory allocation issues on Solaris 11.4. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0377 | 91574 90792 85550 90787 90786 91579 | <p>Enhance English sentence to allow dynamic modification and compatibility with other flavours such as D3</p> <p>A) two DICT items to GLOBAL.MD NBR and ID</p> <p>B) new NI-SUPP and (J These remove the counter shown at end of report</p> <p>C) new TCL-SUPP</p> <p>D) English Enhancements to allow dynamic listings.</p> <table border="1"> <thead> <tr> <th>KEY</th> <th>Modifies attribute</th> <th>Changes</th> </tr> </thead> <tbody> <tr> <td>COL-HDR</td> <td>3</td> <td>The column header</td> </tr> <tr> <td>OUT-CONV</td> <td>7</td> <td>The output conversion</td> </tr> <tr> <td>SEL-CONV</td> <td>8</td> <td>The pre-selection conversion</td> </tr> <tr> <td>COL-JUST</td> <td>9</td> <td>Column alignment type One of the following "LIRTU"</td> </tr> <tr> <td>COL-WIDTH</td> <td>10</td> <td>The column width.</td> </tr> </tbody> </table> | KEY | Modifies attribute | Changes | COL-HDR | 3 | The column header | OUT-CONV | 7 | The output conversion | SEL-CONV | 8 | The pre-selection conversion | COL-JUST | 9 | Column alignment type One of the following "LIRTU" | COL-WIDTH | 10 | The column width. |
| KEY | Modifies attribute | Changes | | | | | | | | | | | | | | | | | | |
| COL-HDR | 3 | The column header | | | | | | | | | | | | | | | | | | |
| OUT-CONV | 7 | The output conversion | | | | | | | | | | | | | | | | | | |
| SEL-CONV | 8 | The pre-selection conversion | | | | | | | | | | | | | | | | | | |
| COL-JUST | 9 | Column alignment type One of the following "LIRTU" | | | | | | | | | | | | | | | | | | |
| COL-WIDTH | 10 | The column width. | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | |
|---------------|---|--|--------|--|---------------|---|-------|---|-------|---|-----|---|
| | | <p>For compatibility with D3 & Unidata the following additional English modifiers will also be allowed:</p> <p>FMT - modifier allows any/all of the column header, justification & width to be altered.</p> <p>Format => FMT "[header justification width] "</p> <p>Where:</p> <table border="1" data-bbox="587 562 1382 1050"> <tr> <td data-bbox="587 562 778 658">header</td> <td data-bbox="778 562 1382 658">'column header ' must be in single quotes.</td> </tr> <tr> <td data-bbox="587 658 778 725">justification</td> <td data-bbox="778 658 1382 725">A single "R", "L", "T", "I" or "U" character.</td> </tr> <tr> <td data-bbox="587 725 778 824">width</td> <td data-bbox="778 725 1382 824">A decimal number representing the column width.</td> </tr> <tr> <td data-bbox="587 824 778 1050">Notes</td> <td data-bbox="778 824 1382 1050"> The order of the fields is optional. Unquoted spaces, "%", "*" and "#" are ignored. This allows the Unidata FMT "R%10" to work! </td> </tr> </table> <p>CONV - this is the same as the SEL-CONV modifier.</p> <p>Examples:</p> <pre>LIST MD A16 COL-HDR "Wages" COL-JUST R COL-WIDTH '11</pre> <pre>LIST MD A16 COL-HDR 'Wages' COL-JUST "R" COL-WIDTH 11</pre> <pre>LIST MD A16 COL-HDR Wages COL-JUST 'R' COL-WIDTH '11'</pre> <p>All the above are the same showing various uses of the allowed delimiters, the only time single or double quotes MUST be used is within a column header if it contains a space character.</p> <p>The following are also examples of the above written with the FMT modifier.</p> <pre>LIST MD A16 FMT 'Wages'R11"</pre> <pre>LIST MD A16 FMT " R #11'Wages' "</pre> <pre>LIST MD A16 FMT " %11 R 'Wages' "</pre> <pre>LIST MD A16 FMT " *11 'Wages' R "</pre> <p>These would ALL list the MD using the following dynamic data definition item:</p> <table border="1" data-bbox="587 1917 876 1982"> <tr> <td data-bbox="587 1917 743 1982">001</td> <td data-bbox="743 1917 876 1982">A</td> </tr> </table> | header | 'column header ' must be in single quotes. | justification | A single "R", "L", "T", "I" or "U" character. | width | A decimal number representing the column width. | Notes | The order of the fields is optional. Unquoted spaces, "%", "*" and "#" are ignored. This allows the Unidata FMT "R%10" to work! | 001 | A |
| header | 'column header ' must be in single quotes. | | | | | | | | | | | |
| justification | A single "R", "L", "T", "I" or "U" character. | | | | | | | | | | | |
| width | A decimal number representing the column width. | | | | | | | | | | | |
| Notes | The order of the fields is optional. Unquoted spaces, "%", "*" and "#" are ignored. This allows the Unidata FMT "R%10" to work! | | | | | | | | | | | |
| 001 | A | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | |
|--------------|----------------|---|-----|----|-----|-------|-----|--|-----|--|-----|--|-----|--|-----|--|-----|---|-----|----|
| | | <table border="1"> <tr> <td>002</td> <td>16</td> </tr> <tr> <td>003</td> <td>Wages</td> </tr> <tr> <td>004</td> <td></td> </tr> <tr> <td>005</td> <td></td> </tr> <tr> <td>006</td> <td></td> </tr> <tr> <td>007</td> <td></td> </tr> <tr> <td>008</td> <td></td> </tr> <tr> <td>009</td> <td>R</td> </tr> <tr> <td>010</td> <td>11</td> </tr> </table> | 002 | 16 | 003 | Wages | 004 | | 005 | | 006 | | 007 | | 008 | | 009 | R | 010 | 11 |
| 002 | 16 | | | | | | | | | | | | | | | | | | | |
| 003 | Wages | | | | | | | | | | | | | | | | | | | |
| 004 | | | | | | | | | | | | | | | | | | | | |
| 005 | | | | | | | | | | | | | | | | | | | | |
| 006 | | | | | | | | | | | | | | | | | | | | |
| 007 | | | | | | | | | | | | | | | | | | | | |
| 008 | | | | | | | | | | | | | | | | | | | | |
| 009 | R | | | | | | | | | | | | | | | | | | | |
| 010 | 11 | | | | | | | | | | | | | | | | | | | |
| V15.1.0.0378 | 91575 | Allow SAVE options X or Y to be used without options Z or S. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0379 | 91576 | Fix restore of data section create image. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0380 | 85968 | Stop SIGHUP in early stages of login cause reality to exit. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0381 | 85967 | Fix tmenu syntax error on line 180. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0382 | 91558 | Fix listing LFB special file. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0383 | 85969 | Reduce eliminate hit processes on abortive terminal closure. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0384 | 85970 | Fix getcwd following symbolic links. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0385 | 91580 | Correct REST-ENABLE handling of @PARAM and provide updated RW_RESTFUL. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0386 | 91582 | Correct the index handling of null nodes and end of list event. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0387 | ----- | Add clean log export feature. This is a licensed enhancement to extract data from a Clean log into JSON format. This patch also corrects some syntax errors within tmenu. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0388 | 85971 91583 | READNEXT of the output of an ISELECT with KEYS-ONLY truncates the item count. | | | | | | | | | | | | | | | | | | |
| V15.1.0.0389 | 91585 | Correct release of item locks for VERIFY-INDEX (T with MvStyleItemLocks set. | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0390 | 91586 | Correct Variable Unassigned error in Network File Maintenance. |
| V15.1.0.0391 | 91587 | Correct DBO %Admin handling of both formats of the function. |
| V15.1.0.0392 | 91562 | <p>Add a number of monitoring utilities to listdb</p> <p>Usage</p> <pre>:listdb -h -h displays this help -d dbname only for this database -s delimiter change default delimiter () -r gives resilience type -t gives type of database -o return database owner -l return database locked state -i return database instance path -a gives all information (-r,-t,-o,-l,-i)</pre> <p>Extended options:</p> <pre>-I return database instance number -S return database size type -m return database emulation code -u/-w return user licence usage or full details -c return the status of the instance -e return resilience configuration -f return resilience status -p return database space usage -V display all extended information -H display in Human readable format</pre> |
| V15.1.0.0393 | 91588 | <p>New SP-SUMMARY verb to summarise form queue contents.</p> <p>SP-SUMMARY</p> <p>Summarises the Spooler's formqueues contents and statuses.</p> <p>Syntax</p> <pre>SP-SUMMARY</pre> <p>Form Queue Summary Screen</p> <p>Entering SP-SUMMARY at TCL initially displays a list of formqueues similar to the following:</p> |

| Fix No | Bug No | Description | | | | | | | | |
|-----------------|---|--|--|--|-----------------|---|------|--|--------|---|
| | | <pre> 15:12:30 26 Mar 2020 64 Print Jobs Page 1/ 1 Form queue Jobs Oldest Form queue Jobs Oldest DAVES1 1 26 Mar 20 10:54 STANDARD 63 08 Nov 19 11:43 1. Switch view 2. SP-STATUS 3. SP-JOBS 99. Exit Enter action code / Option (P#) </pre> <p>This initial screen displays a list of current formqueue names together with their total number of print jobs and the time and date of the oldest job. At the bottom of the screen, four action codes are displayed. Action codes 2 and 3 correspond to their equivalent TCL command that performs the same function.</p> <p>Note This screen only shows the status of queues in the Reality environment.</p> <p>Form Queue Status Fields</p> <table border="1" data-bbox="587 1216 1342 1608"> <thead> <tr> <th data-bbox="587 1216 778 1283"></th> <th data-bbox="778 1216 1342 1283"></th> </tr> </thead> <tbody> <tr> <td data-bbox="587 1283 778 1413">Form Queue Name</td> <td data-bbox="778 1283 1342 1413">The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated.</td> </tr> <tr> <td data-bbox="587 1413 778 1509">Jobs</td> <td data-bbox="778 1413 1342 1509">The total number of jobs currently in the formqueue.</td> </tr> <tr> <td data-bbox="587 1509 778 1608">Oldest</td> <td data-bbox="778 1509 1342 1608">The date and time of the oldest job in the formqueue.</td> </tr> </tbody> </table> <p>Selecting an Action Code To select a particular action code you enter the appropriate number at the screen prompt.</p> <p>Selecting a Screen Page The Form Queue Summary display may contain more than one screen of Spooler status information. The number of pages available and the current page number are displayed at the top right corner of the screen. To page through the screens, press RETURN. To skip to a particular page, enter P, followed by the page number (#).</p> | | | Form Queue Name | The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated. | Jobs | The total number of jobs currently in the formqueue. | Oldest | The date and time of the oldest job in the formqueue. |
| | | | | | | | | | | |
| Form Queue Name | The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated. | | | | | | | | | |
| Jobs | The total number of jobs currently in the formqueue. | | | | | | | | | |
| Oldest | The date and time of the oldest job in the formqueue. | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | |
|-----------------|---|--|------------|-------------|-----------------|---|--------|--|
| | | <p>Use of the Equivalent TCL Command</p> <p>Instead of selecting an action code from the Form Queue Status screen, you can enter the equivalent TCL command. For example, instead of using Action Code 2, you can enter the SP-STATUS command at TCL.</p> <p>Action codes with equivalent TCL commands are listed at the beginning of this topic. The syntax for each TCL command is also described in this section.</p> <p>Action Code 1 Switch View</p> <p>Switches the display to the alternative view showing a summary of the statuses for each formqueue similar to the following:</p> <p>Form Queue Status Summary Screen</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre> 13:52:42 30 Apr 2020 2 Print Jobs Page 1/ 1 Queue Name Status Number Size Copies Jobs Total Printed Total Printed STANDARD Hold 2 3 0 2 0 1. Switch view 2. SP-STATUS 3. SP-JOBS 4. Reset 99. Exit Enter action code / Option (P# / Q queuname) </pre> </div> <p>This alternate screen displays a list of current formqueue names with a breakdown of their jobs summarised by status, together with their total number of print jobs and totals for their sizes and copies. At the bottom of the screen, five action codes are displayed. Action codes 2 and 3 correspond to their equivalent TCL command that performs the same function.</p> <hr/> <p>Note</p> <p>This screen only shows the status of queues in the Reality environment.</p> <hr/> <p>Form Queue Status Fields</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #002060; color: white;">Field Name</th> <th style="background-color: #002060; color: white;">Description</th> </tr> </thead> <tbody> <tr> <td>Form Queue Name</td> <td>The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated.</td> </tr> <tr> <td>Status</td> <td>The status of jobs currently in the formqueue.</td> </tr> </tbody> </table> | Field Name | Description | Form Queue Name | The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated. | Status | The status of jobs currently in the formqueue. |
| Field Name | Description | | | | | | | |
| Form Queue Name | The name of the formqueue. This field is 17 characters wide. Names over 17 characters long are truncated. | | | | | | | |
| Status | The status of jobs currently in the formqueue. | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | |
|----------------|---|--|-------------|---|------------|---|--------------|---|--------------|---|----------------|---|
| | | <table border="1"> <tr> <td>Number Jobs</td> <td>The total number of jobs of that status in the formqueue.</td> </tr> <tr> <td>Size Total</td> <td>The total size of the jobs of that status in the formqueue.</td> </tr> <tr> <td>Size Printed</td> <td>The total printed size of the jobs of that status in the formqueue.</td> </tr> <tr> <td>Copies Total</td> <td>The total number of copies of the jobs of that status in the Formqueue.</td> </tr> <tr> <td>Copies Printed</td> <td>The total number of copies printed of the jobs of that status in the formqueue.</td> </tr> </table> <p>Action Code 1 Switch View Switches the display back to the initial view showing a summary of jobs for each formqueue.</p> <p>Action Code 4 Reset Selection Resets the screen so that it displays summarised details for all formqueues. This may be used after a Q option has been entered at the prompt: Enter action code / Option (P# / Q quename) that restricts the display to a single formqueue.</p> <p>Exiting to TCL To exit to the TCL prompt, select Action Code 99.</p> | Number Jobs | The total number of jobs of that status in the formqueue. | Size Total | The total size of the jobs of that status in the formqueue. | Size Printed | The total printed size of the jobs of that status in the formqueue. | Copies Total | The total number of copies of the jobs of that status in the Formqueue. | Copies Printed | The total number of copies printed of the jobs of that status in the formqueue. |
| Number Jobs | The total number of jobs of that status in the formqueue. | | | | | | | | | | | |
| Size Total | The total size of the jobs of that status in the formqueue. | | | | | | | | | | | |
| Size Printed | The total printed size of the jobs of that status in the formqueue. | | | | | | | | | | | |
| Copies Total | The total number of copies of the jobs of that status in the Formqueue. | | | | | | | | | | | |
| Copies Printed | The total number of copies printed of the jobs of that status in the formqueue. | | | | | | | | | | | |
| V15.1.0.0394 | 91589 | <p>RealEvent enhancements for items and extended html templates</p> <p>This adds new options to the existing realevent command</p> <p>Parameters</p> <p>htmltemplate Path to html message template.</p> <table border="1"> <thead> <tr> <th>Notifiers</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>item</td> <td>Create a file for each notification in the directory with a prefix specified by the recipient, or if blank, defaults to 'files/event.'. The file name is suffixed with a unique ascending identifier based on the date/time. This same identifier is included in the item as an additional field 'Number: '</td> </tr> <tr> <td>html</td> <td>As 'html' but adds the new field 'Number: ' containing a unique</td> </tr> </tbody> </table> | Notifiers | Description | item | Create a file for each notification in the directory with a prefix specified by the recipient, or if blank, defaults to 'files/event.'. The file name is suffixed with a unique ascending identifier based on the date/time. This same identifier is included in the item as an additional field 'Number: ' | html | As 'html' but adds the new field 'Number: ' containing a unique | | | | |
| Notifiers | Description | | | | | | | | | | | |
| item | Create a file for each notification in the directory with a prefix specified by the recipient, or if blank, defaults to 'files/event.'. The file name is suffixed with a unique ascending identifier based on the date/time. This same identifier is included in the item as an additional field 'Number: ' | | | | | | | | | | | |
| html | As 'html' but adds the new field 'Number: ' containing a unique | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | | | | | |
|--------------|---|---|--------|-------------|---|---------------------------------------|---|---|---|--|---|---|---|--|---|---|
| | | ascending identifier based on the date/time. | | | | | | | | | | | | | | |
| V15.1.0.0395 | 91434 | <p>New NEW.LISTVERBS verb to provide improved layout of details over original LISTVERBS verb</p> <p>Syntax NEW.LISTVERBS {(options)}</p> <p>Options</p> <p>Default is to show all verb definitions from the GLOBAL.MD, any alternative MD and the local MD.</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>No page. Suppresses automatic paging.</td> </tr> <tr> <td>P</td> <td>Printer. Sends output to printer assigned to your port.</td> </tr> <tr> <td>G</td> <td>Global MD. Only show entries in the GLOBAL MD.</td> </tr> <tr> <td>A</td> <td>Alternative MD. Only show entries in the user's alternative MD.</td> </tr> <tr> <td>M</td> <td>Local MD. Only show entries in the users MD.</td> </tr> <tr> <td>X</td> <td>Extended. Show all items in the MD rather than just verbs. This a debugging option.</td> </tr> </tbody> </table> <p>Example :NEW.LISTVERBS</p> <p>The command clears the screen and displays a listing similar to the following:</p> <pre> Page 1 10:42:53 24 Oct 2019 Name and location .. Code ... Type Details ADDD PA TCL-I End points 40A0 /DAVES/ ADDS V Synonym for ADDX /DAVES/ALT.MD,ALT.MD ADDX PA TCL-I End points A0 /GLOBAL.MD/ </pre> | Option | Description | N | No page. Suppresses automatic paging. | P | Printer. Sends output to printer assigned to your port. | G | Global MD. Only show entries in the GLOBAL MD. | A | Alternative MD. Only show entries in the user's alternative MD. | M | Local MD. Only show entries in the users MD. | X | Extended. Show all items in the MD rather than just verbs. This a debugging option. |
| Option | Description | | | | | | | | | | | | | | | |
| N | No page. Suppresses automatic paging. | | | | | | | | | | | | | | | |
| P | Printer. Sends output to printer assigned to your port. | | | | | | | | | | | | | | | |
| G | Global MD. Only show entries in the GLOBAL MD. | | | | | | | | | | | | | | | |
| A | Alternative MD. Only show entries in the user's alternative MD. | | | | | | | | | | | | | | | |
| M | Local MD. Only show entries in the users MD. | | | | | | | | | | | | | | | |
| X | Extended. Show all items in the MD rather than just verbs. This a debugging option. | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | |
|--------------|--|---|--|--|--------|---|-------|--|
| | | <p>AFS-CLEAR P DataBasic catalogued in POINTER-FILE</p> <p>/DAVES/ on SYSFILES as AFS- CLEAR</p> <p>AND-ITEMS PL TCL-II End points 2,A471 /DAVES/ parameters Z</p> <p>BSELECT PA TCL def End points 35,4D,352B /DAVES/</p> | | | | | | |
| V15.1.0.0396 | 85972 | <p>New PH-MONITOR verb to monitor output of TIPH process, enhancement to PH-START</p> <p>Displays the latest output lines of a specified TIPH port.</p> <hr/> <p>Note</p> <p>The M option of PH-START must be used for this verb to work on Windows systems.</p> <hr/> <p>Syntax</p> <p>PH-MONITOR portno {lines}</p> <p>Syntax Elements</p> <p>Default is to show all verb definitions from the GLOBAL.MD, any alternative MD and the local MD</p> <table border="1" data-bbox="587 1232 1342 1559"> <thead> <tr> <th data-bbox="587 1232 778 1301"></th> <th data-bbox="778 1232 1342 1301"></th> </tr> </thead> <tbody> <tr> <td data-bbox="587 1301 778 1397">portno</td> <td data-bbox="778 1301 1342 1397">The port number of the TIPH to display the output from.</td> </tr> <tr> <td data-bbox="587 1397 778 1559">lines</td> <td data-bbox="778 1397 1342 1559">The number of lines to display from the end of the TIPH output. If not specified then the default is the last 10 lines..</td> </tr> </tbody> </table> <p>Example</p> <pre>:PH-MONITOR 402</pre> <p>The command displays last 10 lines (the default) of the output from the TIPH running on port 402.</p> <pre>:PH-START Enter task id for TIPH task?TEST Enter port number for TIPH task? Enter options?M</pre> | | | portno | The port number of the TIPH to display the output from. | lines | The number of lines to display from the end of the TIPH output. If not specified then the default is the last 10 lines.. |
| | | | | | | | | |
| portno | The port number of the TIPH to display the output from. | | | | | | | |
| lines | The number of lines to display from the end of the TIPH output. If not specified then the default is the last 10 lines.. | | | | | | | |

| Fix No | Bug No | Description | | | | |
|--------------|---|---|--------|-------------|-----------|---|
| | | <pre> Enter account for TIPH job?SYSMAN Enter account password? Enter command stream <CR to end> Use '<' for a null line >WHERE >POVF >TIME >SLEEP 120 >OFF > [1000] Tiph job started on account 'SYSMAN' using port 402 :PH-MONITOR 402 Last 10 lines of TIPH output for port 402 :POVF Total size 1.8 GB Total free 125.1 MB Percent free 6.95 :TIME 17:01:18 22 Apr 2020 :SLEEP 120 </pre> <p>PH-START</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>Enables monitoring tag in TIPH output (required to work on Windows).</td> </tr> </tbody> </table> | Option | Description | M | Enables monitoring tag in TIPH output (required to work on Windows). |
| Option | Description | | | | | |
| M | Enables monitoring tag in TIPH output (required to work on Windows). | | | | | |
| V15.1.0.0397 | 91591 | <p>Enhance LISTFILES to allow sorting of files by descending total file size.</p> <p>LISTFILES</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>V {limit}</td> <td>Sort the output by the descending total size of each file. An optional limit may be specified to restrict the output to files with a total size of over that value.</td> </tr> </tbody> </table> | Option | Description | V {limit} | Sort the output by the descending total size of each file. An optional limit may be specified to restrict the output to files with a total size of over that value. |
| Option | Description | | | | | |
| V {limit} | Sort the output by the descending total size of each file. An optional limit may be specified to restrict the output to files with a total size of over that value. | | | | | |
| V15.1.0.0398 | 91593 | <p>New GSSM verb to allow a global update of items in the files NETWORK, USERS and SECURITY (as controlled with menu within SSM).</p> | | | | |

| Fix No | Bug No | Description | | | | | | | | | | | | | | |
|--------|---|---|--------|-------------|---|-------------------------|------|---|---|---|---|---|---|--|---|---|
| | | <p>GSSM</p> <p>Allow the bulk updating/creating of user, network or security items from a SELECT list that are based on an existing or new item. This uses the existing SSM screens for USERS, SECURITY and NETWORK to allow modifying an existing item or creating a new one.</p> <p>Syntax</p> <p>GSSM {?} item ({U}{N}{S}{A}{C}{M})</p> <p>Default is to show the usage details</p> <table border="1" data-bbox="587 658 1342 2024"> <thead> <tr> <th data-bbox="587 658 778 723">Option</th> <th data-bbox="778 658 1342 723">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="587 723 778 788">?</td> <td data-bbox="778 723 1342 788">Show the usage details.</td> </tr> <tr> <td data-bbox="587 788 778 1048">item</td> <td data-bbox="778 788 1342 1048">The item id of the USERS, SECURITY or NETWORK source item to be used as the basis for the updating/creating. This can be an existing item or can be created (See C option). There are restrictions to the items that can be used.</td> </tr> <tr> <td data-bbox="587 1048 778 1341">U</td> <td data-bbox="778 1048 1342 1341">This is to affect the USERS file items. When using an existing item, the description and password fields cannot be modified. The following USER items are reserved cannot be used as a source item: DEFAULT, DSPMON, FILEDSP, NETDSP, REMFS, RLTYXDSP, SQLDEMO, SYSMAN and TAPEDSP.</td> </tr> <tr> <td data-bbox="587 1341 778 1570">N</td> <td data-bbox="778 1341 1342 1570">This is to affect the NETWORK file items. When using an existing item, the description and CCI fields cannot be modified. The following NETWORK items are reserved cannot be used as a source item: DEFAULT</td> </tr> <tr> <td data-bbox="587 1570 778 1924">S</td> <td data-bbox="778 1570 1342 1924">This is to affect the SECURITY file items. The following SECURITY items are reserved cannot be used as a source item: DEFAULT, DEFAULT.EXPLORER, DEFAULT.HARNESS, DEFAULT.REALWEB, DEFAULT.WEBSERVICE, REMFS, SYSMAN, SYSMAN.EXPLORER and TL.SECURITY.</td> </tr> <tr> <td data-bbox="587 1924 778 2024">A</td> <td data-bbox="778 1924 1342 2024">Add any items from the select list that do not already exist.</td> </tr> </tbody> </table> | Option | Description | ? | Show the usage details. | item | The item id of the USERS, SECURITY or NETWORK source item to be used as the basis for the updating/creating. This can be an existing item or can be created (See C option). There are restrictions to the items that can be used. | U | This is to affect the USERS file items. When using an existing item, the description and password fields cannot be modified. The following USER items are reserved cannot be used as a source item: DEFAULT, DSPMON, FILEDSP, NETDSP, REMFS, RLTYXDSP, SQLDEMO, SYSMAN and TAPEDSP. | N | This is to affect the NETWORK file items. When using an existing item, the description and CCI fields cannot be modified. The following NETWORK items are reserved cannot be used as a source item: DEFAULT | S | This is to affect the SECURITY file items. The following SECURITY items are reserved cannot be used as a source item: DEFAULT, DEFAULT.EXPLORER, DEFAULT.HARNESS, DEFAULT.REALWEB, DEFAULT.WEBSERVICE, REMFS, SYSMAN, SYSMAN.EXPLORER and TL.SECURITY. | A | Add any items from the select list that do not already exist. |
| Option | Description | | | | | | | | | | | | | | | |
| ? | Show the usage details. | | | | | | | | | | | | | | | |
| item | The item id of the USERS, SECURITY or NETWORK source item to be used as the basis for the updating/creating. This can be an existing item or can be created (See C option). There are restrictions to the items that can be used. | | | | | | | | | | | | | | | |
| U | This is to affect the USERS file items. When using an existing item, the description and password fields cannot be modified. The following USER items are reserved cannot be used as a source item: DEFAULT, DSPMON, FILEDSP, NETDSP, REMFS, RLTYXDSP, SQLDEMO, SYSMAN and TAPEDSP. | | | | | | | | | | | | | | | |
| N | This is to affect the NETWORK file items. When using an existing item, the description and CCI fields cannot be modified. The following NETWORK items are reserved cannot be used as a source item: DEFAULT | | | | | | | | | | | | | | | |
| S | This is to affect the SECURITY file items. The following SECURITY items are reserved cannot be used as a source item: DEFAULT, DEFAULT.EXPLORER, DEFAULT.HARNESS, DEFAULT.REALWEB, DEFAULT.WEBSERVICE, REMFS, SYSMAN, SYSMAN.EXPLORER and TL.SECURITY. | | | | | | | | | | | | | | | |
| A | Add any items from the select list that do not already exist. | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | |
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| | | C | Allow the creation of the source item if it does not already exist. |
| | | M | Allow modification of the active select list of items or creation of a new select list if one is not active (See list maintenance details below). The list maintenance will validate that each entry exists in the file before adding to the list unless combined with the A option. |
| | | <p>Restrictions</p> <p>Can only be run from the SYSMAN account.</p> <p>Comments</p> <p>One of options U, N or S must be specified.</p> <p>Newly created items based on the source item will use their id as the description rather than the source items description.</p> <p>If no changes are made to an existing source item using either EX or FI, the items in the active select list will not be changed and will report "No changes made."</p> <p>If the existing source item is deleted using FD or a new item is abandoned using EX, the items in the active select list will not be changed and will report "'<itemid>' has been deleted."</p> <p>Examples</p> <ul style="list-style-type: none"> To modify/create users based on a new user USER0, with an active select list containing the items USER1, USER2 and USER3 where only USER1 exists in USERS <pre>3 Items selected. >GSSM USER0 (UCA <set up USER0 as required and then FI> Apply changes to supplied list of items (Y/N) Y 'USER1' has been updated. 'USER2' has been added. 'USER3' has been added.</pre> <p>The options used are U for USER items, C for creating the source item if necessary and A to add any items that do not exist.</p> To modify existing entries based on an existing entry NETWORK0, where the list of entries to maintain will be entered manually. This is useful to | |

| Fix No | Bug No | Description |
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| | | <p>create a list where it is difficult to generate an active select list</p> <p>:GSSM NETWORK0 (NM</p> <p><enter the list of entries and confirm></p> <p><modify NETWORK0 as required and then FI></p> <p>Apply changes to supplied list of items (Y/N) Y</p> <p>'NETWORK1' has been updated.</p> <p>'NETWORK2' has been updated.</p> <p>'NETWORK3' has been updated.</p> <p>The options used are N for NETWORK items and M to maintain a list of entries.</p> <p>List Maintenance</p> <p>This will allow the entries in an active selection list to be modified or if no list is active, create a list of entries.</p> <p>The initial display (for example with items from an active selection list) may appear as</p> <div data-bbox="587 1014 1382 1668" style="border: 1px solid black; padding: 5px;"> <pre> GSSM Maintain list of USERS item ids ===== == Page 1 of 1 1. USER1 2. USER2 3. USER3 Option: 'P'rev Page, 'N'ext Page, 'F'irst Page, 'L'ast Page, 'S'ort Items, 'H'elp '*' add all items in file, 'A'dd items, 'D'elete items, 'C'ompleted, 'Q'uit </pre> </div> <p>Each command is accessed as a single keystroke with the available commands being described when the H key is pressed.</p> <div data-bbox="587 1798 1382 1982" style="border: 1px solid black; padding: 5px;"> <pre> GSSM Maintain list of USERS item ids ===== == </pre> </div> |

| Fix No | Bug No | Description |
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| | | <p>'S'ort items Sort the list into alphabetical order (after confirmation) and redisplay the list starting at the first page</p> <p>'F'irst page Display the first page of the list if not already displayed</p> <p>'N'ext page Display the next page of the list if not at the last page</p> <p>'P'revious page Display the previous page if not at the first page</p> <p>'L'ast page Display the last page if not already at the last page</p> <p>'*' Add items from the file that are not already in the list</p> <p>'Q'uit Abandon this list (after confirmation)</p> <p>'C'omplete The maintenance of this list is complete (after confirmation)</p> <p>When</p> <p>'A'dd items Add items to the end of list until a null item is entered</p> <p>'D'elete items Delete items from the list until a null item is entered</p> <p>'V'alidation Toggle checking that the entries exist in the file before adding to the list.</p> <p>'CR' to return</p> |
| V15.1.0.0399 | 91598 | <p>Additional Trigger types now available</p> <p>Trigger-type</p> <p>The type of trigger – the following are now available:</p> <p>READ or PRE-READ</p> <p>Runs the trigger routine before reading an item from the file.</p> <p>POST-READ</p> <p>Runs the trigger routine after reading an item from the file.</p> <p>CLEAR-FILE or PRE-CLEAR-FILE</p> <p>Runs the trigger routine before a CLEAR-FILE operation on a file data section.</p> <p>POST-CLEAR-FILE</p> |

| Fix No | Bug No | Description |
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| | | <p>Runs the trigger routine after a CLEAR-FILE operation on a file data section.</p> <p>DELETE-FILE or PRE-DELETE-FILE</p> <p>Runs the trigger routine before a DELETE-FILE operation on a file dictionary or data section.</p> <p>POST-DELETE-FILE</p> <p>Runs the trigger routine after a DELETE-FILE operation on a file dictionary or data section.</p> <p>Syntax</p> <p><code>DELETE-TRIGGER file-specifier [trigger-type *]</code></p> <p>The type of trigger may be:</p> <p>WRITE, PRE-WRITE, POST-WRITE, DELETE, PRE-DELETE, POST-DELETE, READ, PRE-READ, POST-READ, CLEAR-FILE, PRE-CLEAR-FILE, POST-CLEARFILE, DELETE-FILE, PRE-DELETE-FILE or POST-DELETE-FILE (see CREATE-TRIGGER)</p> <p>DELETE-TRIGGER file-specifier * will remove all triggers from a file.</p> |
| | | <p>New Verb LIST-ALL-TRIGGERS</p> <p>LIST-ALL-TRIGGERS</p> <p>Lists all the triggers associated with a Reality account.</p> <p>Syntax</p> <p><code>LIST-ALL-TRIGGERS {file-specifier}</code></p> <p>Comments</p> <p>The file specifier may be a local file (dictionary or data section), the master dictionary of an account or a combination of both. Triggers cannot be associated with Q-pointers. If no file specifier is provided, the current account is assumed.</p> <p>Example</p> <p><code>:LIST-ALL-TRIGGERS /LIVE-ACCOUNT</code></p> <p>Listing all triggers in Account 'LIVE-ACCOUNT'</p> <pre>LIVE-ACCOUNT STOCK WAREHOUSE PRE-READ: WHSE.TRIG HISTORY PRE-READ: HIST.TRIG POST-WRITE: HIST.TRIG</pre> |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|------------|---|---------------------------|------------|------------|-------------------------|---------|---|---|--------------------|--|--|---|---------------------|--|--|---|---------------------|--|--|---|----------------------|--|--|---|-------------------|--|--|---|--------------------|--|--|---|-------------------------|--|--|---|--------------------------|--|--|---|--------------------------|--|--|---|---------------------------|------------|---|---|-----------------------|--|--|---|--------------------|--|--|---|-------------------------|
| | | <p>ORDERS</p> <p>ORDERS</p> <p>POST-WRITE: ORDER.TRIG</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>Enhancement to ACCESS Function</p> <p>ACCESS(30)</p> <p>For each of the different calling environments, ACCESS(30) returns a number associated with the command or reason for entry.</p> <table border="1"> <thead> <tr> <th>Environment</th> <th>ACCESS(23)</th> <th>ACCESS(30)</th> <th>Calling Sub-environment</th> </tr> </thead> <tbody> <tr> <td>Trigger</td> <td>1</td> <td>0</td> <td>PRE WRITE trigger.</td> </tr> <tr> <td></td> <td></td> <td>1</td> <td>POST WRITE trigger.</td> </tr> <tr> <td></td> <td></td> <td>2</td> <td>PRE DELETE trigger.</td> </tr> <tr> <td></td> <td></td> <td>3</td> <td>POST DELETE trigger.</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>PRE READ trigger.</td> </tr> <tr> <td></td> <td></td> <td>5</td> <td>POST READ trigger.</td> </tr> <tr> <td></td> <td></td> <td>6</td> <td>PRE CLEAR FILE trigger.</td> </tr> <tr> <td></td> <td></td> <td>7</td> <td>POST CLEAR FILE trigger.</td> </tr> <tr> <td></td> <td></td> <td>8</td> <td>PRE DELETE FILE trigger.</td> </tr> <tr> <td></td> <td></td> <td>9</td> <td>POST DELETE FILE trigger.</td> </tr> <tr> <td>Conversion</td> <td>3</td> <td>0</td> <td>CALL conversion code.</td> </tr> <tr> <td></td> <td></td> <td>2</td> <td>B conversion code.</td> </tr> <tr> <td></td> <td></td> <td>3</td> <td>User-defined User Exit.</td> </tr> </tbody> </table> | Environment | ACCESS(23) | ACCESS(30) | Calling Sub-environment | Trigger | 1 | 0 | PRE WRITE trigger. | | | 1 | POST WRITE trigger. | | | 2 | PRE DELETE trigger. | | | 3 | POST DELETE trigger. | | | 4 | PRE READ trigger. | | | 5 | POST READ trigger. | | | 6 | PRE CLEAR FILE trigger. | | | 7 | POST CLEAR FILE trigger. | | | 8 | PRE DELETE FILE trigger. | | | 9 | POST DELETE FILE trigger. | Conversion | 3 | 0 | CALL conversion code. | | | 2 | B conversion code. | | | 3 | User-defined User Exit. |
| Environment | ACCESS(23) | ACCESS(30) | Calling Sub-environment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trigger | 1 | 0 | PRE WRITE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | POST WRITE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2 | PRE DELETE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 3 | POST DELETE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4 | PRE READ trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 | POST READ trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 6 | PRE CLEAR FILE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 7 | POST CLEAR FILE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 8 | PRE DELETE FILE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 9 | POST DELETE FILE trigger. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conversion | 3 | 0 | CALL conversion code. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2 | B conversion code. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 3 | User-defined User Exit. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V15.1.0.0400 | 91590 | <p>Add new TIDYPF verb</p> <p>TIDYPF</p> <p>Display saved lists and cataloged items associated with accounts that no longer exist and optionally remove them.</p> <p>Syntax</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | | |
|---|--|--|-----------|--|--------|-------------|---|---|---|--|---|---|---|----------------------------|---|---------------------------------|---|--|---|---|---|
| | | <p>TIDYPF {account} {(options)}</p> <p>Syntax Examples</p> <p>The default is to show all lists and catalogued items for accounts that do not exist</p> <table border="1" data-bbox="587 465 1342 723"> <tr> <td data-bbox="587 465 778 723">{account}</td> <td data-bbox="778 465 1342 723">The name of an account (either existing or no longer existing - see below). A list of accounts can be supplied from an active select list. If no account name is supplied, the default is to locate items for non-existent accounts.</td> </tr> </table> <table border="1" data-bbox="587 790 1342 1704"> <thead> <tr> <th data-bbox="587 790 778 853">Option</th> <th data-bbox="778 790 1342 853">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="587 853 778 954">N</td> <td data-bbox="778 853 1342 954">No page. Suppresses automatic paging (No Page).</td> </tr> <tr> <td data-bbox="587 954 778 1115">R</td> <td data-bbox="778 954 1342 1115">Remove items when prompted to confirm. This only works for a single account that must not exist else this option is ignored.</td> </tr> <tr> <td data-bbox="587 1115 778 1346">D</td> <td data-bbox="778 1115 1342 1346">Does not show any details and does not show any prompt for confirmation. Each item that is deleted is represented by a dot character. This must be used in conjunction with the R option.</td> </tr> <tr> <td data-bbox="587 1346 778 1408">L</td> <td data-bbox="778 1346 1342 1408">Only consider saved lists.</td> </tr> <tr> <td data-bbox="587 1408 778 1471">C</td> <td data-bbox="778 1408 1342 1471">Only consider catalogued items.</td> </tr> <tr> <td data-bbox="587 1471 778 1606">E</td> <td data-bbox="778 1471 1342 1606">Include existing accounts to produce an output similar to LISTPF. This will ignore the R option.</td> </tr> <tr> <td data-bbox="587 1606 778 1704">A</td> <td data-bbox="778 1606 1342 1704">Produce an alternative view of the items.</td> </tr> </tbody> </table> <p>Example</p> <pre data-bbox="587 1771 703 1798">:TIDYPF</pre> <p>The default command displays all saved lists and catalogued items for accounts that do not exist</p> <table border="1" data-bbox="587 1895 1382 2029"> <tr> <td data-bbox="587 1895 1382 2029"> <pre data-bbox="603 1912 1342 2018">:TIDYPF Listing possibly abandoned catalogued programs and lists Page 1</pre> </td> </tr> </table> | {account} | The name of an account (either existing or no longer existing - see below). A list of accounts can be supplied from an active select list. If no account name is supplied, the default is to locate items for non-existent accounts. | Option | Description | N | No page. Suppresses automatic paging (No Page). | R | Remove items when prompted to confirm. This only works for a single account that must not exist else this option is ignored. | D | Does not show any details and does not show any prompt for confirmation. Each item that is deleted is represented by a dot character. This must be used in conjunction with the R option. | L | Only consider saved lists. | C | Only consider catalogued items. | E | Include existing accounts to produce an output similar to LISTPF. This will ignore the R option. | A | Produce an alternative view of the items. | <pre data-bbox="603 1912 1342 2018">:TIDYPF Listing possibly abandoned catalogued programs and lists Page 1</pre> |
| {account} | The name of an account (either existing or no longer existing - see below). A list of accounts can be supplied from an active select list. If no account name is supplied, the default is to locate items for non-existent accounts. | | | | | | | | | | | | | | | | | | | | |
| Option | Description | | | | | | | | | | | | | | | | | | | | |
| N | No page. Suppresses automatic paging (No Page). | | | | | | | | | | | | | | | | | | | | |
| R | Remove items when prompted to confirm. This only works for a single account that must not exist else this option is ignored. | | | | | | | | | | | | | | | | | | | | |
| D | Does not show any details and does not show any prompt for confirmation. Each item that is deleted is represented by a dot character. This must be used in conjunction with the R option. | | | | | | | | | | | | | | | | | | | | |
| L | Only consider saved lists. | | | | | | | | | | | | | | | | | | | | |
| C | Only consider catalogued items. | | | | | | | | | | | | | | | | | | | | |
| E | Include existing accounts to produce an output similar to LISTPF. This will ignore the R option. | | | | | | | | | | | | | | | | | | | | |
| A | Produce an alternative view of the items. | | | | | | | | | | | | | | | | | | | | |
| <pre data-bbox="603 1912 1342 2018">:TIDYPF Listing possibly abandoned catalogued programs and lists Page 1</pre> | | | | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description |
|--------|--------|---|
| | | <pre> Account Type Item..... Last Modification DATA-BACKUP L LIST-FEB19 05 Mar 2019 04:11:59PM DATA-BACKUP L SAVED-LIST 23 Apr 2018 08:44:12AM *** TESTACC2018 C TEST_PROG 25 Feb 2019 02:37:09PM </pre> <p>:TIDYPF (A)</p> <p>The default command displays an alternate view</p> <pre> :TIDYPF (A Listing possibly abandoned catalogued programs and lists Page 1 Account/Item Last Modification DATA-BACKUP Saved Lists LIST-FEB19 05 Mar 2019 04:11:59PM SAVED-LIST 23 Apr 2018 08:44:12AM TESTACC2018 Cataloged Programs TEST_PROG 25 Feb 2019 02:37:09PM </pre> <p>:TIDYPF TESTACC2018 (R)</p> <p>Displays the saved lists and catalogued items for the TESTACC2018 that no longer exists and allow the items to be removed.</p> <pre> :TIDYPF TESTACC2018 (RA Listing possibly abandoned catalogued programs and lists Page 1 Account/Item Last Modification TESTACC2018 Catalogued Programs TEST_PROG 25 Feb 2019 02:37:09PM Do you still want to delete these items (Y/N) ? Y Deleted TESTPACC2019_O*C*TEST_PROG from POINTER-FILE : </pre> <p>Listing SAVED-LISTS in existing accounts</p> |

| Fix No | Bug No | Description | | | | | | | | |
|--------------|---|---|--------|-------------|---|---|---|---|---|---|
| | | <p>On the majority of systems, multiple users construct LISTS with the use of SAVE-LIST, COPY-LIST etc. These can adversely affect the behaviour of the system by 'filling' POINTER-FILE.</p> <p>TIDYPF accountname (EL</p> <p>This command will display all SAVED LISTS within the named account, any unwanted items may then be removed with DELETE-LIST.</p> | | | | | | | | |
| | | <p>Enhance DELETE-ACCOUNT</p> <p>DELETE_ACCOUNT</p> <p>Syntax</p> <p>DELETE-ACCOUNT {account-name} {(options)}</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>Suppress detailed listing.</td> </tr> <tr> <td>N</td> <td>Suppress paging of output.</td> </tr> <tr> <td>C</td> <td>Clean up possibly abandoned lists and catalogued items.</td> </tr> </tbody> </table> | Option | Description | D | Suppress detailed listing. | N | Suppress paging of output. | C | Clean up possibly abandoned lists and catalogued items. |
| Option | Description | | | | | | | | | |
| D | Suppress detailed listing. | | | | | | | | | |
| N | Suppress paging of output. | | | | | | | | | |
| C | Clean up possibly abandoned lists and catalogued items. | | | | | | | | | |
| V15.1.0.0401 | 91595 | <p>New Verb XDT</p> <p>XDT</p> <p>Displays dates and times converted between internal and external formats.</p> <p>Syntax</p> <p>XDT [value] {(options)}</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Use alternative display format. Times will be displayed in 12-hour format and dates with 2-digit years. The defaults are 24-hour and 4-digit years.</td> </tr> <tr> <td>I</td> <td>Inhibit prompt for value if no date/time value has been specified as part of the command.</td> </tr> </tbody> </table> <p>Operation</p> <p>The command will attempt to determine the type of value supplied from its format. If no value is supplied, the default is to use the current date and time and prompt for</p> | Option | Description | A | Use alternative display format. Times will be displayed in 12-hour format and dates with 2-digit years. The defaults are 24-hour and 4-digit years. | I | Inhibit prompt for value if no date/time value has been specified as part of the command. | | |
| Option | Description | | | | | | | | | |
| A | Use alternative display format. Times will be displayed in 12-hour format and dates with 2-digit years. The defaults are 24-hour and 4-digit years. | | | | | | | | | |
| I | Inhibit prompt for value if no date/time value has been specified as part of the command. | | | | | | | | | |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | <p>a value. If the value supplied is ambiguous then both time and date results are displayed.</p> <p>Comments</p> <p>The date format is recognised and displayed using the current DATE-FORMAT setting. The use of full stops in times is determined by the current setting of the ALT.MT environment option.</p> <p>Examples</p> <p>The following command displays the current date and time in both internal and external formats and prompts for a value to be converted.</p> <p>:XDT</p> <p>Externally 15/06/2020 11:11:26</p> <p>Internally 19160 40286</p> <p>Enter date or time value: Show the possible date and time for a numeric value</p> <p>:XDT 12345</p> <p>Externally 18/10/2001 03:25:45</p> <p>Internally 12345 12345</p> <p>Show the time and value for 10 minutes before midnight</p> <p>:XDT -00:10:00</p> <p>Externally 23:50:00</p> <p>Internally 85800</p> <p>Accept a full date and display its value using a 2-digit year</p> <p>:XDT 23 March 1964 (A</p> <p>Externally 23/03/64</p> <p>Internally -1378</p> <p>Interpret the value with dots as a time rather than a date when the environment option ALT.MT has been set and display the results using 12-hour format</p> <p>:XDT 13.23.45 (A</p> <p>Externally 01:23:45PM</p> <p>Internally 48225</p> |
| V15.1.0.0402 | 91596 | <p>New Verbs – LIST-TABLE and SORT-TABLE</p> <p>LIST-TABLE and SORT-TABLE</p> <p>Generates an English listing in the same way as LIST or SORT but formatted similar to an SQL SELECT statement and is not paged.</p> <p>Syntax</p> <p>As for LIST/SORT.</p> |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|--|---------------|-------------|---|--|-------|----------|------|---------------|------------|-----|----------|--------|----------|----------|-----|------|-------|--------|----------|-----|----------|--------|---------|----------|-----|------|-------|--------|----------|-----|------|-------|--------|----------|-----|------|-------|--------|----------|-----|----------|--------|----------|----------|-----|----------|--------|-------|--|-----|------|-------|-----------|----------|
| | | <p>LIST-TABLE filename BY dictitem list.of dict items (S)</p> <p>Additional option (optional)</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>Display the summary at the end of the listing.</td> </tr> </tbody> </table> <p>Comment</p> <p>As the width of the columns cannot be determined until all the data has been processed, large data sets will take longer to display.</p> <p>Example</p> <p>LIST-TABLE ROOMS WITH ROOM-CODE "ST" BED-TYPE RATE GUEST-NAME LEAVE-DATE (S)</p> <table border="1"> <thead> <tr> <th>ROOMS</th> <th>Bed Type</th> <th>Rate</th> <th>Current Guest</th> <th>Leave Date</th> </tr> </thead> <tbody> <tr> <td>365</td> <td>WaterBed</td> <td>104.00</td> <td>Ferguson</td> <td>29/07/91</td> </tr> <tr> <td>444</td> <td>King</td> <td>82.00</td> <td>Curtis</td> <td>26/07/91</td> </tr> <tr> <td>222</td> <td>WaterBed</td> <td>104.00</td> <td>O'Brien</td> <td>23/07/91</td> </tr> <tr> <td>478</td> <td>King</td> <td>82.00</td> <td>Kolman</td> <td>29/07/91</td> </tr> <tr> <td>354</td> <td>King</td> <td>82.00</td> <td>Taylor</td> <td>27/07/91</td> </tr> <tr> <td>355</td> <td>King</td> <td>82.00</td> <td>Taylor</td> <td>22/07/91</td> </tr> <tr> <td>318</td> <td>WaterBed</td> <td>104.00</td> <td>Petrillo</td> <td>22/07/91</td> </tr> <tr> <td>600</td> <td>WaterBed</td> <td>104.00</td> <td>Kerry</td> <td></td> </tr> <tr> <td>234</td> <td>King</td> <td>82.00</td> <td>McSweeney</td> <td>26/07/91</td> </tr> </tbody> </table> <p>9 rows in set (0.003 sec)</p> | Option | Description | S | Display the summary at the end of the listing. | ROOMS | Bed Type | Rate | Current Guest | Leave Date | 365 | WaterBed | 104.00 | Ferguson | 29/07/91 | 444 | King | 82.00 | Curtis | 26/07/91 | 222 | WaterBed | 104.00 | O'Brien | 23/07/91 | 478 | King | 82.00 | Kolman | 29/07/91 | 354 | King | 82.00 | Taylor | 27/07/91 | 355 | King | 82.00 | Taylor | 22/07/91 | 318 | WaterBed | 104.00 | Petrillo | 22/07/91 | 600 | WaterBed | 104.00 | Kerry | | 234 | King | 82.00 | McSweeney | 26/07/91 |
| Option | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S | Display the summary at the end of the listing. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROOMS | Bed Type | Rate | Current Guest | Leave Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 365 | WaterBed | 104.00 | Ferguson | 29/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 444 | King | 82.00 | Curtis | 26/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 222 | WaterBed | 104.00 | O'Brien | 23/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 478 | King | 82.00 | Kolman | 29/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 354 | King | 82.00 | Taylor | 27/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 355 | King | 82.00 | Taylor | 22/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 318 | WaterBed | 104.00 | Petrillo | 22/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 600 | WaterBed | 104.00 | Kerry | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 234 | King | 82.00 | McSweeney | 26/07/91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V15.1.0.0403 | 91599 | PCL2PDF – Correct handling of delta row compression raster images. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V15.1.0.0404 | 91594 | <p>New verb EESEARCH to allow searching of all, selected or single files for character strings</p> <p>EESEARCH</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | | | | | |
|----------|--|---|--|--|------|--|---------|---|----------|---|--|--|----------|--|--------|-------------|---|---|---|------------------------------------|---|---|---|--|
| | | <p>Searches a single file, a list of files or all files in current account for specified character strings. The differences between similar verbs are shown below</p> <table border="1" data-bbox="587 400 1342 792"> <thead> <tr> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>FIND</td> <td>Locates files with an item ID of the required field.</td> </tr> <tr> <td>ESEARCH</td> <td>Locates an item within the named file that contains the given string.</td> </tr> <tr> <td>EESEARCH</td> <td>Will locate items with the required ID or any items which contain the given string.</td> </tr> </tbody> </table> <p>Syntax</p> <p>EESEARCH {filename} {(options)}</p> <p>Syntax elements</p> <table border="1" data-bbox="587 952 1342 1279"> <thead> <tr> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Filename</td> <td>This is the file name to be searched. An asterisk can be used to signify all accounts. If a select list is active, the filename is not necessary and is ignored. If the file name is omitted and no select list is active then a No items present error is generated.</td> </tr> </tbody> </table> <p>Prompts</p> <p>STRING:</p> <p>Enter a character string and press RETURN. The prompt is repeated until only RETURN is pressed. The total character strings entered can consist of up to 500 characters.</p> <p>Double quotes should not be entered</p> <table border="1" data-bbox="587 1550 1342 2036"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ANDs string together. Items must contain all specified strings.</td> </tr> <tr> <td>F</td> <td>Include the item-id in the search.</td> </tr> <tr> <td>N</td> <td>Selects only those items that do not contain the specified string(s).</td> </tr> <tr> <td>O</td> <td>Sort the resulting matched items in a file alphabetically. Searching large files will slow the process if this option is used.</td> </tr> </tbody> </table> | | | FIND | Locates files with an item ID of the required field. | ESEARCH | Locates an item within the named file that contains the given string. | EESEARCH | Will locate items with the required ID or any items which contain the given string. | | | Filename | This is the file name to be searched. An asterisk can be used to signify all accounts. If a select list is active, the filename is not necessary and is ignored. If the file name is omitted and no select list is active then a No items present error is generated. | Option | Description | A | ANDs string together. Items must contain all specified strings. | F | Include the item-id in the search. | N | Selects only those items that do not contain the specified string(s). | O | Sort the resulting matched items in a file alphabetically. Searching large files will slow the process if this option is used. |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| FIND | Locates files with an item ID of the required field. | | | | | | | | | | | | | | | | | | | | | | | |
| ESEARCH | Locates an item within the named file that contains the given string. | | | | | | | | | | | | | | | | | | | | | | | |
| EESEARCH | Will locate items with the required ID or any items which contain the given string. | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Filename | This is the file name to be searched. An asterisk can be used to signify all accounts. If a select list is active, the filename is not necessary and is ignored. If the file name is omitted and no select list is active then a No items present error is generated. | | | | | | | | | | | | | | | | | | | | | | | |
| Option | Description | | | | | | | | | | | | | | | | | | | | | | | |
| A | ANDs string together. Items must contain all specified strings. | | | | | | | | | | | | | | | | | | | | | | | |
| F | Include the item-id in the search. | | | | | | | | | | | | | | | | | | | | | | | |
| N | Selects only those items that do not contain the specified string(s). | | | | | | | | | | | | | | | | | | | | | | | |
| O | Sort the resulting matched items in a file alphabetically. Searching large files will slow the process if this option is used. | | | | | | | | | | | | | | | | | | | | | | | |

| Fix No | Bug No | Description | | | | | | | |
|-----------|--|--|---|--|--|-----------|---|-----------|--|
| | | R | Suppresses the Item not on file message that is generated if no items are selected. | | | | | | |
| | | U | Specifies that case is significant when comparing strings. | | | | | | |
| | | W | Specifies that case should be ignored when comparing strings. | | | | | | |
| | | <p>Comments</p> <p>As the search can involve a large amount of data and/or items, the user has a number of opportunities to abort sections of the search using certain keystrokes.</p> <table border="1" data-bbox="587 792 1342 1088"> <thead> <tr> <th colspan="2" data-bbox="587 792 1342 860"></th> </tr> </thead> <tbody> <tr> <td data-bbox="587 860 778 956">Control-X</td> <td data-bbox="778 860 1342 956">aborts the search and immediately returns to TCL.</td> </tr> <tr> <td data-bbox="587 956 778 1088">Control-Y</td> <td data-bbox="778 956 1342 1088">aborts the search of the current file data section and begins searching the next data section.</td> </tr> </tbody> </table> <p>The process will check for the use of selected keystrokes before processing a file and after each batch of 500 items in the file.</p> <p>The name of the file and data section currently being processed is displayed to provide an indication of the progress.</p> <p>DataBasic object code is not searched.</p> <p>Case Sensitivity</p> <p>If neither U nor W is specified, the current data case setting (set with the DATA.CC environment option or the CASE TCL command) is used. See Case Sensitivity for more details.</p> <p>If both U and W are specified an error message is displayed and results are generated.</p> <p>Example 1</p> <pre data-bbox="587 1697 831 2011">:EESEARCH * (WF STRING: Henn STRING: Mc BP BP RESET-DEMO GUESTS GUESTS 143</pre> | | | | Control-X | aborts the search and immediately returns to TCL. | Control-Y | aborts the search of the current file data section and begins searching the next data section. |
| | | | | | | | | | |
| Control-X | aborts the search and immediately returns to TCL. | | | | | | | | |
| Control-Y | aborts the search of the current file data section and begins searching the next data section. | | | | | | | | |

| Fix No | Bug No | Description |
|-------------|--------|--|
| | | <p>GUESTS 234</p> <p>PAYMENT-CODES</p> <p>PAYMENT-CODES MC</p> <p>SAVE.GUESTS</p> <p>SAVE.GUESTS 143</p> <p>SAVE.GUESTS 234</p> <p>6 Items listed.</p> <p>In this example, all files on the current account (HOTEL in this example) are searched for any items containing any of the terms Henn or Mc regardless of case including the item id. The returned results show the file name, data section and item id of those matching items.</p> <p>Example 2</p> <pre>:LOGTO ACCOUNT1 :CASE [1315] Case sensitive. :EESEARCH SQL (A STRING ABC123 STRING DEF456 STRING : STOCK ORDERS ORD001 ORDERS ORD099 INVOICES INV004</pre> <p>3 Items listed.</p> <p>In this example, all files on the current account (ACCOUNT1) are searched for any items containing both the terms ABC123 and DEF456 using the case sensitively of the database (sensitive).</p> |
| 15.1.0.0405 | 91597 | <p>Enhancements to GENML/SGENML to output formats json, html, csv or XML.</p> <p>GENML, SGENML</p> <p>GENML generates an English listing in the same way as LIST. However, the result is embedded in an optional template specified by the user and saved to a file item.</p> <p>SGENML is similar, but its output is in item-id order unless sort criteria specify otherwise.</p> <p>Syntax</p> <pre>GENML file-specifier {item-list} {selection-criteria} {USING file-specifier} {sort-criteria} {output-</pre> |

| Fix No | Bug No | Description | | | | | | | | | | |
|--------|---|--|--------|-------------|---|----------------|---|--|---|--|---|---|
| | | <p>specification} {format-specification} {macro-call} {(options)}</p> <p>SGENML file-specifier {item-list} {selection-criteria} {USING file-specifier} {sort-criteria} {output-specification} {format-specification} {macro-call} {(options)}</p> <p>Refer to Sentence Structure for descriptions of these parameters.</p> <p>Options</p> <table border="1" data-bbox="587 645 1342 1167"> <thead> <tr> <th data-bbox="587 645 778 712">Option</th> <th data-bbox="778 645 1342 712">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="587 712 778 779">F</td> <td data-bbox="778 712 1342 779">Defines items.</td> </tr> <tr> <td data-bbox="587 779 778 904">P</td> <td data-bbox="778 779 1342 904">Sends the listing to the printer. You will not be prompted for an output file or item.</td> </tr> <tr> <td data-bbox="587 904 778 1030">T</td> <td data-bbox="778 904 1342 1030">Sends the output to the terminal. You will not be prompted for an output file or item.</td> </tr> <tr> <td data-bbox="587 1030 778 1167">X</td> <td data-bbox="778 1030 1342 1167">Requests the output type for the results. This can be HTML (the default if none is given), JSON or XML.</td> </tr> </tbody> </table> <p>If the X option is specified, the following prompt is displayed</p> <p>Conversion type:</p> <p>The valid responses are HTML, JSON, XML or <RETURN> . If <RETURN> is pressed, the default of HTML is used. If an invalid type is given, an "Item not on file error" is displayed and the type requested again.</p> <p>Operation</p> <p>When executed, the GENML and SGENML commands prompt an optional format type (see option X), the file and item into which to save the generated results, and for the file and item containing the template into which the Reality data will be embedded.</p> <p>For example:</p> <pre data-bbox="587 1780 1377 1995">:GENML EMP ID-SUPP TITLE EMPNO WITH EMPNO = "02]" Template file name or <RETURN> for default:HTML Template item name:EMPTEMPLATE Output file name:MYDIRVIEW Output item name:emp.htm</pre> | Option | Description | F | Defines items. | P | Sends the listing to the printer. You will not be prompted for an output file or item. | T | Sends the output to the terminal. You will not be prompted for an output file or item. | X | Requests the output type for the results. This can be HTML (the default if none is given), JSON or XML. |
| Option | Description | | | | | | | | | | | |
| F | Defines items. | | | | | | | | | | | |
| P | Sends the listing to the printer. You will not be prompted for an output file or item. | | | | | | | | | | | |
| T | Sends the output to the terminal. You will not be prompted for an output file or item. | | | | | | | | | | | |
| X | Requests the output type for the results. This can be HTML (the default if none is given), JSON or XML. | | | | | | | | | | | |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | <p>This selects data from the file EMP and outputs the attributes identified by TITLE and EMPNO, suppressing the item-id (the TITLE and EMPNO data definition items use the XT conversion code). The output is embedded in the template item EMPTEMPLATE in the file HTML and saved in item emp.htm in the file MYDIRVIEW.</p> <hr/> <p>Note</p> <p>If you press RETURN at the Template file name prompt, you are not prompted for a template item. Instead a simple default template is used.</p> <hr/> <p>The P and T options respectively send the generated output to the printer and terminal. If you specify either of these options.</p> <p>F Uses a template item containing placeholders that will be replaced by the relevant values in the columns from the data. Each row of data will create an item in the specified file or if the output is to the screen or printer, a continuous listing. This overrides the X option and the supply of a template file and item is mandatory. This allows the user more detailed formatting of the generated data.</p> <p>The template item uses placeholders to indicate where values from a row of data will appear. The placeholders are formatted as <%n%> where n is the number of the column to show the value from. For example, if a row of data consists of 123 VM ABC VM 456 and the template contains <%3%>~<%2%>~<%1%>, the resulting data will be 456~ABC~123. Any placeholders that are greater than the maximum number of columns in the data will not be changed.</p> <p>If the output is to a file, the requested output item id will be used to create unique item ids in the file. The entered value will generate an id consisting of the value from the first column of a row of data suffixed with a dot then the entered id. For example, if the value in the first column contains 123 and the entered id is ABC then the resulting id of 123.ABC will be generated. A supplied id containing an asterisk signifies the position of the first columns value in the generated id. For example, an entered id of ABC-* DEF would result in an id of ABC-123-DEF being used. The asterisk can be used any number of times and each occurrence will be replaced with the first columns value.</p> |
| V15.1.0.0406 | 91600 | <p>New verb SLS to perform log file reporting and maintenance</p> <p>SLS</p> <p>Within Reality there are many SYSTEM LOGS – these may grow, using disk space, slowing save/restore routines etc.</p> |

| Fix No | Bug No | Description | | | | | | | | | | | | | | | | | | | | | | |
|--------|----------------------------|--|--------|-------------|---|-----------------------|---|-------------------|---|----------------------------|--|--|-----|----------|-----|---------------|-----|----------------|-----|----------|-----|--------------------------|-----|---------------|
| | | <p>This new verb allows such data to be removed with optional reporting during the removal process.</p> <p>Syntax</p> <p>SLS LOG <lower date>,<upper date></p> <p>Dates must not contain spaces</p> <p>Options</p> <table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>R</td> <td>Delete matches items.</td> </tr> <tr> <td>D</td> <td>Detailed listing.</td> </tr> <tr> <td>S</td> <td>Summary listing (default).</td> </tr> </tbody> </table> <p>If an upper date is supplied then the comma is required. Where LOG can be</p> <table border="1"> <thead> <tr> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>ALL</td> <td>All logs</td> </tr> <tr> <td>SER</td> <td>Services logs</td> </tr> <tr> <td>ACC</td> <td>Accounting log</td> </tr> <tr> <td>PHH</td> <td>TIPH log</td> </tr> <tr> <td>DBD</td> <td>DataBasic Debugger Dumps</td> </tr> <tr> <td>TCL</td> <td>TCL Audit log</td> </tr> </tbody> </table> | Option | Description | R | Delete matches items. | D | Detailed listing. | S | Summary listing (default). | | | ALL | All logs | SER | Services logs | ACC | Accounting log | PHH | TIPH log | DBD | DataBasic Debugger Dumps | TCL | TCL Audit log |
| Option | Description | | | | | | | | | | | | | | | | | | | | | | | |
| R | Delete matches items. | | | | | | | | | | | | | | | | | | | | | | | |
| D | Detailed listing. | | | | | | | | | | | | | | | | | | | | | | | |
| S | Summary listing (default). | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| ALL | All logs | | | | | | | | | | | | | | | | | | | | | | | |
| SER | Services logs | | | | | | | | | | | | | | | | | | | | | | | |
| ACC | Accounting log | | | | | | | | | | | | | | | | | | | | | | | |
| PHH | TIPH log | | | | | | | | | | | | | | | | | | | | | | | |
| DBD | DataBasic Debugger Dumps | | | | | | | | | | | | | | | | | | | | | | | |
| TCL | TCL Audit log | | | | | | | | | | | | | | | | | | | | | | | |

2.3 Reality V15.3 product updates

The following Reality V15.3 service pack was released on 15th February 2021.

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0407 | 91601 | <p>Enable build of reality on Centos 8/Move to Reality V15.3</p> <ul style="list-style-type: none"> Fix 407 will move Reality to V15.3. When a DBUPDATE is used, the majority of the fixes will already be incorporated into the database and items such as ERRMSG 335, features etc. will be updated to read V15.3. |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | Fix 407 must be installed before building Reality with Centos 8. |
| V15.1.0.0408 | 91606 | Correct error handling in tmenu. |
| V15.1.0.0409 | 91608 | Amendment to realclone -pu to ensure all files are copied rather than just changes. |
| V15.1.0.0410 | 91610 | Correct handling of Instances under Centos. |

The following fixes were released on 9th Sept 2022.

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0411 | 91612 | Ensure PCL2PDF uses the Java Language Server as the default connection. |
| V15.1.0.0412 | 91611 | New version of DELETE-ACCOUNT verb to behave as original if run from PROC by PH. Fixes issue in SYS-UPDATE. |
| V15.1.0.0413 | 91572 | <p>Enhancement to DECRYPT/ENCRYPT to add algorithms for SHA, AES and other openssl</p> <p>ENCRYPT Function</p> <p>Two new encryption methods are now supported</p> <p>Method 7</p> <p>This provides access to the openssl message digest algorithms for MD4, MD5, MDC2, RIPEMD160, whirlpool, SHA0, SHA1, SHA224, SHA256, SHA384 & SHA512. The algorithm to use is passed as the key parameter of the function. The returned data is binary so care must be taken to process values such as character 255 that may occur in the result.</p> <p>Method 8</p> <p>This provides access to the openssl ciphers for AES-128-CBC, AES-192-CBC, AES-256-CBC, DES-CBC and DES-EDE3-CBC. The cipher, key (in hex) and initialisation vector (in hex) are passed as an attribute separated list in the key parameter. The returned data is binary so care must be taken to process values such as character 255 that may occur in the result.</p> <p>Examples</p> <pre>DIGEST = ENCRYPT("HELLO WORLD", "SHA512", 7) HEX = "" FOR A = 1 TO LEN(DIGEST) HEX:=DTX (SEQ (DIGEST [A, 1])) "R%2" NEXT A PRINT DOWNCASE (HEX)</pre> |

| Fix No | Bug No | Description |
|--------|--------|---|
| | | <p>Displays: 13d6c73ac8ccee9ff9ff6b0ba2ce19c5fc47ac21f9fd403c15 1fe88e0fd39f4223c29bc9bde59e1e3f272fd969fd6e2e6e 35be35072e742c4b36fec48feb87df</p> <p>Sets DIGEST to the SHA512 digest of the string "HELLO WORLD" and then displays the result in hexadecimal (variable HEX). This example takes into account that the resulting digest contains the character 255 (FF).</p> <pre> IV = OCONV("16 characters!?!#", "MCAX") KEY = OCONV("Thirty Two character secret key!", "MCAX") CIPHER = "AES-256-CBC" DIGEST = ENCRYPT("HELLO WORLD", CIPHER:@AM:KEY:@AM:IV, 8) HEX = "" FOR A = 1 TO LEN(DIGEST) HEX:=DTX(SEQ(DIGEST[A,1])) "R%2" NEXT A PRINT DOWNCASE(HEX) </pre> <p>Displays: de1ab4f1df9fa6831c3cf59abea09200</p> <p>Sets DIGEST to the result of applying the AES-256-AES cipher to encrypt the string "HELLO WORLD" using a secret key (KEY) and an initialisation vector (IV) and then displays the result in hexadecimal (variable HEX). This example takes into account that the resulting digest may contain the character 255 (FF).</p> <p>DECRYPT Function</p> <p>Two new decryption methods are now supported</p> <p>Method 7</p> <p>Decrypting a digest is not possible so this function will return a null value</p> <p>Method 8</p> <p>This provides access to the openssl ciphers such as AES-128-CBC, AES-192-CBC, AES-256-CBC, DES-CBC and DES-EDE3-CBC. The cipher, key (in hex) and initialisation vector (in hex) are passed</p> |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | <p>as an attribute se/parated list in the key parameter. The passed string is binary (as returned from a corresponding ENCRYPT). The returned data is binary so care must be taken to process values such as character 255 that may occur in the result.</p> <p>Examples</p> <pre>DIGEST = OCONV("DE1AB4F1DF9FA6831C3CF59ABEA09200", "MCXA") IV = OCONV("16 characters!?#", "MCAX") KEY = OCONV("Thirty Two character secret key!", "MCAX") CIPHER = "AES-256-CBC" MSG = DECRYPT(DIGEST, CIPHER:@AM:KEY:@AM:IV, 8) PRINT MSG</pre> <p>Displays: HELLO WORLD</p> <p>Sets MSG to the result of applying the AES-256-AES cipher to decrypt the digest (DIGEST) using a secret key (KEY) and an initialisation vector (IV) and then displays the result. The digest is originally in hexadecimal so is converted to a binary string before being passed to the DECRYPT function.</p> |
| V15.1.0.0414 | 91614 | Intercall functions added (U2-VIEW and U2-SET) to allow pointers to a U2 database. |
| V15.1.0.0415 | 91617 | Fix for issue with incorrect scale being applied for SQL-VIEW numeric and decimal columns. |
| V15.1.0.0416 | 91618 | U2-CHANGE verb added, to allow U2-VIEWS to enable password amendment with U2-VIEW'S. |
| V15.1.0.0417 | 91619 | SET-FILE reinstated - only relevant to new databases. The verb had been removed from mkdbase but would still be there in mkdbase -r. |
| V15.1.0.0418 | 91620 | DELETE-FILE syntax corrected and improved error checking. |
| V15.1.0.0419 | 91615 | Rebranded to NEC Software Solutions UK Limited. |
| V15.1.0.0420 | 85973 | Fix for tlmenu perl warnings when selecting to save a database with transaction handling. |

2.4 Reality V15.4 product updates

Following is the Reality V15.4 service pack released on 29th December 2023.

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0421 | 91623 | Update PH-MONITOR to read tmp file from Config file and permit use of windows 12 hour date format USA format. |
| V15.1.0.0422 | 91629 | Update JSON builder to be able to handle double quotes and slash characters (clog export). |
| V15.1.0.0423 | 91624 | <p>Enhancement to SP-CLEAR</p> <p>Add a date option to SP-CLEAR (available as an enhanced feature from TCL) which includes an archive feature for records removed.</p> <p>SP-CLEAR (D)</p> <p>The first time the D option is used, two new files will be created. These files are named SPOOL.JOBS.ARCHIVE and PRINT.JOB.CONTROL.ARCHIVE.</p> <p>This new feature may only be used from TCL. The following section describes the use of the D switch.</p> <p>: SP-CLEAR (D</p> <p>Form Queue – STANDARD name of Spool queue to clear</p> <p>Enter date (dd/mm/yy) - 03/04/23 Date after which spool jobs will not be cleared</p> <p>Archive jobs (Y/N) – Y Y or N should spool jobs be copied to archive files</p> <p>Records will be archived to SPOOL.JOBS.ARCHIVE and PRINT.JOB.CONTROL.ARCHIVE</p> <p>If the Archive by date switch has been used as above the spool jobs will be removed from SPOOL.JOBS and PRINT.JOB.CONTROL and will be copied to the archive files from where they may be retrieved if required.</p> <p>NB The archive files will only contain the latest version of the SPOOL.JOBS and PRINT.JOB.CONTROL</p> |
| V15.1.0.0424 | 91631 | Cosmetic changes to tmenu. |
| V15.1.0.0425 | 91633 | Correct Realclone issue on Windows. |
| V15.1.0.0426 | 91644 | Prevent issues arising with large items occasionally creating GFE's when multi-threaded restores are performed. |
| V15.1.0.0427 | 91640 | Ensure that DBSTART, PRESTARTUP and STARTUP Procs are called correctly. |

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0428 | 91624 | Further updates to SP-CLEAR (D). |
| V15.1.0.0429 | 91641 | Prevent DELETE-CATALOG from removing the data portion of the file when the file name is entered in error. |
| V15.1.0.0430 | 91622 | R Justified Dictionary items may fail to SELECT data correctly. |
| V15.1.0.0431 | 91632 | Ensure that DELETE-ACCOUNT gives a list of Q Pointered accounts which will be removed and a confirmation prompt before account deletion. |
| V15.1.0.0432 | 91605 | DIR-VIEWS. Ensure that (D option may be used when copying data between two directory views. |
| V15.1.0.0435 | 91649 | Within the tlmenu menus, force the software to verify and reset RRS_MODE_FS_ACTIVE to allow frequent toggles from primary to secondary. This fault has caused problems with Red Hat 8 failsafe systems. |
| V15.1.0.0436 | 91651 | <p>If you are using English with a right justified dictionary item and the data is of the form A01, A001 then the data should be surrounded by square brackets, for example,</p> <pre>SELECT file WITH rjdict = "[A01]"</pre> <p>If the brackets are not included in the enquiry, then Reality will match A01, A001, A0001 as being matched to A01.</p> <p>This is due to right justification changing the data into binary format where 00 is treated in the same way as 0, that is, A01 = A001</p> <p>If the data is wholly numeric then the brackets may be omitted as in this case 1001 will NE 10001.</p> <pre>SELECT file WITH rjdict = "1001"</pre> <p>This corrects a fault introduced with fix 430.</p> |

2.5 Reality V15.5 product updates

Following is the Reality V15.5 service pack released on 13th September 2024.

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0437 | 91652 | DELETE-CATALOG will not delete the data portion of any file, irrespective of the Emulation type. The code will also handle the options passed after * (For example, DELETE-CATALOG TESTA * (D). |
| V15.1.0.0438 | 91653 | Ensure that the START-DESPOOLER and TOP-DESPOOLER verbs are functioning correctly on all the Linux platform. |

| Fix No | Bug No | Description |
|--------------|--------|--|
| V15.1.0.0439 | 91646 | Cosmetic change to F-S. |
| V15.1.0.0440 | 91647 | Cosmetic change to DELETE-ACCOUNT. |
| V15.1.0.0441 | 91635 | Cosmetic change to realusers command. |
| V15.1.0.0442 | 91655 | A new command, LISTU.SUMMARY has been introduced. This command provides a summary of the counts of active users, despoolers, TIPH processes, and other processes. |
| V15.1.0.0443 | 91648 | Cosmetic change to tmenu. |
| V15.1.0.0443 | 91630 | Cosmetic change to tmenu. |
| V15.1.0.0444 | 91656 | When performing a F-S (FILE-SAVE), if a GFE is encountered then a list of files containing the GFE will be displayed. |
| V15.1.0.0445 | 91657 | Reality to be re-badged to 15.5. |
| V15.1.0.0446 | 91658 | <p>A new command DV.SEARCH has been introduced. This new command provides a streamlined way to ensure that all directory paths for DIR-VIEW files are correctly configured, improving the overall reliability and integrity of the directory structure.</p> <p>Example 1:</p> <p>If all DIR-VIEW files have valid paths, the DV.SEARCH command will produce the following output:</p> <pre>:DV.SEARCH *****DIR- VIEW SEARCH REPORT *****DIR- VIEW - All paths are Valid</pre> <p>Example 2:</p> <p>If any DIR-VIEW file has an invalid path, the DV.SEARCH command will specify the DIR-VIEW name and its invalid file path in the output.</p> <p>Account name will be truncated if it is very long.</p> <p>File name will be truncated if it is long.</p> <p>The report may scroll onto another screen if many incorrect values are found.</p> <pre>:DV.SEARCH ***** List of Invalid DIR-VIEWS *****</pre> |

| Fix No | Bug No | Description |
|--------|--------|---|
| | | <pre>ACCOUNT DIR-VIEW NAME Incorrect Path ACCOUNT-WITH-VERY-LO F C:\HENRY\TEST ACCOUNT-WITH-VERY-LO FILE.WITH.VERY.LONG. D:\ ENGLISH - All ENGLISH TEST2 C:\TEST2 ENGLISH TRAIN C:\TRAINING TEST1 FRED2 D:\CHICKEN THIS.IS.A#TEST F C:\HENRY\TEST THIS.IS.A#TEST FILE.WITH.LONG.NAME D:\TEST WIKI UIFVB /cora/backedup/ziggy/src/DPS/SYS *****</pre> |

2.6 Reality V15.6 product updates

Following is the Reality V15.6 service pack released on 08th September 2025.

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0447 | 91669 | <p>This enhancement resolves inconsistent RESTful behaviour noticed on the newer versions of windows.</p> <p>Several DLLs were upgraded to their latest versions to ensure RESTful functionality remains compatible or consistent across different Windows environments, from older versions up to Windows Server 2025.</p> <p>The updated DLLs are:</p> <ul style="list-style-type: none"> • libeay32.dll • ssleay32.dll • msvcr100.dll • vcruntime140.dll |
| V15.1.0.0448 | 91677 | <p>New verb LIST-DBASE-INDEXES to list all Indexes within the database.</p> <p>The existing TCL command LIST-INDEXES /ACC will display indexes from the specific account ACC.</p> <p>The new TCL command LIST-DBASE-INDEXES runs within the SYSMAN account and will display all indexes present across the database.</p> <p>Syntax: LIST-DBASE-INDEXES Example 1: No Index case : LIST-DBASE-INDEXES Result / Output: NO INDEXES EXIST</p> <p>Example 2: Multiple Indexes case : LIST-DBASE-INDEXES</p> |

| Fix No | Bug No | Description |
|--------------|--------|--|
| | | <p>Result / Output: Indexes in '/TEST' Page 1 File Data Section Index name Status Definition TT TT INDEX1 ok Explicit index, BY A1 BY A2 INDEX2 ok Explicit index, BY A1 BY A2 INDEX3 ok Explicit index, BY A1 BY A2 [2100] 3 indexes, no errors.</p> |
| V15.1.0.0449 | 91660 | <p>Enhanced listdb command. Using listdb will now display the database list sorted by Instance and Database Name.</p> <p>The existing command listdb -a has been enhanced so that the list of databases displayed will be sorted first by Instance Name, followed by Database Name. Previously, the results were sorted solely by database name. With this enhancement, executing the listdb command will now display a more structured and intuitive output, grouped by instance for better clarity and management.</p> <p>Syntax: listdb -a Example:</p> <pre># listdb -a</pre> <p>Result / Output:</p> <pre>ace /export/home/dbases/ace V15.1.0.0446 1 NA; N;Standalone realman notlocked delaccnew /export/home/dbases/delaccnew T15.1. 0.0446 1 NA;N;Standalone realman notlocked train /export/home/dbases/train V15.1.0.0446 1 NA;N;Standalone realman notlocked clone3 /export/home/dbases/clone3 V15.1.0.0446 1 NA;N;Standalone realman notlocked delacc1 /realman/delacc1 V15.1.0.0446 1 NA;N;S tandalone realman owner /usr/realman/15.1 clone1 /export/home/dbases/clone1 V15.1.0.0446 1 ;N;Standalone realman notlocked /usr/realman/1 5.1_1 clone2 /export/home/dbases/clone2 V15.1.0.0446 1 ;N;Standalone realman notlocked /usr/realman/1 5.1_2 clone4 /export/home/dbases/clone4 V15.1.0.0446 1 ;N;Standalone realman notlocked /usr/realman/1 5.1_4 clone5 /export/home/dbases/clone5 V15.1.0.0446 1 ;N;Standalone realman notlocked /usr/realman/1 5.1_5 clone6 /export/home/dbases/clone6 V15.1.0.0446 1 ;N;Standalone realman notlocked /usr/realman/1 5.1_6</pre> |

| Fix No | Bug No | Description |
|--------------|--------|---|
| V15.1.0.0450 | 91668 | <p>Enhancement - Input Screen for the <code>realityrc</code> file to allow changes to the <code>realityrc</code> file from TCL and remove the requirement to use the Unix vi editor.</p> <p>To simplify realityrc file configuration and management, a new verb RCEDIT has been introduced. A user-friendly input screen prompts for display, add or update, and removal of configurable settings in the \$REALROOT/files/realityrc file.</p> <p>Syntax: <code>RCEDIT</code> Example Steps:</p> <pre> :RCEDIT When prompted for the editor type (SE/ED), enter your choice. ED will drop into the Reality line editor whilst SE will use the Reality Screen editor Enter editor type (SE/ED): ?ED Information may be added, updated or deleted using the SE or ED editor. For details on editor functionality, please refer to the reality online documentation.</pre> <hr/> <p>Note To ensure the changes take effect, a killreal/realstart should be issued otherwise only new connections will use any amended settings.</p> |
| V15.1.0.0451 | 91663 | <p>Enhancement to SYSINFO.</p> <p>To improve support and diagnostics, realityrc information is now included in the SYSINFO output. This provides deeper insight into the system configuration that will aid in resolving any issues more effectively.</p> <p>Syntax: <code>:SYSINFO</code> Example: <pre>:SYSINFO</pre></p> <p>Result / Output: <pre> START SYSINFO WARNING - You are not root and access may be limited TO:110209 Add System Configuration Add Reality Build and Fixes Add Feature Keys Add Custom Options Add POVf Add realityrc Add TCL Stacker Configuration Add plog -h (raw log header) The report has been saved to 110209 in SYSDATA.</pre></p> |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | <p>If the problem was in DataBasic please use something like: CAPTURE PRINT-CATALOG [File] [Program] TO:(SYSDATA 110209 to append DataBasic details to this report. Include the T for tape option to T-DUMP the final item to a tape device.</p> |
| V15.1.0.0452 | 91665 | <p>Incorrectly sized files can lead to performance bottlenecks, instability, or system inefficiencies within Reality environments. .</p> <p>A new verb RSZ.AUTO is introduced which will not resize files but will update all the file sizing parameters that will be applied on the next restore.</p> <p>Syntax: RSZ.AUTO</p> <p>4 prompts will appear</p> <pre>AUTO FILE RESIZER ~~~~~ (U)pdate Run or (R)eport Only? R Minimum Percentage to Resize Undersize Files? (1-100) :10 Port No. of Last File-Save? 401 Account Name to Resize or 'ALL' ALL</pre> <p>Prompt 1 should be U or R using R will cause a report to be added to the spooler while using U will also create a report but file dictionary items (attribute 13) will be updated with parameters to be applied on the next restore.</p> <p>Prompt 2 should be a number 1 – 100 - this is the additional space to be added to a file to allow for growth</p> <p>Prompt 3 should be the port number of a recent F-S or ALL-FILE-STATS as the program will make use of STATFILE,PORTXXX</p> <p>Prompt 4 should be ALL or a single account name.</p> <p>Example: RSZ.AUTO with (R)eport Only</p> <pre>:RSZ.AUTO AUTO FILE RESIZER ~~~~~</pre> |

| Fix No | Bug No | Description |
|--------------|--------|---|
| | | <pre> (U)pdate Run or (R)eport Only? R Minimum Percentage to Resize Undersize Files? (1-100) :20 Port No. of Last File-Save? 401 Account Name to Resize or 'ALL' ALL Selecting SYSTEM Auto File Resizer Update Report is now available in Spooler : Results at spooler: 09:24:50 25 Jun 2025 16 Print Jobs Page 2/ 2 Job-Id Queue Name Port Status User Job Created CP OP Size Prtd 12 STANDARD 401 Queued realman 02 Jun 15:16 1 1 0 13 STANDARD 401 Queued realman 02 Jun 15:16 1 1 0 14 STANDARD 401 Queued realman 03 Jun 14:43 1 6 0 15 STANDARD 401 Queued realman 03 Jun 14:45 1 1 0 16 STANDARD 401 Queued realman 25 Jun 09:23 1 6 0 Job list - >16 Print Job Id - 16 Top .P Select STAT-FILE,PORT401 WITH *A1 = "BASIC.CONVERSION*]" 9 Items selected. /BASIC.CONVERSION/MD 57 53 /BASIC.CONVERSION/PRIOR.PF,PRIOR.PF 51 53 /BASIC.CONVERSION/PRIOR.OBJ,PRIOR.OBJ 51 53 /BASIC.CONVERSION/CONVERTER.LOG,XLATE 7 3 Select STAT-FILE,PORT401 WITH *A1 = "DENAT*]" 7 Items selected. /DENAT/MD 11 53 /DENAT/BP,BP 11 1 /DENAT/ENGLISH,ENGLISH 5 13 /DENAT/UTILITY.MSGS,UTILITY.MSGS 7 5 Select STAT-FILE,PORT401 WITH *A1 = "ENGLISH- TUTORIAL*]" 1 Items selected. /ENGLISH-TUTORIAL/MD 29 53 Select STAT-FILE,PORT401 WITH *A1 = "GLOBAL.MD*]" 1 Items selected. /GLOBAL.MD/MD 101 53 EOI </pre> |
| V15.1.0.0453 | 91666 | <p>Enhancement - Display screen for Daemon Logs.</p> <p>A new verb DLOG is a cross-platform utility designed to help users easily view the contents of the daemon.log file from their Reality environment, without needing to use Unix-style commands.</p> |


| Fix No | Bug No | Description |
|--------|--------|--|
| | | <p>The utility displays the most recent 200 lines of the log for the active instance, using a paging mechanism that shows 20 lines at a time with a prompt to press "Enter" to continue. If fewer than 200 lines are found in the current log, DLOG will automatically read from older log files to complete the view. The utility works seamlessly across all supported operating systems.</p> <p>: DLOG Example: :DLOG</p> <p>Result / Output: Total lines in file: 2994 Reading the last 200 lines starting from line 2795</p> <p>-----</p> <pre> Jun 23 19:46:26 #7284 realdr DEBUG: Async:6596 Message code 0404 Jun 23 19:46:26 #7424 realcd DEBUG: kill pid 1624, signal 0 Jun 23 19:46:26 #21980 realdd[0] DEBUG: Async:1624 Message code 0404 Jun 23 19:46:26 #7424 realcd DEBUG: Async:7428 Message code 0407 Jun 23 19:46:28 #7284 realdr DEBUG: RnwsAccept failed 32020 Jun 23 19:46:28 #7284 realdr DEBUG: Waiting for connection on port 1210 Jun 23 19:46:33 #7284 realdr DEBUG: RnwsAccept failed 32020 Jun 23 19:46:33 #7284 realdr DEBUG: Waiting for connection on port 1210 Jun 23 19:46:38 #7284 realdr DEBUG: RnwsAccept failed 32020 Jun 23 19:46:38 #7284 realdr DEBUG: Waiting for connection on port 1210 Jun 23 19:46:39 #21980 realdd[0] DEBUG: Vectoring mod 1 fun 8 Jun 23 19:46:39 #7424 realcd DEBUG: Async:7428 Message code 0406 Jun 23 19:46:39 #21980 realdd[0] DEBUG: Async:1624 Message code 0407 Jun 23 19:46:39 #7424 realcd DEBUG: Vectoring mod 1 fun 13 Jun 23 19:46:43 #7284 realdr DEBUG: RnwsAccept failed 32020 Jun 23 19:46:43 #7284 realdr DEBUG: Waiting for connection on port 1210 Jun 23 19:46:43 #7424 realcd DEBUG: Vectoring mod 1 fun 8 Jun 23 19:46:43 #7424 realcd DEBUG: kill pid 6596, signal 0 Jun 23 19:46:43 #7284 realdr DEBUG: Async:6596 Message code 0404 Jun 23 19:46:43 #7424 realcd DEBUG: kill pid 1624, signal 0 </pre> |


| Fix No | Bug No | Description |
|--------------|--------|--|
| | | Press Enter to continue... |
| V15.1.0.0454 | 91667 | <p>Enhancement - Input screen for database config File.</p> <p>To simplify database config file configuration and management, a new verb EDITDBCONFIG has been introduced. This will display a user-friendly input or display screen which enables the use of the Reality line editor or the Reality screen editor for amendment of the database config file.</p> <p>Example:</p> <pre>: EDITDBCONFIG</pre> <ol style="list-style-type: none"> 1. Enter your choice Enter (D to display config file) or (E to edit config file): ?E 2. Enter your choice for editor type (SE/ED): Enter editor type (SE/ED): ?ED <hr/> <p>Note</p> <p>To ensure the changes take effect, a killreal/realstart or realserv -e/realserv -s is essential.</p> |
| V15.1.0.0455 | 91679 | <p>Amendment has been made to the realstart utility to improve instance verification on Unix/Linux systems by ensuring that the correct Reality instances are initiated during startup.</p> <p>The amendment will include details of the Rawlog if it has been configured.</p> <p>Syntax: realstart</p> <p>When rawlog is setup: root@sundev:~# realstart</p> <pre>realstart, version 45.1 The Install_SN script has been installed The Install_Key script has been installed The show_key script has been installed The /etc/init.d/reality script has been installed The /etc/init.d/shadow script has been installed The realityrc script has been installed The realcshrc script has been installed</pre> <pre>runrealcd: Reality daemon 23090 writing to /usr/realman/15.1/files/daemon.log</pre> <p>The base, 15.1 central daemon has been started</p> <p>Current RawLog Status:</p> |

| Fix No | Bug No | Description | | | | | | | | | | |
|--------------|--------|--|-------|------|------|-------|-----|---------|------|-----|--|--|
| | | <p>Status LIVE, Initialised 14:05:03 Jun 25, Last updated 14:05:03 Jun 25</p> <p>Reality instance 15.1 central daemon pid: 23090 root@sundev:~#</p> <p>When rawlog is not setup: [root@RLTY-DEV-RHL85 ~]# realstart</p> <p>realstart, version 45.1 The Install_SN script has been installed The Install_Key script has been installed The show_key script has been installed The /etc/init.d/reality script has been installed The /etc/init.d/shadow script has been installed The realityrc script has been installed The realcshrc script has been installed</p> <p>runrealcd: Reality daemon 2132676 writing to /usr/realman/15.1/files/daemon.log</p> <p>The base, 15.1 central daemon has been started</p> <p>Raw log not setup for Reality instance 15.1</p> <p>Reality instance 15.1 central daemon pid: 2132676 [root@RLTY-DEV-RHL85 ~]#</p> | | | | | | | | | | |
| V15.1.0.0456 | 91680 | <p>Enhancement – new verb PFSEARCH File search by partial name.</p> <p>A new verb PFSEARCH will prompt the user to enter a fragment of the file name (for example, AUDIT). It will generate an active list and display all matching files containing the input string, such as TEST.AUDIT or AUDIT.TEST, regardless of the position of the phrase within the filename.</p> <hr/> <p>Note The partial filename will be always converted to Uppercase for fetching the matching file names) so entering Eng will not locate files with mixed case names such as Eng.file or similar.</p> <hr/> <p>Syntax: PFSEARCH Example: :PFSEARCH Enter partial file name to Search: ?Eng</p> <p>File definition items in account: DENAT Page 1</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">File</th> <th style="text-align: left;">name</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Ftype</th> <th style="text-align: left;">Mod</th> </tr> </thead> <tbody> <tr> <td>Details</td> <td>Just</td> <td>Len</td> <td></td> <td></td> </tr> </tbody> </table> | File | name | Type | Ftype | Mod | Details | Just | Len | | |
| File | name | Type | Ftype | Mod | | | | | | | | |
| Details | Just | Len | | | | | | | | | | |

Section 2: Product updates

| Fix No | Bug No | Description |
|--------------|--------|--|
| | | ENGLISH 1 1 L 10 DL B2 ENGLISH 5 1 L 10 DL B3 |
| V15.1.0.0457 | 085977 | Re-badging Reality to be named Reality 15.6. The logon banner will be amended to read 15.6. |



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