Reality v11.0

Release Information

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Document control

Software Version	Document Status	Document Revision	Issue Date	Reason for Change
V11.0	Published	v0.1	October, 2004	Final draft

Table of Contents

Section 1: Introduction

Reality is a software environment that supports multiple databases on a single host and includes a range of powerful utilities for building, managing and accessing the databases.

The release information in this document applies to Reality V11.0 for UNIX and Windows. Reality V11.0 adds support for more platforms and environments and enhanced compatibility with similar database systems. Faults reported since Production Release of Reality V10.0 have been resolved. See New Features in Reality V11.0 (page 11) and Fault Resolutions (page 21) for more details.

Reality V11.0 is supplied on two CDs. Included on the first CD are:

- The Reality database software.
- User Documentation
- UNIX-Connect – networking software that provides communications between Reality databases and between Reality and host system environments.
- Reality Remote Tape – server software that allows a Reality host to use tape units on remote systems.
- PCSNI – client software that allows communication between a PC and a Reality database.
- JReal – client software that provides the Java programmer with the ability to run Remote Basic subroutines and to write custom servlets to access a Reality database via RealWeb.
- Reality Explorer – client software that plugs in to Windows Explorer to provide a graphical view of a Reality database.
- RealWeb – client software that provides a Web developer with DataBasic experience with access to data held in a Reality database.
- RealSQL-JDBC Driver – client software that provides a standard API for Java applications, applets and servlets using SQL to access data.
- RealSQL-ODBC Driver – client software that allows PC applications to access data using SQL.
- WinSQLM – client software that assists in creating SQL tables based on existing Reality dictionary definitions.
- RealEdit – a Reality editor that runs on Windows PCs.
- Reality and RealWeb demonstration software.

The second CD contains the Reality GUI Administration tool, including the:

- GUI Administration server.
- Client configuration utility.
- Client deployment service. This version of the software supersedes all previously released versions. NEC policy is to withdraw support for previous versions six months after a new release. The relevant date for this software can be obtained from your NEC representative or the NEC web site, www.nec-is.com/.

Section 2: Related documents

Reality is supplied with comprehensive on-line documentation for viewing in a web browser. Refer to the Document Directory in the on-line documentation for details.

Section 3: Packaging

All of the software comprising this release is supplied on the installation CDs, with electronic versions of all documents (including this one).

The first installation CD contains the following components.

Software	Version
PDS History Tool	V11.0
Reality	V11.0
User Documentation	V11.0
UNIX-Connect)	V1.4.2
Reality Remote Tape	V11.0
Reality Explorer (client)	V1.0.1
Reality Explorer Help (client)	V1.0
PCSNI (client)	V2.3.1
JReal (client)	V3.1
RealSQL-JDBC Driver (client)	V1.0.1
RealSQL-ODBC Driver (Windows client)	V2.5
RealSQL-ODBC Driver (UNIX client)	V2.5
RealWeb HTML (client)	V3.0
RealWeb Servlets (client)	V3.1

WinSQLM (client)	V2.0
Reality Demonstration	V1.0
RealWeb Demonstration	V1.0
WinSNI Configuration Editor (client)	V1.0
RealEdit (client)	V1.1.1
TCP Bridge	V1.0.1

The second installation CD contains the following components.

Software	Version
GUI Administration Tools	V2.0
Installation Guide for GUI Administration Tools	V2.0

Section 4: Prerequisites

4.1 Reality on UNIX

One of the following:

- SUN Sparc running Solaris 2.6, 7, 8, or 9.
  IBM P Series (RS 6000), running AIX 4.3.3 & 5L.
  Hewlett Packard PA-RISC running HP-UX 11i.
  PC with Intel Pentium processor or equivalent running Red Hat Linux version 7.2 or 9, or ES/AS versions 2.1 and 3.
- 128Mb RAM minimum (512Mb recommended), plus 2-6Mb per Reality User. See also Memory on page 8.
- 500 Mb of available space to accommodate setup (actual hard disk used once installed will be between 220Mb and about 350Mb, depending on the system components installed).
- Korn shell.
- Perl – this is supplied with AIX, HP-UX and Linux (on HP-UX some configuration is necessary – contact NEc for details). On Solaris, Perl is installed when you install Reality.
- UNIX-Connect for networking (supplied on the Reality CD).
- NEC Customisation (a CD is available for SUN – for other operating systems, contact NEC).
- C compiler (on Solaris, if a C compiler is not available you can install the GNU C Compiler from the NEC Customisation CD).

4.1.1 UNIX-Connect

'rosi' UNIX user id with a home directory on a file system with at least 25 Mbytes free.

4.2 Reality on windows

- PC with Intel Pentium processor or equivalent, 200MHz or faster, running Windows NT 4.0 SP3+, 2000 SP1+, XP Home Edition or XP Professional Edition.

Note

- Reality is not available for Windows 95, 98, 98 SE or ME, though many of the client components can be installed on Windows 98 (refer to the Reality Client Components, Installation Guide for details).
- Reality is not currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

- 64Mb RAM minimum (128Mb recommended), plus 2-6Mb per Reality User. See also Memory below.
- 500Mb of available disk space to accommodate setup (actual hard disk used once installed will be between 150Mb and about 350Mb, depending on the system components installed).
- It is recommended that Reality is installed on an NTFS partition.

- The Reality database can be loaded on to a Primary Domain Controller, Backup Domain Controller, stand-alone member server or WorkStation.
- NEC can take no responsibility for the processor and memory requirements of other applications running on a Windows server. Ideally, Reality should be loaded on a dedicated server.
- Reality backup and restore is supported on 4mm, 8mm and DLT tape units.
- Using at least a dual processor system is highly recommended.

4.3 Memory

Reality memory usage is difficult to predict, but as a rough sizing guide use 128Mb for the system and then 2Mb to 6Mb per user, depending on type of user and application. Performance problems are generally caused by lack of memory. If the server is not dedicated to Reality then other application memory requirements must be added to this.

4.4 Foreign database support and SQL view

These features require a working ODBC installation, with appropriate ODBC driver(s), on the Reality system.

4.5 Client components

Note

The Reality Client Components are not currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

4.5.1 RealWeb

- A web server with support for Java servlets. (This can be on the same system as the Reality database or on another system.) On web servers that do not support servlets, plug-ins can be used to add servlet support.
- Java Run Time Environment (JRE) version 1.2 or above. If this is not available, it can be downloaded from java.sun.com/j2se/.
- If you are connecting to a Reality database on a UNIX host, the host will require UNIX-Connect.

4.5.2 RealSQL-JDBC driver

- Java Run Time Environment (JRE) version 1.2 or above. If this is not available, it can be downloaded from java.sun.com/j2se/.
- If you are connecting to a Reality database on a UNIX host, the host will require UNIX-Connect.

4.5.3 Reality explorer

- Microsoft Windows 98, NT4.0, 2000 or XP (Home or Professional).
- NEC PCSNI software V2.2 Rev C or later.

- A Winsock compliant TCP/IP transport stack for TCP/IP connections.
- If you are connecting to a Reality database on a UNIX host, the host will require UNIX-Connect.

4.5.4 RealEdit

- Microsoft Windows 98, NT4.0, 2000 or XP (Home or Professional).
- NEC PCSNI software V2.2 Rev C or later.

4.5.5 RealSQL-ODBC driver

- Microsoft Windows 98, NT4.0, 2000 or XP (Home or Professional).
- NEC PCSNI software V2.2 Rev C or later.
- Any ODBC Level 1 or 2 compliant application.
- A Winsock compliant TCP/IP transport stack for TCP/IP connections.
- If you are connecting to a Reality database on a UNIX host, the host will require UNIX-Connect.

The PC applications and transport stacks use large amounts of memory. It is therefore essential that PCs running this package are configured for the optimum use of memory, otherwise it is possible that GPFs and other memory type errors will occur.

4.5.6 WinSQLM

- Microsoft Windows 98, NT4.0, 2000 or XP (Home or Professional).
- NEC PCSNI software V2.2 Rev C or later.
- A Winsock compliant TCP/IP transport stack for TCP/IP connections.
- If you are connecting to a Reality database on a UNIX host, the host will require UNIX-Connect.

4.5.7 Remote tape server

Any UNIX or Windows system that supports Reality.

4.6 Online documentation

The on-line documentation can be installed on a web or file server, or on individual PCs running Windows 98, NT 4.0, 2000 or XP. On Windows systems, they can also be viewed from the Reality CD.

To view the on-line documentation, you will require one of the following web browsers:

- Internet Explorer 5.5 or 6.0 (PC only). –or–
- Netscape 6.x or 7.x (PC or UNIX). –or–
- Mozilla 1.4 or 1.5 (PC or UNIX).

Internet Explorer is recommended.

Note

For all browsers, a compatible Java plug-in is a prerequisite. In many cases, this is not installed as standard – for more information, refer to the Reality FAQ pages on the NEC portal (http://www.nec-is.com/portal/knowledgebase/pids/kb_index.html).

4.7 GUI administration tools

4.7.1 GUI administration server

The GUI Administration server will run on the majority of platforms that support Reality V11.0, subject to the following additional requirements:

4.7.1.1 UNIX and windows

- Reality V11.0.
- Java V1.4.1_02 or later. (Versions of the JRE suitable for Windows, Linux and Solaris are supplied on the CD.)

Note

Java V1.4.1_02 is not available for Solaris 2.6 and 7.

- 256Mb RAM minimum (512Mb recommended), plus 2-6Mb per Reality User.
- 5MB free disk space, plus space for JRE (around 40-50Mb for Java V1.4.1_02).
- TCP/IP network

4.7.1.2 Windows

- 500MHz or faster processor.
- Windows XP + SP1, Windows 2000 + SP3 or Windows NT 4.0 + SP6.

Note

The Reality GUI Administration Server is not currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

4.7.2 Client configuration service

The Client Deployment Service will run on the majority of platforms that support Reality V11.0, subject to the following additional requirements:

4.7.2.1 UNIX and windows

- Web server (it is strongly recommended that you use the web server supplied with Reality).
- 128 MB Memory (256Mb recommended).
- Java V1.4.1_02 or later (versions of the JRE suitable for Windows, Linux and Solaris are supplied on the CD).
- 80MB free disk space (includes around 40-50 MB for JRE).
- TCP/IP network.

4.7.2.2 Windows

- 500MHz or faster processor. • Windows XP + SP1, Windows 2000 + SP3 or Windows NT 4.0 + SP6.

Note

The Reality Client Deployment Service is not currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

4.7.3 Client configuration utility

Java V1.4.1_02 or later (versions of the JRE suitable for Windows, Linux and Solaris are supplied on the CD).

4.7.4 GUI administration client

Any Windows or Linux platform with Java V1.4.1_02 or later and for which a web-start component is available. The following is recommended:

4.7.4.1 Linux

128Mb RAM minimum (512Mb recommended). • 5MB free disk space, plus space for JRE (around 40-50Mb for Java V1.4.1_02) • Netscape 6 or 7, or Mozilla 1.4 or 1.5 (to display on-line help).

4.7.4.2 Windows

- 500MHz or faster processor.
- Windows NT 4.0 SP6+, 2000 SP3+, XP Home Edition SP1+ or XP Professional Edition SP1+.

Note

The Reality GUI Administration Client is not currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

- 128Mb RAM minimum (256Mb recommended).
- 5MB Free disk space, plus space for JRE (around 40-50Mb for Java V1.4.1_02)
- Internet Explorer 5.5 or 6.0, Netscape 6 or 7, or Mozilla 1.4 or 1.5 (to display on-line help). Suitable versions of Java are supplied on the CD.

Section 5: New features in Reality v11.0

5.1 Supported environments

Reality is now supported on Red Hat Linux version 9, and ES/AS versions 2.1 and 3.

Neither Reality nor the client components are currently supported on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality FAQ pages on the NEC portal (http://www.nec-is.com/portal/knowledgebase/pids/kb_index.html).

The client components are no longer supported on Windows 95.

5.2 GUI administration

The Reality Graphical Administration tool was introduced on the previous release. It enables an administrator to manage Reality databases on any number of host systems, via a client program on a single workstation.

On the previous release it included the administration of databases, users, security profiles and the administration tool itself. On this release it is extended to include all routine spooler management. In addition, you can now view the on-line help within a standard internet browser.

5.2.1 Spooler administration

All routine spooler administration on configured Reality databases is supported. This is based on management of spool jobs, form queues and despoolers. It provides:

5.2.1.1 Spool jobs

- Listing of all database spool jobs, with sorting and filtering of the jobs listed.
- Actions on one or more spool jobs, including:
  Viewing and/or changing priority, options and number of copies
  Stopping, suspending, resuming, killing, deleting, and re-queuing
  Viewing contents and details - Moving between form queues.
- Viewing form queues and despoolers associated with a job.
- Listing jobs queued on system (host) devices.

5.2.1.2 Form queues

- Viewing of all form queues, with sorting and filtering of the queues viewed.
- Actions, including creating, editing and deleting form queues. Stopping, suspending and resuming a form queue or its assigned despoiler. Clearing non-active jobs. Viewing active, queued and hold jobs on a queue.

5.2.1.3 Despoolers

- Viewing of all despoolers, with sorting and filtering of the despoolers viewed.
- Viewing of system (host) despooling device details.
- Automatic building of a set of despoolers, and associated form queues, for a database.

- Actions, including creating, editing, deleting, starting, stopping and resetting despoolers; and stopping, suspending, killing and resuming despooler output.

5.2.1.4 Browser-based context-sensitive help

Browser-based help is available for all panes and main windows, via a help button. This help is featuring an expandable contents list, index and full-text search. Help text can be viewed within the application window as well as, or instead of, within a browser.

5.3 DataBasic

5.3.1 New feature

5.3.1.1 Dictionary subroutines

This feature allows you to call DataBasic subroutines from within the English conversion attributes of file and data definition items. A new conversion code, CALL, is used to run specially written, Embedded Basic subroutines. See also ACCESS Statement and User Defined User Exits.

5.3.1.2 Sequential file access

This feature consists of a number of DataBasic statements that provide sequential access to host files and Reality items. For host files, this provides an alternative to directory view.

For both host files and Reality items, sequential file access has the advantage that large files and items can be read into memory in small blocks, thereby overcoming the restrictions imposed by the size of the active workspace.

Statements are provided to open files and items for sequential access, to read and write to an opened file, both line by line and in fixed size blocks, and to move to any point in the file.

5.3.1.3 Assignment operators

DataBasic now provides assignment operators that provide shortcuts by combining assignment with some other operation. The operators available are +=, -=, *=, /= and :=.

5.3.1.4 Predefined constants

Several predefined constants are now available, with the name of each prefixed with the @ character. Constants are available to represent commonly used values such as attribute marks, value marks, subvalue marks, Boolean true and false, and so on.

5.3.1.5 New statements and functions

SUM function: This is similar to SUMMATION but returns a dynamic array in which numeric elements at the lowest level have been added together to replace the elements that contained them.

CONVERT statement: This provides an alternative syntax to that of the CONVERT function.

5.3.2 Enhancements

5.3.2.1 ACCESS function

The ACCESS function has been enhanced to support dictionary subroutines. The information that it can now return includes the item, attribute, value and subvalue counts.

5.3.2.2 SYSTEM function

The SYSTEM function now provides access to the following system elements:

- The path of the current user's alternate verbs file.
- The resilience mode.
- Whether the current user is the database owner.

5.3.2.3 Labels

DataBasic labels have been extended to allow a terminating colon with numeric labels. White space can precede the colon in both numeric and alphanumeric labels.

5.3.2.4 Format string

Format Strings have been enhanced to provide the same functionality as the English ML and MR conversion codes.

Format strings can also be enclosed in parentheses, as specified by the SMA standard. Therefore, if a site converts to Reality from another MultiValue system, existing format strings need not be changed.

5.3.2.5 / Debugger command

The / Debugger command is now able to null fields in dynamic arrays as well as simple variables.

5.3.2.6 Relational operators

DataBasic now recognises the following additional relational operators:

= Less than or equal to.

=>, #< Greater than or equal to

5.3.2.7 EQUATE to SYSTEM and ACCESS

The EQUATE statement now allows you to assign symbols to the SYSTEM and ACCESS intrinsic functions. The symbol will then function in the same way as the assigned function.

5.4 Line editor

A new '/' command in the Line Editor provides a simpler alternative to the L (Locate) command.

5.5 Tandem

The TANDEM feature is now available on all supported platforms.

5.6 English

5.6.1 New conversion codes

The following new conversion codes are available:

CALL: Used to call a dictionary subroutine.

SOUNDEX: Generates the phonetic equivalent of its input. Provides English with the same functionality as the DataBasic SOUNDEX function.

MCAN, MCNA: These conversion codes are synonyms for MCB. See the MC conversion code for details.

MC/AN, MC/NA: These conversion codes are synonyms for MC/B. See the MC conversion code for details.

5.6.2 Enhanced conversion codes

S (Substitution): In this conversion code, a literal can now be enclosed in single or double quotes.

5.7 SQL for Reality

5.7.1 New features

5.7.1.1 Binary data types

When accessed via ODBC, tables created with the SQL CREATE TABLE statement now provide support for the BINARY, LONGVARBINARY and VARBINARY data types. These data types are not, however, available from JDBC or in tables created with the SQLM or WinSQLM utilities.

5.7.1.2 Stored procedures

This feature provides the SQL equivalent of subroutines. A stored procedure consists of a named sequence of statements that are stored in the database and can be executed by the CALL statement.

Typically, a stored procedure is used to encapsulate a set of operations so that they can be executed easily and reliably. This allows for more modular programming, as a single stored procedure can be called any number of times by different application programs.

In addition, stored procedures can reduce the amount of network traffic generated by an application. A single CALL statement can cause execution of many lines of SQL, and programming logic inside the procedure can reduce the amount of data returned to the client application.

A stored procedure can have arguments and return a result, which may be a single value or a result set (a set of rows such as that returned by a SELECT statement). In addition

to standard SQL statements to manipulate and report on the database, procedures can contain control statements such as IF/ELSE and WHILE.

5.7.2 Enhanced features

5.7.2.1 Null handling

Improved support for null values in SQL tables is provided. In tables created with the SQL CREATE TABLE statement, null values are fully supported in accordance with the ODBC 2.0 and SQL92 standards. In tables created with the SQLM and WinSQLM utilities, there are certain limitations (see the SQL for Reality Configuration Guide for details).

For existing SQL tables created with the SQL CREATE TABLE statement, you need to be aware of the following:

- Character columns previously written with SQL NULL will now be interpreted as empty strings. One way to resolve this is to re-write these values as nulls; for example:
  UPDATE Table SET COL=NULL WHERE COL=''
- You may experience problems when selecting data containing characters in the range X'00' to X'08' from character columns. If you do, contact the NEC support desk for assistance.
- In previous versions of Reality, nulls were in some cases treated as empty strings or zeros. Nulls will now be handled correctly; that is, an operation in which one of the operands is NULL will return NULL.
- In tables created with SQLM or WinSQLM, if Special Null Handling is in use, nulls and empty strings are now treated differently. As a result, when sorted, nulls will appear before empty strings. If Special Null Handling is not in use, nulls and empty strings cannot be differentiated.
- Special Null Handling must not be enabled on tables created using the SQL CREATE TABLE statement.
- Writing an empty string value into a numeric column will generate a conversion error: Cannot convert '' to Number.
- In non-indexed numeric columns, zeros and nulls are no longer treated as identical. When null is allowed in a column, rows containing empty values will be only selected when matched with NULL. Similarly, if null is not allowed, the same rows will only be selected when matched with zero.
- An SQL query based on a numeric column in which null is not allowed and which contains both zero and empty values, would previously have sorted and grouped these values separately. Empty values will now be interpreted as zero and will therefore be sorted and grouped together.
- An SQL query that matches nulls in a numeric column in which null is not allowed would previously have selected rows containing empty values. The empty values will now be interpreted as zero and the same query will therefore not select any rows.

5.7.3 ALTER TABLE statement

The SQL ALTER TABLE statement has been enhanced as follows:

- Columns can be dropped from the table.

- A single PRIMARY KEY, UNIQUE or FOREIGN KEY table constraint can be applied to a table.
- Multiple NOT NULL, PRIMARY KEY, UNIQUE and FOREIGN KEY constraints can be applied within a new column definition.

ALTER TABLE has the following restrictions:

- Only the SQL owner of the table can perform this statement. The table owner must have SQL Catalog Maintenance privilege set in the Reality security profile.
- The table must have been created by the SQL CREATE TABLE statement.
- The table must not contain any data.
- No columns that form part of the primary key can be used in indexes.
- Once defined, a primary key cannot be redefined.
- In a FOREIGN KEY constraint, the number of columns in the candidate key must match the number in the foreign key.

5.8 Automatic size sizing

For optimum speed of access, a Reality file must be correctly sized. Unless regularly resized, the larger a file gets, the slower access to the data will become.

The normal way of resizing a file is to save it to tape and then restore it with a new modulo. A file can be resized while in use, but the database must be shut down before this can be done again. In either case, the database must be taken out of use periodically.

Automatic file sizing overcomes these problems by changing the modulo automatically as the file grows. Contraction is not automatic, but can be done if necessary, with a TCL command. When you create a new file, you can choose to use the standard hashing algorithm or automatic sizing (the default is standard hashing). You can also convert existing files to automatic sizing - your file save statistics will help you decide how much you need to expand or contract a badly sized file, and you can then use the TCL commands provided to resize it. This can all be done while the database is in use (though you should avoid contracting a file while it is being accessed by other processes).

Indexes can also be configured to be resized automatically - new indexes are automatically sized unless you specify otherwise. A file and its indexes can be independently configured for automatic file sizing. Dictionaries cannot be automatically sized.

5.9 Identifiable item locks

The special view of the item lock table generated when you use the ILOCKS keyword with the MAKE-SPECIAL command has been enhanced to include more information. You can now find out which files and items are locked, which ports are holding those locks, and which ports, if any, are waiting for the locks to be released.

5.10 New installation procedure for demonstration/evaluation version

The procedure for installing the demonstration/evaluation version of Reality on Windows has been made much simpler, by requiring only the destination drive and user confirmation before installing automatically.

5.11 Cold start recovery

The feature consists of a number of elements:

- A host script that is executed when Reality system daemons or services are started.
- A Proc that is run when you create or update a database. You can create your own Proc to be called when this Proc completes.
- A Database Start-up Proc that is be executed when the database daemons or services are started. A configuration parameter allows you to choose whether and how to run this Proc, and you can create your own Proc to be called when this Proc completes.
- A configuration parameter that allows you to choose whether to check and, if necessary, clean the database, if it was not shut down properly. It also allows you to choose the action to take if cleaning database fails.

5.12 MultiValue migration

Reality V11.0 has been further enhanced to improve compatibility with other MultiValue systems. In addition, the following features simplify migration to Reality from other MultiValue systems.

5.12.1 User defined user exits

This feature allows you to replace a user exit with a DataBasic subroutine. The subroutine must be written in the same way as a Dictionary subroutine and must have the same name as the user exit it replaces. See Redefining User Exits and Embedded Basic subroutines for more details.

5.12.2 Run time user exit mapping

This feature allows you to replace one user exit with another. This is done by creating a user exit substitution item in the account's master dictionary. This item must have the same name as the user exit it replaces and must contain the name of the user exit to be called in its place. See Redefining User Exits for more details.

5.12.3 Tape images (pseudo-floppy)

This feature allows you to transfer data between Reality and other MultiValue systems by converting Reality tape images into MultiValue pseudo-floppy images and vice versa, using new commands FLOPPYTOTAPE and TAPETOFLOPPY.

Note

These commands replace FDISCTOTAPE and TAPETOFDISC,providing enhanced functionality.

5.13 On-line documentation

5.13.1 Mozilla support

The on-line documentation can now be viewed in the Mozilla browser (version 1.4 or 1.5).

5.13.2 Improved navigation

Navigation within the on-line documentation has been improved as follows:

- A new global index is available from the navigation pane on the left of the browser window.
- The search tool now gives you the choice of searching just the currently selected section or the whole of the documentation.
- The location of the current topic within the contents list is displayed at the top of the browser window.
- The home page includes a list of "quick links" to useful topics.

Section 6: Functionality/Features restrictions

6.1 All versions

File triggers can currently only be associated with file data sections.

6.2 AIX and HP-UX

The foreign database files and SQL-VIEW features are not available on AIX and HP-UX.

6.3 Linux

The UNIX-Connect Simple File Transfer (SFT) utility is not available on Linux.

6.4 Windows

Neither Reality nor the client components are currently certified on Windows XP SP2, though this is subject to review. For the latest information, refer to the Reality pages on the NEC portal (http://www.nec-is.com/reality).

6.5 On-line documentation

When the on-line documentation is viewed in a browser running in the Linux environment, the search tool may not function correctly.

6.6 GUI administration tool

- The GUI Administration Server is not available for Solaris 2.6 and 7.
- The GUI Administration Tool client is only available for Linux and Windows.
- The GUI Administration Tool will not use any licences in this release. However, NEC reserves the right to change this in future versions of the Reality product.
- When the on-line documentation is viewed in a browser running in the Linux environment, the contents and search tools may not function correctly.

Section 7: Fault resolutions

Reality V11.0 includes resolutions of the following customer-reported faults:

Fault number	Description
049004	RUN/CRE/SAD – disparity between SSM and GUI naming conventions.
049130	Security profile, modify alternative profiles. Can add multiple entries for the same server's name.
049133	DataBasic CLEARFILE on a DICT section rewrites D-pointers unnecessarily.
049560	SQLM does not accurately verify tables (applies to SQLM8 too).
049568	With FDB set, you cannot create an account.
049587	GUI Database summary pane, diagnostics tab. **where** and the button **Run where** should have the **w** capitalised.
049593	SSM. Cannot turn off RPL debugger.
049595	RUN/CRE/PLID and RUI/MOD/PLID. You can only add one PLId to profile mapping. Then the add box is greyed out.
049597	Cannot extend a pseudo-partition database on UNIX.
049613	GUI spinner boxes are too small.
049615	Attempting to carry out an operation which requires a Remote Basic connection when not the database owner and the database is locked excluding owner, erroneously brings up a Remote Basic connection message instead of a database is locked message.
049616	When GUI server service logged on as local not domain user, candidate users list incorrect.

049623	MAKE-SPECIAL does not validate keywords, resulting in cryptic error being returned.
049625	DBN/CREATE - create a Database. Progress bar doesn't show anything.
049641	VERIFY-INDEX does not work if index definition is not present.
049684	REALODBC driver 2.4 has problem with the COLOVRFLOW mode of operation.
049694	Various scripts require modification to echo command.
049695	Core dump when trying to capture output from perform of SQL VERIFY when errors detected.
049696	DIR-VIEW throws up unassigned variable if error in file specification.
049698	Database tooltip. Insufficient information.
049700	Typo in error dialogue. Databases>Create.
049702	RUI/UID. Access details/set password – how to blank password detail missing.
049707	Cannot create security profiles on GUI.
049712	Nested correlated SQL statement using NOT EXISTS returns an incorrect result set.
049713	Patch tried to build on incorrect platform.
049717	Database install_fix on Linux failed, because only had realman permissions on ut/fix.

049722	GUI Admin will accept both slashes and backslashes in paths.
049725	SP-EDIT of open print job displays rubbish on screen.
049737	GUIREALITYSERVER fails to start when Linux boots up in init 5 (graphics mode).
049740	REALITYGUISERVER starts OK from /etc/init.d, but GUI client fails to get database list.
049749	SP-SUSPEND does not return the job id correctly if job already suspended.
049759	SHOW-ITEM-LOCKS verb shows only first lock held by a port.
049762	3 realcd processes unidentifiable. Also, rkill does not identify release with daemons.
049772	SQL driver crashes when updating longvarchar with empty string from Microsoft Access.
084434	Reality installs from CD: if an error occurs, does not stop – more error detection required.
084481	Implement SOUNDEX () as variant of S conversion code, as for MultiValue.
084482	Require MCAN as equivalence of MCB conversion code, as for MultiValue.
084541	Require S code (substitution) to be able to use double quotes, as well as single, as for MultiValue.
084552	No attribute definition items message when using SQLM to create a table from a list of ids taken from a multiple data section file.

084576	Need to allow for labels and variables of the same name, as for MultiValue.
084580	The utility install_fix which is used to install fixes on both UNIX and Linux can fail to install a fix which only contains a tape image (that is, a database level fix only).
084601	UCOMPILE does not correctly decompile a Proc.
084603	To allow easier upgrade from other MultiValue platforms, enable compiler to accept label and semi-colon (statement separator) on the same line.
084605	To allow easier conversion from other MultiValue platforms, enable compiler to accept INCLUDE statement followed by comment.
084630	ISTAT reports incorrect item count.
084647	Add TRIMF and TRIMB versions of TRIM function, as for MultiValue.
084664	Various problems with install_fix on UNIX.
084683	LIST-SPREAD not working correctly.
084684	INPUT@ pattern matching does not disallow failing patterns.
084685	Add SWAP () function (equivalent to CHANGE () function), as for MultiValue – Power 95.
084705	Heartbeat: after a failure during a paused-secondary FILE-SAVE, realcip times out and fails to start a tlrestore.
084707	Will not accept character 252 while creating new terminal definition.

084712	mklog -r causes seek failed errors on Linux using LVM device.

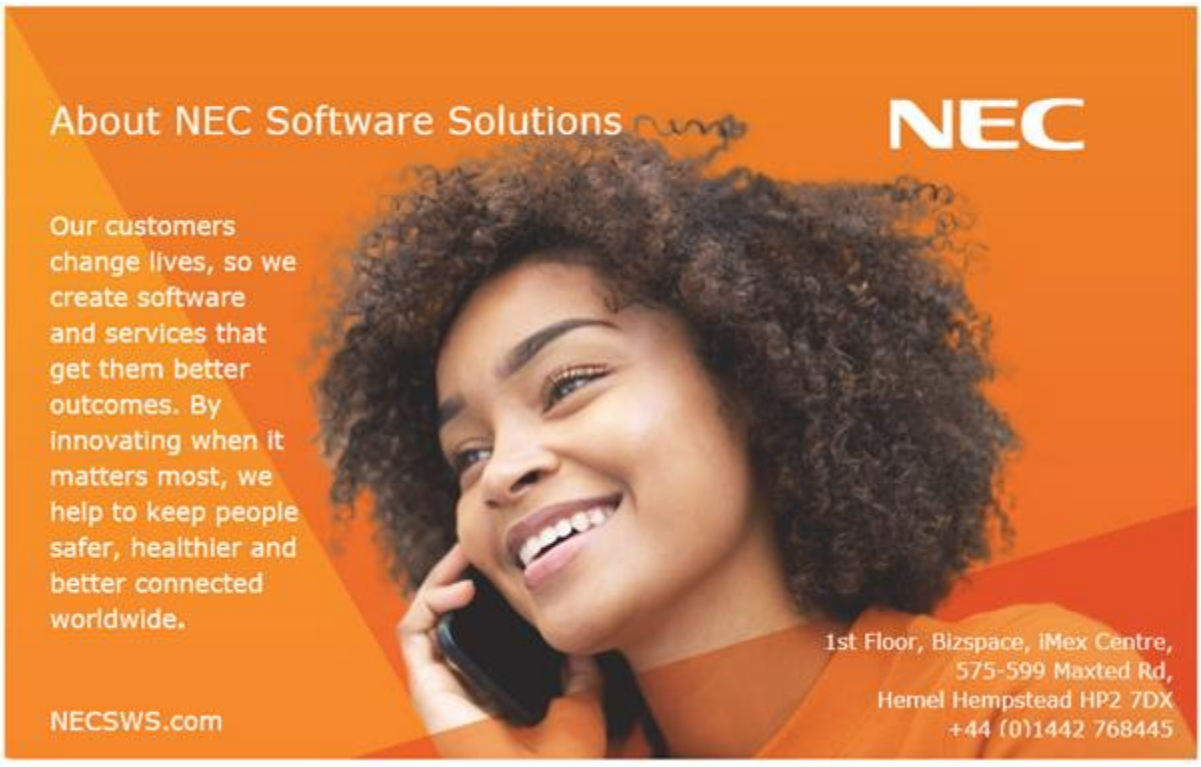
Section 8: Third-party products

The following third-party products may be included with Reality (depending on the operating system):

- Perl scripting environment (GNU Software Foundation)
- Gzip compression software (GNU Software Foundation)
- GNU C-complier (GNU Software Foundation)
- Gdb Debugger (GNU Software Foundation)
- Adobe Acrobat document reader (Adobe Systems Inc.)
- TomCat web server (Apache Software Foundation).

The following third-party products are used within Reality:

- GNUmalloc (GNU Software Foundation)
- Zlib compression library (GNU Software Foundation).
- Gnu.regexp regular expression package for Java (GNU Software Foundation).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