Rocket U2 Web Development Environment

Release Notes

Version 5.3.1

June 2021
WDE-530-ALL-RN-01

U2 Web DE v5

The release notes in this section provide information about changes in U2 Web DE v5.

U2 Web DE v5.3.1

Build *3809*
Release Date: June 2021

Web DE v5.3.1 contains many exciting enhancements and fixes, which are described in this document. This information is grouped by topic and listed in ascending order by issue number.

- [Installation](#)
- [Java Scheduler](#)
- [Monitoring and security](#)
- [U2 Web Designer](#)

Installation

Installation enhancements and fixes are listed in the following table by issue number:

Issue number	Description
WEBE-4883	At v5.3.0.3529 on UniData servers, the entry for WWLOG in the VOC file is an F type when it should be DIR. The impact of this issue was that garbage collection ceased to function, the size of the WWSTATE file will continue to increase, and response times will slow down until requests timeout before they can be fulfilled. The issue has been resolved in v5.3.1.
WEBDE-4779	Beginning at Web DE v 5.3.1, RedpagesNET.dll now supports .NET Core and .NET Standard.
| WEBDE-4763 | Testing RBOs using Hotfix build 5.3.0.3529 on Unix systems returned the failure message:<br><br>```
RedObject failed to open a connection to server:account
Please check the selected account from the rgw5.ini
 file.
Personal Edition cannot be used with non Personal
 Edition database.
```<br><br>This issue has been resolved at v5.3.1. |

Java Scheduler

Enhancements and fixes related to the Java Scheduler are listed in the following table by issue number:

Issue number	Description
WEBDE-4751	Beginning with v5.3.1, all Java components are built using OpenJDK 1.8. All future versions of WebDE will be built with OpenJDK.

Issue number	Description
WEBDE-4801	Prior to v5.3.1, when a database connection had reached the UniRPC idle timeout limit, the connection would be set to CLOSE_WAIT and would not be released by the scheduler. Eventually, this would reach the OS limit for open connections, preventing new connections being made and requiring a restart of the scheduler.

Monitoring and security

Enhancements and fixes related to monitoring and security are listed in the following table by issue number:

Issue number	Description
WEBDE-4770	In prior releases of Web DE, if Web DE was moved to a different machine, a Security Violation 11 would be generated requiring a clear code before the product could be used. Beginning with v5.3.1, this is no longer the case.

U2 Web Designer

Enhancements and fixes related to the U2 Web Designer are listed in the following table by issue number:

Issue number	Description
WEBDE-4772	In prior releases of Web DE, if the license flag to prevent a hardware check was set, Web DE would generate unassigned variable error messages in various log files relating to Aldon LME. This issue has been resolved in v5.3.1 with the removal of the hardware check flag.
WEBDE-4802	Prior to this release, on all platforms, the default versions of the rgw5.ini file and the javascheduler.ini files deployed with the WDE installation contained encrypted passwords from a previous encryption scheme. This caused various encryption errors when editing these files with the U2 Web Designer. With this release, those passwords have been removed from both files.

U2 Web DE v5.3.0

Build *3425*
Release Date: July 2017

Web DE v5.3.0 contains many exciting enhancements and fixes, which are described in this document. This information is grouped by topic and listed in ascending order by issue number.

▪ Installation

▪ Java Scheduler

▪ Monitoring and security

▪ U2 Web Designer

Installation

Installation enhancements and fixes are listed in the following table by issue number:

Issue number	Description
WEBDE-3339	In previous versions, the message boxes for installing registry keys referred to UODOTNET as UODONET. This has been fixed in both the regular Web DE product and the personal edition.
WEBDE-3967	In v5.3.0, `webdeservice64.exe` was added for computers running Windows 64-bit operating systems.
WEBDE-3988	In v5.3.0, when installing Web DE, the account version now automatically matches the database version.
WEBDE-4022	In previous releases, administrators were asked to manually register the RedPages COM Wrapper in the 32-bit version of .NET Framework 4.0 or later, which led to configuration errors. In v5.3.0, installation and un-installation script files for 32-bit and 64-bit systems are included in the installation directory and manual registry is no longer required.
WEBDE-4065	Web DE v5.3.0 is compatible with Windows 10.
WEBDE-4353	A check has been added at runtime to verify that the user is licensed to use Web DE services. The RedObject class now takes a Boolean parameter in a **setServices** method, which causes a flag to be passed to the UO.SPIDER to determine whether the services flag was turned on when Web DE was authorized. The **setServices** method needs to be set in the Web DE RESTful server wherever an RBO is created.
WEBDE-4354	Beginning at this release, the U2 Resource view has been updated to DBTools v4.3.0.
WEBDE-4485	In v5.2.0, the UniData object server installation shield did not create a default license or a license information file as it should. This issue has been fixed in v5.3.0.
WEBDE-4539	The RedPages COM Wrapper allows you to upgrade Web DE server components to 5.*x* and employ features of the new architecture without modifying the application front end. This wrapper connects classic ASP and other COM-based applications to the Web DE 5.*x* architecture, which relies on the Microsoft .NET Framework, and is designed for application developers who have written ASP or other COM-based applications with the RedPages 3.x or 4.x API and do not have the option of moving the existing code into ASP.NET.

Java Scheduler

Enhancements and fixes related to the Java Scheduler are listed in the following table by issue number:

Issue number	Description
WEBDE-2393	In previous releases, como files would become extremely large. Now, the log files contain information about requests received since the last time the Java Scheduler was restarted. Information about requests received prior to restart are stored in a backup log file named after the account, which is accessible from the `BackupLogs` folder.
WEBDE-2597	In v5.3.0, the [account] section of the `JavaScheduler.ini` file can now accept Tcl commands, making it easier to specify the amount of time in which account-specific connections will remain open without activity before they time out.
WEBDE-3308	In previous versions, if the Java Scheduler could not return log viewer requests from the Web Designer, the Web Designer would not attempt to access the `javascheduler.log` file from the server and account combination that was connected. This issue has been fixed in v5.3.0.

Issue number	Description
WEBDE-3520	In v5.3.0, you can write performance statistics to a log file, and start and stop the performance statistics logger from the command window. From this window, you can also specify if you want to view the statistics log as comma-delimited, and specify if you only want to log the distribution of the number of requests processed by each database session or license during the specified time interval.
WEBDE-4007	When the Java Scheduler successfully starts, a `javascheduler.log` file is generated, which contains information about requests processed. In v5.3.0, information about requests processed prior to the last Java Scheduler restart are stored in the new `javascheduler.txt` backup log file. This log file is accessible from the `BackupLogs` folder, which is typically located in the same directory as the `JavaScheduler.ini` file.
WEBDE-4228	An individual account-level timeout has been added to client threads with the setting **ThreadSocketTimeOut**. This will override the global **ThreadSocketTimeOut** setting, eliminating the need to restart the Scheduler if there is a change. The thread error associated with this (and client reset) has been changed to INFO instead of SEVERE.
WEBDE-4275	In previous versions, there was no way to enable the keep alive option on the Scheduler threads that take client requests. In v5.3.0, the **tcpKeepAlive** property has been added at the account level, which allows keep alive to be set on the socket created for the thread.
WEBDE-4300	A new developer mode has been added to the Java Scheduler. The developer mode can be set up per account and bounces an API server or slave combination for each call made through either an account or alias account. When the developer mode property is set to `1` for an account in the `JavaScheduler.ini` file, all available connections in the connection pool will be automatically reset to load new source code that has been created or changed on the server. The developer mode can be turned off and on during an account restart.
WEBDE-4327	In previous versions, the account name was displayed as null in the `javascheduler.log` file. This issue has been fixed for v5.3.0.
WEBDE-4350	A new configuration parameter, *SOCKET_BACKLOG* has been added to the [Default] section of the `JavaScheduler.ini` file to change the default number of requests that can be queued for the Java Scheduler when all the responders are in use. The default value is 50 requests, but this can be increased by adding the new parameter. If the parameter is set, it will be applied to the Scheduler server socket during startup.
WEBDE-4423	In v5.3.0, you can now change the log level while the Java Scheduler is running without causing new connections to fail.
WEBDE-4424	In v5.3.0, if the log path parameter does not contain a log file name in the `JavaScheduler.ini` file, `javascheduler.log` is now the default in the path specified.
WEBDE-4455	The **PoolingDebug** option in the Java Scheduler has been updated and the password issues that existed in the previous version have been fixed.
WEBDE-4483	To enhance Java Scheduler security, the Scheduler now verifies the user login and password for database accounts unless the **validateClient** parameter is set to `0` in the `JavaScheduler.ini` file.
	An overload has also been created for users who do not use the `rgs5.ini` file to set their login and password in their C# code so that they can accept encrypted passwords in the same format as in the `.ini` files.

Issue number	Description
WEBDE-4489	In v5.2.0, the Java Scheduler log file did not log all trace log messages. This issue has been fixed in v5.3.0.
WEBDE-4494	In v5.2.0, UniVerse users who opted to save como logs received inaccurate error messages when restarting accounts. This issue has been fixed for v5.3.0.
WEBDE-4522	In v5.2.0, UniVerse users who opted to save como logs received inaccurate error messages in the Java Scheduler log file the first time the Scheduler was started. This issue has been fixed for v5.3.0.
| WEBDE-4548 | (HPUX Itanium systems only.) Prior to this release, SOAP requests to the Java Scheduler would generate an error similar to the following:<br><br>```
In soap worker Resource temporarily unavailable
(errno:11).
```<br><br>For this release, a new parameter, **SemaphoreAccept**, was added to the default section of the `JavaScheduler.ini` file.<br><br>By default, **SemaphoreAccept** is set to `0`, which allows the Java Scheduler to rely on the OS to handle TCP/IP socket handle accepts.<br><br>If **SemaphoreAccept** is set to `1`, a unique semaphore is created to manage the socket handle accepts. There will be one unique semaphore per unique socket port number. This is the recommended setting on an HPUX Itanium system. |
| WEBDE-4577 | Previously, in the Web Designer `rgw5.ini` account editor, the **User** and **Password** fields and the **Test Connection Pooling Settings** button were disabled if the **Use Web Shares** option was selected. This has been changed so that these fields and the button will still be enabled if the **Use Web Shares** option is selected. |

Monitoring and security

Enhancements and fixes related to monitoring and security are listed in the following table by issue number:

Issue number	Description
WEBDE-1174	The **WWSESSION** flag is now supported in the `JavaScheduler.ini` file to enable state management functionality. It is set as an environment variable whenever an API slave process is created for an account by the Java Scheduler connection pool. It will be picked up and set in the first-time initialization of the UO.SPIDER.
WEBDE-3491	New monitor information and functionality has been incorporated into the Java Scheduler command line maintenance and informational executables that start or stop the performance statistics logger in the Scheduler.
WEBDE-3900	In v5.3.0, the accounts monitoring table on the **Scheduler Monitor** tab has been enhanced so the number of threads associated with a client IP address and connected to a client application or server can now be displayed.
WEBDE-4143	Previously, when a user selected more than one account (but not all accounts), using the Monitor Accounts Filter window, only one account was monitored. This was due to a security parameter that was part of the communications stream, which limited the number of accounts returned during the filter process. This issue has been corrected.
WEBDE-4245	In v5.2.0, there was no passthrough RPC style call, which caused performance bottlenecks. This has been fixed in v5.3.0 with the addition of an overloaded **callRPC** in both RedPages.NET and RedBeans.

Issue number	Description
WEBDE-4272	In v5.3.0, `getRequests.java` file was modified to handle a persistent connection for the scheduler monitor and new information has been added from the monitor.
WEBDE-4301	In previous versions, after the first request, como files were not activated when using developer mode. This issue has been fixed for v5.3.0.
WEBDE-4328	In previous versions, when an SSL protocol was enabled and an invalid security certificate was used, users received an exception error and the `rgw5.ini` file failed to load. This issue has been fixed for v5.3.0, and these types of errors are now recorded in the log file.
WEBDE-4329	Web DE examples can fail after installation if the IIS web server the examples were installed against uses an application pool that is set to .NET 2.0. This is because the examples project target framework is set to .NET Framework 4.5, so the application pool must be enabled for .NET 4.0. A message box will now be displayed prior to installation indicating that the example web pages must be installed on a website that is using an application pool enabled for .NET 4.0.
WEBDE-4399	When making RPC calls using either RedPages.NET or RedBeans, a URL encoding problem occurred that changed dashes (-) to periods (.) and spaces to plus signs (+) saving the data in the U2 database with the URL-encoded characters, which rendered the RPC feature unusable. RedPages.NET and RedBeans have been fixed to save the data to disk properly.

U2 Web Designer

Enhancements and fixes related to the U2 Web Designer are listed in the following table by issue number:

Issue number	Description
WEBDE-1083	In previous releases, users who right-clicked on the Web DE Elements tree and selected **Manage Garbage Collection** would receive an error message. This issue has been resolved in v5.3.0.
WEBDE-1185	In v5.3.0, you can restrict administrative views and functionality from non-administrative users by creating a new subroutine (or editing an existing one), compiling it, and globally cataloging it.
WEBDE-2610	Previously, in the Web Designer, the button to open the Documentation Editor was disabled if the RBO was in View mode. This issue has been resolved.
WEBDE-2758	When editing RBOs, previous versions of Web DE allowed multiple properties and methods to have the same name. This issue has been fixed for v5.3.0.
WEBDE-3264	When code has been changed in the `Drivers` file, saved, and is ready to compile, the **Compile U2 BASIC** button is enabled in v5.3.0. The location of this button has also changed, making it easier to find.
WEBDE-3321	In v5.3.0, after an account has been deleted, the current server's account list is refreshed.
WEBDE-3322	In previous versions, secondary modules and RBOs added during a maintenance session did not display in the tree without a manual refresh. This issue has been fixed in v5.3.0.
WEBDE-4004	In v5.3.0, an enhancement to the restart account feature has been added. The Restart Account dialog will remain open and the selected account will display a status of Restarting. When the account has reached the restarted state, the status column will display a status of Restarted.

Issue number	Description
WEBDE-4114	In v5.3.0, the Web Designer and server code have been modified so that only one person can access the code at a time. Users who attempt to open code locked by another user will receive an error message and will not be able to access the code. Users who are updating code that is subsequently locked will also receive an error message and will not be able to save changes to the database until the lock is released.
WEBDE-4179	In previous versions, the **Cataloged Name** field was not initializing with the correct program name when a method was selected. This issue has been fixed in v5.3.0.
WEBDE-4219	In v5.2.0, a null pointer exception error occurred if an RBO was created and closed without being saved. This issue has been fixed in v5.3.0.
WEBDE-4231	Beginning at this release, the Web Designer is built on Eclipse 4.4.2.
WEBDE-4251	Previously, the functionality in the U2 Resource view that should have filtered out accounts that were not enabled for Web DE instead removed those accounts from the `UD.ACCOUNT` or `UV.ACCOUNT` file on the server. This issue has been resolved.
WEBDE-4267	In v5.3.0, the WW.LME.CHECK subroutine has been updated and the password issues that existed in the previous version have been fixed.
WEBDE-4355	To improve security between the Web Designer and Java Scheduler, all Web DE software that calls the Java Scheduler monitor port must now use a new `CmCmd.java` wrapper class. This wrapper class will enumerate and encrypt commands and their parameters on the client side and decrypt them on the monitor side.
WEBDE-4412	An issue was discovered in which the Web DE calling interface into Aldon was not working. This was due to a change to the named common in the Aldon LM(e) programs. The common in WW.LME.BRIDGE has been changed to reflect the changes made in the ALDON basic code. This issue has been resolved.
WEBDE-4465	In previous versions, the option to turn on U2 activity logging was incorrectly worded on the U2 Resource view preferences page. This issue was fixed for v5.3.0.
WEBDE-4477	Prior to this release, users could expand the U2 Web DE Elements node without entering correct credentials after reconnecting to the server if they had previously entered correct credentials. Now, users must enter correct credentials to expand the node each time they reconnect to the server.
WEBDE-4484	To access the new Java Scheduler developer mode, select the **Enable scheduler developer mode for this account** option from the Web Designer. When enabled, the Web Designer Properties page includes developer mode displays and updates.

Requirements for v5.3.0 (Windows)

Before installing Web DE v5.3.0, ensure your systems meet or exceed the Windows system requirements outlined below.

U2 Web Designer requirements

Supported operating systems:

- Windows Server 2012 (R2)

- Windows 8.1
- Windows 8
- Windows 7 (SP1)

Web server requirements:

Requirements for .NET applications (RedPages.NET):

- Microsoft Internet Information Services (IIS) 6.x or later
- Microsoft .NET Framework 3.5 or later
- Microsoft .NET Framework 4.0 or later (for RedPages COM Wrapper)
- Microsoft Visual Studio 2010 or later

Requirements for Java applications (RedBeans), one of the following:

- Java Development Kit (JDK) 8 or later
- Java Runtime Environment (JRE) 8 or later

Disk space requirements: 300 MB

Java Scheduler requirements

Supported operating systems:

- Windows Server 2012 (R2)
- Windows Server 2008 (R2 SP1)
- Windows 10
- Windows 8.1
- Windows 7 (SP1)

Runtime environment: JRE 8 or later

Disk space requirements: 1 MB

RedBack Object Server requirements

Supported operating systems:

- Windows Server 2012 (R2)
- Windows Server 2008 (R2 SP1)
- Windows 10
- Windows 8.1
- Windows 7 (SP1)

Runtime environment: JRE 8 or later

Disk space requirements: 20 MB

Database server requirements:

- UniData 8.1 or higher
- UniVerse 11.2 or higher

Requirements for v5.3.0 (UNIX)

Before installing Web DE v5.3.0, ensure your systems meet or exceed the UNIX system requirements outlined below.

Web server requirements

Supported operating systems (all 64-bit):

- AIX
    - 7.2
    - 7.1
- AP/UX Intel Itanium
    - 11.31
- Linux
    - Red Hat Enterprise Linux 6, 7
    - SUSE Linux Enterprise Server 11 (SP2)
- Solaris
    - 11 x86
    - 11 SPARC

Web server software: Java-based web server software, such as IBM WebSphere Application Server or Tomcat. Otherwise, if you only want to run client/server applications on this computer, one of the following:

- Java Development Kit (JDK) 8 or later
- Java Runtime Environment (JRE) 8 or later

Disk space requirement: 120 KB

Java Scheduler requirements

Supported operating systems:

- AIX
    - 7.2
    - 7.1
- AP/UX Intel Itanium
    - 11.31
- Linux
    - Red Hat Enterprise Linux 6, 7
    - SUSE Linux Enterprise Server 11 (SP2)
- Solaris
    - 11 x86
    - 11 SPARC

Runtime environment: JRE 8 or later

Disk space requirement: 1 MB

RedBack Object Server requirements

Supported operating systems:

- AIX
  - 7.2
  - 7.1
- AP/UX Intel Itanium
  - 11.31
- Linux
  - Red Hat Enterprise Linux 6, 7
  - SUSE Linux Enterprise Server 11 (SP2)
- Solaris
  - 11 x86
  - 11 SPARC

Database server requirements:

- UniData 8.1 or higher
- UniVerse 11.2 or higher

Runtime environment: JRE 8 or later if you run the Java Schedulerto manage client/server applications on this computer.

Disk space requirement: 12 MB

U2 Web DE v5.2.2

Build 3302
Release Date: July 2016

These release notes provide information about enhancements and fixes in Web DE v5.2.2.

Enhancements and fixes in U2 Web DE v5.2.2

The following issues were addressed in this release:

Issue number	Description
WEBDE-4269	Starting at this release, you can specify the Java Trust certificate store and password to reference the CA root certificate of the U2 Database Server you are connecting to. JVM truststore and password parameters were added to the `Javascheduler.ini` file. These parameters are: - sslTrustStore - sslTrustStorePassword These parameters can be defined using the U2 Web Designer JavaScheduler.ini configuration wizard.

Issue number	Description
WEBDE-4270	Starting at this release, three parameters were added to the rgw5.ini to be used in the connection parameters in the RedBeans client. They are: ▪ usingTrustStore=1 ▪ sslTrustStore ▪ sslTrustStorePassword They can be set using the U2 Web Designer rgw5.ini configuration wizard
WEBDE-4294	Starting with this release, Web DE RedPagesNET supports secure protocols other than SSLv3. These include TLSv1, TLSv1.1, and TLSv1.2. This requires DOTNET 4.5 framework or above. Also included is the location and certificate name parameter (MSCertificatePath) and the parameter to turn on RedPages security (usingMSssl). The following was added to rgw5.ini: ``` usingMSssl=1 MSCertificatePath=path-to-certificate\certificatename.cer sslProtocol=TLS12 ```
WEBDE-4296	Prior to this release, the JavaScheduler SSL security negotiation with the connecting client side application was securing the data packets only, and not the connection. This issue has been resolved.
WEBDE-4297	Starting with this release, the U2 Resources View has been enhanced to include secure connections to U2 database servers to meet security compliance.
WEBDE-4298	Starting with this release, Web DE uses Java JVM 1.8 for security compliance purposes. ALL javaScheduler environments must use JVM 1.8. Please refer to your operating system provider for the latest 1.8 JVM.
WEBDE-4305	Prior to this release, the Web DE Scheduler used the physical account name and not the name specified in the `Scheduler.ini` file. As a result, you could not identify which sessions belonged to which U2 Web DE scheduler defined account. This issue has been resolved by forcing the connection creation to use the account alias name if it exists.

U2 Web DE v5.2.1.1

Build 3276
Release Date: March 2016

These release notes provide information about enhancements and fixes in Web DE v5.2.1.1.

Enhancements and fixes in U2 Web DE v5.2.1.1

The following issues were addressed in this release:

Issue number	Description
WEBDE-4268	Prior to this release, the operating system level password could be visible in clear text when `WW.LME.CHECK` was called from U2 Web Designer. This issue has been resolved.
WEBDE-4271	Prior to this release, a severe error resulted when a socket was disconnected from a client. This should not have been considered a severe error, and this issue has been resolved.

Issue number	Description
WEBDE-4273	In Web DE 5.2.0 and 5.2.1, `getRequest.jar` did not work with new information obtained from the Web DE Monitor. This issue has been resolved.

U2 Web DE v5.2.1

Build 3275
Release Date: October 2015
These release notes provide information about enhancements and fixes in Web DE v5.2.1.

Enhancements and fixes in U2 Web DE v5.2.1

The following issues were addressed in this release:

Issue number	Release notes	Component
WEBDE-3980	Web DE v5.2.1 now supports Rocket Aldon Lifecycle Management, or LM(e). As a web developer, you can use the Web Designer to modify RBOs and methods associated with a task reference directly from an LM(e) client. Web DE supports the check in and check out actions of Aldon LM(e), adding an additional level of security using source control. For more information about how to use the Web Designer with this version of Web DE, see the *Web Designer User Guide*. For more information about Aldon LM(e), see the Rocket Aldon documentation located at https://docs.rocketsoftware.com. Navigate to **Rocket Aldon → Lifecycle Manager for Rocket U2.**.	Web Designer

U2 Web DE v5.2.0

Build 3236
Release Date: July 2015
These release notes provide information about enhancements and fixes in Web DE v5.2.0.

In v5.2.0, RESTful RBOs are available as part of the early release program to build your applications. For more information about how to fully utilize this feature, contact support@rocketsoftware.com.

Enhancements and fixes in U2 Web DE v5.2.0

The following issues were addressed in this release:

Issue number	Release notes	Component
WEBDE-1081	When deploying a Web DE application to a web server, you need to establish the `rgw5.ini` file on that server. While `rgw5.ini` does support unencrypted passwords, having plain-text passwords on a server is not secure. Previously, to encrypt the password, you had to use the Web Designer to edit the `rgw5.ini` file, save it locally, then deploy it to the server. Now, you can edit the `rgw5.ini` file outside of Web Designer, and use the following command to encrypt the password and send it back to the web server without interacting with the Web Designer: `java -cp /path/to/RedBeans.jar com.rs.u2.wde.redbeans.VerifyIni ./ rgw5.ini`	U2 Web Designer
WEBDE-3014	When you use RESTful services and need to upgrade Web DE, you can also manually upgrade the U2 REST servers you created so they can be updated with the latest code and artifacts that come with the latest version of Web DE. If you do not manually upgrade the servers, their current state remains, potentially rendering any bug fixes that come with Web DE upgrades useless. For steps on upgrading your U2 REST servers, see *Getting Started with REST Services*.	RESTful RBOs
WEBDE-3345	For RESTful uQuery services, the ability to test the RBO service using a session ID has been added. RBO Services that are backed by stateful RBOs use a session ID to reference the RBO state that is stored on the server in between requests. If the RBO you are testing is stateful, the RBO Service Test Browser has a Use Session Id check box. Select the Use Session Id check box to have the test page automatically copy the session ID from the result back into the service URL.	RESTful RBOs
WEBDE-3433	At v5.2.0, "U2WEBDE" is available to use as a value passed to the XTOOLSSUB to identify the tool (INITIALIZE). Before v5.2.0, the Web Designer would have the Basic Developer Toolkit (BDT) sent instead of a string identifying the Web Designer.	U2 Web Designer
WEBDE-3442	In v5.2.0, you can use the performance monitor to record statistics on the requests processed for each account. For the monitor to work properly with the Java Scheduler, you must use the same version of Web Designer as the Java Scheduler. For example, use 5.2.0 versions of both components of Web DE.	Monitoring, Scheduler, U2 Web Designer
WEBDE-3453	Internal testing found that the Java Scheduler was not catching some UO exceptions, such as UO subroutine and unisession exceptions. This has been fixed in v5.2.0.	Scheduler
WEBDE-3464	In v5.1.1, when installing only RedPages.NET, the `rgw5.ini` file installed incorrectly with the default values which could cause problems if left as default. In v5.2.0, the values have been changed to be more applicable and usable if unchanged.	Installation

Issue number	Release notes	Component
WEBDE-3465	In v5.1.1, no `uoj_trace.log` file was created when the PoolingDebug parameter was set in the `JavaScheduler.ini` file. This has been fixed in v5.2.0.	Scheduler
WEBDE-3478	One of the features of the 5.2.0 performance monitor is the ability to keep track of exceptions and transactions. When exceptions and transactions occur, the stop light appears red in the monitor. The **Reset Counter** button on the **Scheduler Monitor** tab allows you to dismiss this critical status to view the stop light as a more accurate state of your environment.	Scheduler, U2 Web Designer
WEBDE-3485	While using the monitor, you can view the exceptions that occurred. The Exceptions thrown link on the **Scheduler Monitor** tab displays the **Scheduler Log View** pane below the monitor, where you can view only the exceptions.	Scheduler, U2 Web Designer
WEBDE-3492	The Java Scheduler performance monitor records statistics on the requests processed for each account. This information presented in the monitor is written to the performance statistics log.	Scheduler
WEBDE-3499	In previous versions of Web DE, a bug existed that allowed you to create an empty dynamic array subroutine resource for a REST server. This has been fixed and you are now required to enter a name for the dynamic array before it is created.	RESTful RBOs, U2 Web Designer
WEBDE-3503	When you create a multivalue field in a UniVerse NLS or UniData I18N environment, you need to obtain a UniDynArray from a UO session object so that the proper marks as defined on the server are used. You can create an instance of a UniDynArray to handle multivalue fields by calling the getUniDynArray method of the U2 Web DE connection class. This will allow you to create a multivalue field on your Web DE client application. For more information, see the *Application Developer's Guide*.	RedBeans, RedPages.NET
WEBDE-3504	In previous versions of Web DE, the I18N configuration of UniData did not work properly with licensing in the Web Designer. This has been fixed in v5.2.0.	U2 Web Designer
WEBDE-3505	In previous versions of Web DE, license violations were not properly reported back to the Web Designer when using a UniData I18N server. This has been fixed in v5.2.0.	U2 Web Designer
WEBDE-3507	In v5.1.1, if the UniVerse example files were not selected during installation, an error occurred that left the installer in a non-responsive state. This has been fixed.	Installation
WEBDE-3523	In v5.2.0, an enhancement to the Java Scheduler has been implemented that allows the worker threads to log the IP address of the server that starts them, such as initialization information and error information.	Scheduler
WEBDE-3555	In RESTful services, an error occurred that prevented a newly created REST server from appearing until you restarted the Web Designer. This has been fixed so that immediately after creation, the new REST server appears.	RESTful RBOs

Issue number	Release notes	Component
WEBDE-3598	In v5.1.1 and v5.1.2 of the Web DE Java Scheduler, the number of responders in use and requests waiting sometimes appeared incorrectly when a run queue was building for webshares. This has been fixed.	Scheduler
WEBDE-3622	In v5.1.2, when a MAXRESTARTWAIT timeout occurred and the account was automatically reset, the log did not contain enough information to help understand what happened. This has been fixed, and logging now contains more information when a timeout restart occurs.	Scheduler
WEBDE-3657	In the performance monitor, you can view the RBO process details to help you troubleshoot problems with slow processes. The process details are displayed in a table include information such as how long the process has been busy or when it started. You can sort the columns in this table to help with the troubleshooting process.	U2 Web Designer
WEBDE-3660	The performance monitor allows for a definable parameter, `SlowProcessTime=n`, that triggers monitor warnings when any requests exceeds the n value. n is the amount of time in milliseconds when the monitor displays red.	Scheduler, U2 Web Designer
WEBDE-3677	When you encounter a slow process while using the performance monitor, you can view the BASIC call stack to help you troubleshoot the problem. When the Slow Requests column appears red in the monitor table, click **RBO Process Details**. A window appears where you can view the call stack for each slow process. For more information, see the *Administrator's Guide*. Note that the BASIC call stack is viewable with UniData versions 8.1 and higher.	Scheduler
WEBDE-3681	The Web Designer now supports starting and stopping of the Java Scheduler on a remote UNIX server.	Scheduler, U2 Web Designer
WEBDE-3776	You can filter which accounts you want to see in the performance monitor and then restart the monitor so that only the selected accounts displayed. You can also adjust the table columns by dragging and dropping them in your preferred order, or filtering some columns out so that you can see only the information that is relevant to your site. For more information, see the *Administrator's Guide*.	Scheduler, U2 Web Designer
WEBDE-3777	The performance monitor contains specific parameters that trigger the stop light and table cells to be red or yellow. The average response time, average response time interval, the number of requests waiting to be served, and slow processes are defined with default values in the `JavaScheduler.ini` file. You can change these values to better suit your environment from the Java Scheduler account editor wizard or directly in the `JavaScheduler.ini` file. For more information about these parameters and the default settings, see the *Administrator's Guide*.	Scheduler, U2 Web Designer
WEBDE-3805	As of v5.2.0, Web DE supports 64-bit versions for both UniVerse and UniData.	Installation

Issue number	Release notes	Component
WEBDE-3859	In v5.2.0, the como directive can now be used from `JavaScheduler.ini` as well as the `rgw5.ini` file. Because SB/XA services do not use the `rgw5.ini` file, the functionality has been copied to the `JavaScheduler.ini` so that you can take advantage of this server-side logging feature. The account wizard in the Web Designer has been updated so that you can select this option while creating an account, or you can modify the `JavaScheduler.ini` in a text editor and set `como=1` in the default or account section to enable it. The como directive is still available in the `rgw5.ini` file so that users not using the client can still utilize its functionality.	Scheduler
WEBDE-3881	In version 4.4.2, an enhancement was added to the RBO Server that allowed users to determine which exact RBO, method, and variable name caused an UNASSIGNED variable on the WW.SET.PROPERTY calls, identifying which basic program had a coding error. This enhancement did not properly get ported into 5.x code initially, but is now added back to v5.2.0.	RBO Server
WEBDE-3882	In previous versions of Web DE, the Java Scheduler falsely triggered a security violation 11 when the UniVerse common block was corrupted. In v5.2.0, a test has been added that re-reads the checksum from disk to detect whether a user has triggered a false positive situation. If it is a false positive, the common variable value gets corrected and an event item in the `Javascheduler.log` is added.	Scheduler
WEBDE-3919	In v5.2.0, the SOAP worker thread has been modified so that it queries the SOAP header at the beginning of the read process for the Java Scheduler. The content length is parsed from the header and is used to determine how much data should be in the SOAP envelope. The worker thread polls the socket in an attempt to read this amount of data before timing out. The timeout is a default number of 5000ms. You can configure this number in the `JavaScheduler.ini` file under the account section with the parameter `soapTimeout=nnnn`, where `nnnn` is the timeout number in milliseconds.	Scheduler
WEBDE-3961	During a clean installation of Web DE with no modifications to the accounts, when you started the Java Scheduler, it appeared to not properly start. This has been fixed in v5.2.0,	Scheduler, U2 Web Designer
WEBDE-3963	In v5.2.0, you can filter which accounts you want to see by the performance monitor. For more information, see the *Administrator's Guide*.	Monitoring, U2 Web Designer
WEBDE-3981	When using advanced monitoring and logging in Web DE, some RPC call information was not being displayed properly in the RBO Process window or log file. This has been fixed in v5.2.0.	Scheduler

Issue number	Release notes	Component
WEBDE-3987	In previous versions, certain server level errors, such as an uncataloged server subroutine, caused a null pointer exception that was not caught when making Web DE RPC calls. These types of errors are now caught and logged properly in v5.2.0.	RedBeans, RedPages.NET
WEBDE-4003	In v5.2.0, you can choose to bypass the `rgw5.ini` file. A new RBO instantiation method has been added to RedPages.NET that allows the instantiation of a RedObject without an `rgw5.ini` file. The format is: `RedObject r = new RedObject("rbexamples",server,port,min, max,connectionString,"EXMOD:EmpReader");`	RedPages.NET
WEBDE-4012	In previous versions of the Web Designer, if the server editor was left open after the server connection was closed in the U2 Resource view with the Java Scheduler running, multiple instances of some dialog boxes appeared. This has been fixed in v5.2.0 and the multiple dialog boxes no longer appear.	U2 Web Designer
WEBDE-4018	Previously, when you added a new account in the `JavaScheduler.ini` file but did not change the number of connections using the wizard, the minimum and maximum numbers were set to zero by default instead of one. This has been fixed in v5.2.0 and the default connections are now one.	Scheduler, U2 Web Designer
WEBDE-4019	Older versions of Web DE incorrectly allowed you to add the same soapPort to two different accounts for the Java Scheduler. This has been fixed in v5.2.0 so that if a service tries to start on a port that is already in use, an error will be logged and the service fails to start.	Scheduler
WEBDE-4021	In previous versions of Web DE, you could not deploy to a U2 Server with a directory that contained spaces. This has been fixed in v5.2.0 so that these directories can be utilized.	Installation

Requirements for v5.2.0

The following lists provide detail about the requirements to support components of U2 Web DE v5.2.0.

RedBack Object Server (Windows or UNIX)

Operating system

- Windows 7, Windows 8, or Windows 8.1

  and Windows Server 2012

Data server

- UniData v7.2 or later; however, v8.1 or later is recommended
- UniVerse v10.3 or later; however, v11.2.3 is recommended

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

- Microsoft Internet Information Services (IIS) v6.x or later

  If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

  - Expand the Internet Information Services node.

  - Expand the Web Management Tools node.

  - Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

- Microsoft .NET Framework v2.0 or later

- Microsoft .NET Framework v4.0 or later if you use RedPages COM Wrapper

Web Server for Java applications (RedBeans)

Java Runtime Environment (JRE)

- JRE 7 or later

U2 Web DE v5.1.2

Build 3104
Release Date: July 2014
These release notes provide information about enhancements and fixes in Web DE v5.1.2.

Enhancements and fixes in U2 Web DE v5.1.2

The following issues were addressed in this release:

Key	Release Notes	Component
WEBDE-3452	UniObjects exceptions were not logged properly in the Java Scheduler log file. In v5.1.2, the UniObjects exceptions and error codes are now logged with the Java Scheduler error messages.	Scheduler
WEBDE-3526	When an account was restarted and a responder was busy, the restart shut down all of the processes except for the one that was stuck. This caused the web application to become unresponsive because no sessions were available. This issue is resolved.	Scheduler
WEBDE-3527	Setting a new value for the unirpcTimeout setting in the Account section of the `JavaScheduler.ini` file did not work. This issue is resolved.	Scheduler
WEBDE-3528	The Java Scheduler process terminated unexpectedly when the request exceeded 5 minutes. This issue is resolved.	Scheduler
WEBDE-3544	Using any connection string other than "uvcs" caused the Java Scheduler to throw an exception and leave behind established TCP connections. This prevented new TCP socket connections from running. This issue is resolved.	Scheduler

Key	Release Notes	Component
WEBDE-3550	When the Java Scheduler was stopped, the number of consumed licenses doubled. This issue is resolved.	Scheduler
WEBDE-3553	Invalid requests to the Java Scheduler resulted in an outstanding socket that was left connected and used system resources. These requests eventually would use all of the resources on the system and resulted in the system being down. This issue is resolved.	RedBeans, RedPages.NET, Scheduler
WEBDE-3559	When an exception was received at the Java Scheduler level on an RBO call, there were no details logged in the Scheduler log file. In v5.1.2, details such as the RBO name, the method called, and the properties are now logged.	Scheduler
WEBDE-3561	If a call was made to an RBO and the call timed out, the next call to an RBO received the data from the call that timed out rather than the current call. This issue is resolved.	Scheduler
WEBDE-3567	As of v5.1.2, you can set the UniRPC or socket timeout for an account in the `rgw5.ini` file.	RedBeans, RedPages.NET
WEBDE-3613	A new parameter, `ThreadSocketTimeOut`, has been added to the `JavaScheduler.ini` file. This parameter specifies the number of milliseconds that sockets can be left open with no activity before they timeout on the listening thread. If not set, the default socket timeout of 8 hours is set on the listening thread.	Scheduler

U2 Web DE v5.1.1

Build 3094
Release Date: January 2014
These release notes provide information about enhancements and fixes in Web DE v5.1.1.

Enhancements and fixes in U2 Web DE v5.1.1

The following issues were addressed in this release:

Issue Number	Description	Component
WEBDE-67	In previous versions, access to the `RedPages_accountname.log` file was locked when using RedPages.NET. This caused subsequent Windows processes that use RedPages.NET to fail to log to the file. This has been fixed in v5.1.1 by appending a process ID to the RedPages.NET log file, making its name unique.	Logging
WEBDE-1027	As of v5.1.1, when you uninstall U2 Web DE, you can select to remove all of the components, including removal of all account files and temporary files except for the .ini files or the log files. This clean uninstallation allows for a stable work environment ready for future upgrades.	Installation
WEBDE-1051	In previous versions, Microsoft Internet Information Services (IIS) was required to install RedPages.NET. As of v5.1.1, RedPages.NET is installable without IIS.	Installation

Issue Number	Description	Component
WEBDE-2198	When editing an RBO's method, entering a long description that contained more than one carriage return did not save correctly; the carriage returns converted to in-line text, changing to "-4." This issue has been resolved.	U2 Web Designer
WEBDE-2628	As of v5.1.1, you can view the `JavaScheduler.log` file directly in the U2 Web Designer by using the **Scheduler Log View** tab while the Java Scheduler is running.	U2 Web Designer
WEBDE-2878	In v5.1.0, the Java Scheduler monitor display in the U2 Web Designer was missing information. The correct information has been added to resolve this issue.	U2 Web Designer
WEBDE-3028	In v5.1.1, the U2 Web Designer shortcut icons have been updated.	U2 Web Designer
WEBDE-3034	In previous versions, UNIX users could only install the Java Scheduler using the Eclipse deployer. As of v5.1.1, the `rbappsvr` script used to install U2 Web DE components on UNIX includes the Java Scheduler.	Scheduler
WEBDE-3093	In previous versions, when multiple web servers were used, the `JavaScheduler.log` file did not contain the data coming in or out for each request. As of v5.1.1, the `JavaScheduler.ini` file allows you to set the trace parameter to allow the logging of incoming request names, request values, property names, and property values from the client. This also logs outgoing property names and values being returned to the client.	Logging
WEBDE-3096	Running a `RECATALOG` at TCL in UniVerse incorrectly changed field 2 of RELLEVEL to version 8, forcing the UniVerse account to be out of date. This issue has been fixed to keep the correct UniVerse version number in field 2.	RBO Server
WEBDE-3097	In previous versions, the permissions on the deployed files for the server and Java Scheduler matched the umask of the user. If the umask put a restriction of the file, then U2 Web DE would not work. This issue has been fixed in v5.1.1 by changing the permissions on all deployed accounts and the Java Scheduler directory on UNIX deployments for UniData and UniVerse.	Installation, U2 Web Designer
WEBDE-3141	In previous versions, the rbdefn account in the U2 ReSource view was used incorrectly for new accounts. This issue has been fixed in v5.1.1 by having a dialog box appear to define the correct path when a user has more than one possible rbdefn account to enable for U2 Web DE.	U2 Web Designer
WEBDE-3143	In previous versions, session encoding in the JSP RBOScope testing tool was not supported. As of v5.1.1, the rgw5.ini file has the option in the [accountname] section to configure encoding so that information can be correctly displayed in the JSP application.	Web RBOScope

Issue Number	Description	Component
WEBDE-3165	U2 Web DE installation has been modified to allow for easier upgrade or concurrent installation methods. The installation default directory is now /U2WDE*nnn*, where *nnn* is the current version number in the install shield project file. Additionally, the installation checks for previously installed versions 5.0.1 through 5.1.0 and reports the latest version that it finds, warning the user of possible changes to the U2WDE environment variable.	Installation
WEBDE-3279	The Java Scheduler status monitor contained an incorrect negative number in the Requests Per Interval column when an account was restarted. This issue has been resolved.	U2 Web Designer
WEBDE-3290	When connecting to the RedBack Object Server with invalid credentials, users were not able to re-enter credentials without first disconnecting from the server or account. This issue has been fixed to allow users to immediately re-enter their credentials.	U2 Web Designer

U2 Web DE v5.1.0

Build 3081
Release Date: September 2013
These release notes provide information about enhancements and fixes in U2 Web DE v5.1.0.

Enhancements and fixes in U2 Web DE v5.1.0

The following issues were addressed in this release:

Issue number	Description
WEBDE-1004	In previous versions, the timestamp was incorrect in redbeans_account.log. This issue was corrected in v5.1.0.
WEBDE-1057	At v5.1.0, a Re-enter password field was added in the User tabbed page available from the Manage RedBack Users option in the U2 Web Designer.
WEBDE-1072	In previous versions, when re-enabling an account for Web DE from the U2 ReSource view on UniVerse systems, the LOGIN proc was restored to the VOC. This caused users to see a '?' prompt when logging into the account at TCL. This issue has been fixed.
WEBDE-1136	Version 5.1.0 introduces a Java Scheduler, which manages data transfer between the RedBack Object Server and the web server while using webshares. Version 5.0.x used the connection pooling feature of UniData and UniVerse to perform load balancing; version 5.1.0 gives users the ability to use the Java Scheduler or the connection pooling feature to perform this task. A form of request manager called the RedBack Scheduler was used in versions prior to 5.0.x and was not available in v5.0.x. The Java Scheduler reintroduces the request manager functionality of the RedBack Scheduler in a Java implementation in v5.1.0.
WEBDE-2093	In v5.0.x, RPC calls did not return data from the U2 Web Development Environment server back to the calling client (RedPagesNET.dll or RedBeans). This issue has been fixed.
WEBDE-2095	RPC calls were failing with error "Invalid parameter supplied to the subroutine" when perfstats was set to 1 in the rgw5.ini configuration file. This issue has been resolved.

Issue number	Description
WEBDE-2131	Version 5.1.0 allows environment variables to be passed from the JavaScheduler.ini file to the server. Users have the option to create an alias that points to the same account but uses a different environment variable for each set of connections.
WEBDE-2137	In previous versions, when multiple accounts were set up in the rgw5.ini file, the first account accessed by RedPages.NET created the log file for this account. All subsequent requests regardless of the account being accessed would log into that log file instead of the respective log file for each account. This issue has been fixed.
WEBDE-2156	In previous versions, when setting an RBO property on the server side to a JSON, the call of the RBO method was slow. This issue has been fixed.
WEBDE-2173	U2 Web DE v5.1.0 has been certified for Windows 8 and Windows 2012.
WEBDE-2192	In previous versions, RedPages.NET was not honoring UO session timeouts set in the rgw5.ini configuration file. This issue has been fixed.
WEBDE-2239	Version 5.1.0 corrects an issue which involved login credentials being incorrectly case sensitive. The issue has been fixed.
WEBDE-2265	Version 5.1.0 corrects an issue in which the JSP RBOScope previously referenced an incorrect package name and did not work. The issue has been fixed.
WEBDE-2285	In previous versions, when using the COM wrapper in an ASP page, a RedField object would become corrupted when setting its content using StringValue. This issue has been fixed.
WEBDE-2287	uQuery objects failed because the BOF property of RecordSets was not supported in the COM Wrapper in v5.1.0. This issue has been fixed.
WEBDE-2315	Typographical errors in the rgw5.ini configuration file sometimes resulted in incorrect messages. A misspelled account would error out with "object reference is not set to an instance of an object." An invalid logpath value did not use a fallback default location for the creation of the log file. The appropriate exceptions are now returned to the U2 Web DE client. If the logpath is incorrect in the rgw5.ini file, the preferred path location for the rgw5.ini file is used as the default location for the log file.
WEBDE-2341	The U2 Web Development Environment SOAP server was re-enabled at version 5.1.0. This is done by adding a listening port using the account level soapPort property in the JavaScheduler.ini configuration file. Example: [rbexamples] soapPort=7075 MinimumPoolSize=2 MaximumPoolSize=2 userId=guest password=KDkRpbZJkpPOnXv8s0+Gmw== server=localhost usingssl=0 workdir=C:\U2\U2WDE\UVserver\rbexamples ConnectionString=uvcs
WEBDE-2389	Issues concerning the accessibility of the RecordCount property through the COM Wrapper have been resolved.
WEBDE-2526	Issues related to StringValue assignments and unexpected error messages from RedFields in the COM Wrapper have been resolved.
WEBDE-2542	Using the COM Wrapper in an ASP page, a RedField object became corrupted when using the Count command. This issue has been fixed.
WEBDE-2593	A new batch file named redpagesCCW_uninstall.bat is included in the RedPages COM Wrapper package, for 32- and 64-bit platforms. This batch file uninstalls the RedPages COM Wrapper libraries and clears registry entries associated with the COM Wrapper.
WEBDE-2640	An issue with header information related to the SOAP server component of the Java Scheduler was causing a ConnectionAborted error. The issue has been resolved.

Issue number	Description
WEBDE-2667	The copyright banner in the JSP examples was changed to " (c)Rocket Software, Inc. or its affiliates 1989-2013. All Rights Reserved."
WEBDE-2903	U2 Web DE v5.1.0 gives users the ability to select 0 webshares when licensing the product, whereas in previous versions the minimum was 1.
WEBDE-2906	When installing RedPages.NET, the UO.NET performance counter registry is now automatically created in the rgw directory.

Requirements for v5.1.0

The following lists provide detail about the requirements to support components of U2 Web DE v5.1.0.

RedBack Objects Server (Windows or UNIX)

Operating system

- Windows XP Professional, Windows Server 2003, Windows Server 2008, Windows Server 2012, Windows 7, or Windows 8
- IBM AIX®
- Sun Solaris
- HP-UX
- RedHat Linux®

Data server

- UniData v7.2 or later; however, v7.3.5 or later is recommended
- UniVerse v10.3 or later

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

- Microsoft Internet Information Services (IIS) v6.x or later

  If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

  - Expand the Internet Information Services node.
  - Expand the Web Management Tools node.
  - Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

- Microsoft .NET Framework v3.5 or later
- Microsoft .NET Framework v4.0 or later if you use RedPages COM Wrapper

Development tool

- Microsoft Visual Studio 2005 or later

Web Server for Java applications (RedBeans)

Recommended Web server software

- Tomcat 6.x or later
- IBM WebSphere Application Server

Java Runtime Environment (JRE)

- JRE 6 or later

Java Development Kit (JDK)

- JDK 6 or later

U2 Web DE v5.0.3

Build 3041
Release Date: September 2012
These release notes provide information about enhancements and fixes inU2 Web DE v5.0.3.

Enhancements and fixes in U2 Web DE v5.0.3

The following issues were addressed in this release:

Issue number	Description
WEBDE-2006	uQuery objects containing fields larger than 1K bytes caused all data that was returned in the query to be skewed. The hard-coded buffer size for uQuery objects has been fixed and data is now returned correctly.
WEBDE-2033	An enhancement was made to the RedPages.NET log files that allows the display of additional debug information when the LogLevel **inf** and **times** flags are set to 1. At this release, the module, class, and property names and values have been added to the log information displayed.
WEBDE-2046, WEBDE-2062	Web applications running SB+ or SB/XA processes from an RBO caused the error "WW.SB.COMMON Invalid checksum." The correct SB common routines were not set up in U2 Web DE when WW.INITIATE was run on the account. This problem affected SB+ 5.x and SB/XA 6.x versions. This issue has been resolved at this release. Additionally, attempting to link U2 Web DE and SB users from the Web Designer administration menu caused an "Invalid password" error after the SB+ password was supplied. This issue has been fixed for UniData installations but remains open as issue WEBDE-2086 for UniVerse installations. UniVerse users can work around this issue by supplying the SB+ user ID and password in the sb_user_id and sb_password properties of the RBO.
WEBDE-2079	Running ENABLE.RBO or RECATALOG in an SB+ or SB/XA account caused the VOC pointer SB.DISP to incorrectly point to the U2 Web DE installation path. This caused errors in SB+ and SB/XA applications when an SB.DISP call was made. ENABLE.RBO and RECATALOG have been fixed to retain the correct VOC pointer to SB.DISP.

Requirements for v5.0.3

The following lists provide detail about the requirements to support components of U2 Web DE v5.0.3.

RedBack Object Server (Windows or UNIX)

Operating system

- Windows XP Professional, Windows Server 2003, Windows Server 2008, or Windows 7
- IBM AIX®
- Sun Solaris
- HP-UX
- RedHat Linux®

Data server

- UniData v7.2 or later, or
- UniVerse v10.3 or later

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

- Microsoft Internet Information Services (IIS) v6.x or later

  If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

  - Expand the Internet Information Services node.
  - Expand the Web Management Tools node.
  - Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

- Microsoft .NET Framework v2.0 or later

Web Server for Java applications (RedBeans)

Recommended Web server software

- Tomcat v6.x or later

Java Runtime Environment (JRE)

- JRE v1.5 or later

U2 Web DE v5.0.2

Build 3035
Release Date: June 2012
These release notes provide information about enhancements and fixes in U2 Web DE v5.0.2.

Enhancements and fixes in U2 Web DE v5.0.2

The following issues were addressed in this release:

Issue number	Description
WEBDE-1175	Running WW.INITIATE against accounts configured for SB+ v5.5.x or SB/XA v6.1.x was blocked because those versions were not supported. These newer versions SB+ and SB/XA are now supported.
WEBDE-1189	The Logical File Editor in the U2 Web Designer did not allow you to edit existing logical file definitions or create new ones. At v5.0.2, the Logical File Editor has been fixed to support the edit, create, and read functions.

Issue number	Description
WEBDE-1190	uQuery RBOs that used SELECT statements with BY.EXP in the select_criteria property returned data with incorrect delimiters. This problem has been resolved, and data is now returned correctly.
WEBDE-1194	Connection pools opened by the RBOScope remained open on the database server machine even after the RBOScope was closed. An enhancement has been implemented to close all connections when the RBOScope window or any child windows opened by the RBOScope are closed.
WEBDE-1942	The change of architecture at U2 Web DE v5.0.0 removed the ability to set custom environment variables in the [Default.Environment] section of the rgwresp.ini file. Equivalent functionality has been added at version 5.0.2, enabling you to set environment variables in the VOC SPIDER.LOGIN item in a U2 Web DE-enabled account. The variable value must be set in VOC SPIDER.LOGIN as follows: SETENV MYRBHOME MYRBHOMEVALUE Get the value of the variable using standard UniData or UniVerse techniques for variable value retrieval. **UniData:** myVar = GETENV("MYRBHOME") **UniVerse:** IF SYSTEM(91) = 1 THEN *Windows cmd = "DOS /C 'set MYRBHOME'" END ELSE *UNIX cmd = "SH -c 'echo $MYRBHOME'" END EXECUTE cmd CAPTURING RTNVAL
WEBDE-1976	The version number of XTOOLSUB supplied with UniData and UniVerse was changed from 7.x or 11.x to a new scheme, 3.100.x. The new version numbering scheme caused the U2 Web DE server deployment tool to fail because it did not recognize the XTOOLSUB version correctly. This problem has been fixed.
WEBDE-1988	Several deprecated .dll and .ocx files contained in the U2 Web DE deployable packages were flagged by spyware utilities as possible trojans. These files have been removed from the deployable packages at v5.0.2.
WEBDE-1989	Attempting to set an RBO property to null when using the RedPages COM Wrapper returned an error, "UniSession Class error '80131600'." The RedPages COM Wrapper has been revised to allow properties to be set to null without error.

Requirements for v5.0.2

The following lists provide detail about the requirements to support components of U2 Web DE v5.0.2.

RedBack Object Server (Windows or UNIX)

Operating system

- Windows XP Professional, Windows Server 2003, Windows Server 2008, or Windows 7
- IBM AIX®
- Sun Solaris

- HP-UX
- RedHat Linux®

Data server

- UniData v7.2 or later, or
- UniVerse v10.3 or later

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

- Microsoft Internet Information Services (IIS) v6.x or later

  If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

  - Expand the Internet Information Services node.
  - Expand the Web Management Tools node.
  - Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

- Microsoft .NET Framework v2.0 or later

Web Server for Java applications (RedBeans)

Recommended Web server software

- Tomcat v6.x or later

Java Runtime Environment (JRE)

- JRE v1.5 or later

U2 Web DE v5.0.1

Build 3030
Release Date: October 2011
These release notes provides information about new features, enhancements, and fixes in U2 Web DE v5.0.1.

What's new in U2 Web DE v5.0.1

RedPages COM wrapper

In version 5.0.1 and later, U2 Web DE offers the option of implementing the RedPages COM Wrapper for backward compatibility with classic Active Server Pages (ASP) and other Component Object Model (COM)-based applications.

The RedPages COM Wrapper enables you to connect classic ASP and other COM-based applications to the U2 Web DE 5.x architecture, which relies on the Microsoft .NET Framework. For additional information and steps to install the RedPages COM Wrapper, see the *U2 Web Development Getting Started* manual.

JSP version of RBOScope

At version 5.0.1, U2 Web DE provides a standalone Java Server Pages (JSP) RBOScope testing tool, which enables testing of RBOs outside of U2 Web Designer. This tool is designed for the use of developers with Java application servers such as Tomcat or WebSphere.

For steps to install the JSP RBOScope, see Chapter 5, "Installing the Standalone JSP RBOScope," in *U2 Web Development Environment Getting Started*. For information on testing RBOs with the new standalone tool, see Chapter 4, "The RBOScope," in *Developing RBOs with U2 Web Designer*.

UNIX install script

At version 5.0.1, a standalone UNIX install script is included on the product CD image. For details, see WEBDE-1122 below.

New features, enhancements, and fixes in U2 Web DE v5.0.1

The following issues were addressed in this release:

Issue number	Description
WEBDE-10	Rebranding of the U2 Web Development Environment documentation set from IBM to Rocket Software was completed after the release of version 5.0, when the content of *Administering RedBack Object Server with U2 Web Designer* was merged with *Administering U2 Web Development Environment*. The updated U2 Web DE documentation library was posted to the U2 ReSources page in April 2011.
WEBDE-450	In version 5.0.1 and later, U2 Web DE provides the optional RedPages COM Wrapper for backward compatibility with classic Active Server Pages (ASP) and other Component Object Model (COM)-based applications.
WEBDE-1002	U2 Web DE 5.0.1 provides a standalone Java Server Pages (JSP) version of the RBOScope testing tool, which enables testing of RBOs outside of U2 Web Designer for users with Java application servers such as Tomcat.
WEBDE-1040, WEBDE-1050	With the COMO option set to 1 (On) in rgw5.ini, methods containing a COMO statement did not properly create a COMO file. In the UniData edition, the method call did not create a COMO file at all. In the UniVerse edition, the method created a COMO file with only a header record. This issue has been resolved in version 5.0.1, and the method creates a complete COMO file in both editions as designed.
WEBDE-1090	When attempting to read a record using RedObject, no data was retrieved, but the status was returned as successful (status=0). With fixes to Java code, a read from RedObject now returns the correct data and status code.
WEBDE-1093	After using the wizard to deploy RedBack Object Server to a U2 server, the client and server logs showed an incorrect product version number for both the previous and current versions. The code that generates deployment logs has been fixed in U2 Web DE 5.0.1, so the log now reports the correct four-part version number (such as 5.0.1.3030) for the previous and current versions deployed to the U2 server.
WEBDE-1094	At version 5.0.1, the main Registry entry for U2 Web DE has been changed from "Rocket Software, Inc." to "Rocket Software" to match all other U2 products.
WEBDE-1122	UniData and UniVerse versions of a UNIX install script are shipped with the product at version 5.0.1. The files are located in the server\unix\udt or server\unix\uv directory on the product CD image. To perform a UNIX install using the script, copy the rbappsvr file and the .tar file onto your UNIX machine, and then run the rbappsvr script.

Issue number	Description
WEBDE-1125	During the procedure of upgrading a 4.x account to the 5.x architecture, an error occurred when the user attempted to enable the account for U2 Web DE from the U2 Web Designer menu. This problem appeared only in the U2 Web Designer interface: the same account could be enabled successfully by running the ENABLE.RBO command at the ECL/TCL prompt. The code has been changed so that U2 Web Designer uses a different write method to enable RBOs, preventing the error.
WEBDE-1126	When running the REDBACK.UPG routine to upgrade an account from 4.x to 5.x, the program returned a "COMMON size mismatch" error, and the associated APP.IDS record remained at the old version number in the VOC. A fix to the REDBACK.UPG routine prevents this error, and the program now processes both UniData and UniVerse account upgrades correctly.
WEBDE-1128	On installing the RedPages.NET component, the redpagesNet.dll and UODOTNET.dll were written to the \rgw path. However, when RedPages.NET was modified, these DLLs were written to both the \rgw and \gateway paths. As of version 5.0.1, these DLLs are written to the \rgw path alone on installation or modification.
WEBDE-1129	The prompt for viewing the Readme has been removed at the end of the installation process.
WEBDE-1131	A new batch file named redpagesCCW_setup.bat is included in the RedPages COM Wrapper package, for 32- and 64-bit platforms. This batch file installs the RedPages COM Wrapper libraries. It also adds the uonetcp_iis.reg registry item to resolve a UO.NET problem required to use the RedPages COM Wrapper.
WEBDE-1147	When the GetSystemInfo method was called from the SysInfo object, U2 Web DE returned a "Cannot open file \doc\port.note" error. This issue has been resolved in version 5.0.1, so the Web page displays properly and the error no longer occurs.
WEBDE-1149	While working with the RedPages.NET API on Windows 7, the U2WDE environment variable is sometimes not found and an error message is displayed. In version 5.0.0, the message, "Access to the path '*pathname*' is denied," was misleading and offered no solution. The fix is to reboot the RedBack object server machine. After a reboot, the RedBack object server is able to resolve the U2WDE environment variable and the error no longer occurs. In version 5.0.1, the message text has been clarified and provides instructions: "Unable to locate *filename* file in U2WDE environment variable path. Your system may require a reboot to resolve this error."
WEBDE-1151	In certain circumstances, deploying the RedBack Object Server component through U2 Web Designer failed, and the program displayed the error message, "An Execute is already active on the server." This occurred if the user's server permissions were insufficient to create the required folders and files for the server log, which left the Execute command waiting for a response from the client. A segment of code has been added to handle insufficient permissions, and the deployment no longer fails in this situation.

Requirements for v5.0.1

The following lists provide detail about the requirements to support components of U2 Web DE v5.0.1.

RedBack Object Server (Windows or UNIX)

Operating system

▪ Windows XP Professional, Windows Server 2003, Windows Server 2008 (including R2), or Windows7

▪ IBM AIXreg

▪ Sun Solaris

▪ HP-UX

▪ RedHat Linux

Data server

▪ UniData v7.2 or later, or

▪ UniVerse v10.3 or later

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

▪ Microsoft Internet Information Services (IIS) v6.x or later

   If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

   ▫ Expand the Internet Information Services node.

   ▫ Expand the Web Management Tools node.

   ▫ Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

▪ Microsoft .NET Framework v2.0 or later

Web Server for Java applications (RedBeans)

Recommended Web server software

▪ Tomcat v6.x or later

Java Runtime Environment (JRE)

▪ JRE v1.5 or later

U2 Web DE v5.0

Build 3020
Release Date: November 2010
These release notes provide information about new features, enhancements, and fixes in U2 Web DE v5.0.

What's new in U2 Web DE v5.0

Changes to the U2 Web DE architecture

The architecture of U2 Web DE has changed significantly to leverage the underlying technologies of UniData 7.2 and UniVerse 10.3. U2 Web DE 5.x uses the connection pooling feature of UniData and UniVerse to perform load balancing, supported in UniObjects for .NET (UO.NET) and UniObjects for Java (UOJ). In addition, .NET technology is employed in the new RedPages.NET as the means to

access data Sources. ASP.NET provides the client interface to RedPages.NET. Details on the new architecture and connection pooling are provided in the *U2 Web DE 5.0 New Features* manual. Please see the u2webDE50beta.pdf file in the doc folder of the product CD image. Details on the new .NET-based application programming interface (API) are contained in the *RedPages.NET* manual. Please see the redpages_net.pdf file in the doc folder of the product CD image.

Changes to installation

Due to changes in the product's architecture, the selection list of Windows components has been revised in the InstallShield program, and now includes RedPages.NET. In addition, you can now deploy RedBack Object Server components to UNIX using a new deployment wizard. Detailed instructions are provided in the *Getting Started* guide. Please see the getting_started.pdf file in the doc folder of the product CD image.

Additional data server features supported

Due to changes in the product's architecture, many advanced data server features are now supported in U2 Web DE 5.x:

- SSL connections from Web server to data server.

- Automatic Data Encryption

- True 24x7 operation with the ability to pause the data server during backups.

- NLS on UniVerse

- I18N on UniData

For detailed information on setting up these features, see the respective product manuals for UniData or UniVerse.

InstallShield upgraded to Version 2009

U2 Web Development Environment 5.x is built using InstallShield 2009.

New features, enhancements, and fixes in U2 Web DE v5.0

The following issues were addressed in this release:

Issue number	Description
WEBDE-12	All U2 Web DE 5.0 Source code has been rebranded to show ownership by Rocket Software.

WEBDE-40	A new wizard allows users to create an RBO from a U2 database file. To get started, in the **U2 ReSource** view right-click the database file name and choose **Create RBO from Selection** from the context menu. This opens the wizard, which walks you through the steps of creating the RBO, including:
	
	- Selecting the parent module
	- Selecting the type of RBO:
	  _ Stateful file-based RBO
	  _ Stateless file-based RBO, or
	  _ Query RBO
	- Creating properties for the RBO, or
	  Selecting fields to display in query output

Issue number	Description
WEBDE-45	In previous versions, the RBOScope did not display subvalue data in tree format as it did with multivalue data. It displayed unknown character blocks and did not nest the subvalue data. In version 5.0, a subvalue layer has been added to the tree. If multivalue data contains subvalue data, the multivalue data displays "SubValues[n]" where n represents a count of the subvalue data. When the multivalue data level is expanded, each subvalue is shown on its own line.
WEBDE-60	As of version 5.0, the RBO perspective is the default perspective in U2 Web Designer. Note that the Web Page perspective is not available in the current version of the product.
WEBDE-61	UniObjects connection pooling properties have been added to the configuration file, which has been renamed rgw5.ini in version 5.0.
WEBDE-75	The grace period for entering license information and authorizing the product has been changed to 10 days. During the grace period, evaluation licenses can be authorized for a period of 60 days.
WEBDE-82	With this enhancement, a new environment variable named U2WDE specifies the primary path for the rgw5.ini file. If the U2WDE environment variable is not set, U2 Web DE searches for rgw5.ini in the path specified by the %SYSTEMROOT% variable.
WEBDE-110	When editing an RBO in U2 Web Designer, selecting a value from the **Default Value** drop-down combo box produced unexpected results and errors. A fix to the combo box/text box logic corrects this problem in version 5.0.
WEBDE-116	All new features, enhancements, and fixes in the RedBeans API have been copied to the RedPages.NET API.
WEBDE-120	In the RBO Editor of U2 Web Designer, the user can click an icon to disable drop-down lists for better performance. As an enhancement in version 5.0, the state of the disable option is saved on closing U2 Web Designer, and persists in the next session. The next time the user opens U2 Web Designer, drop-down lists in the RBO Editor are enabled or disabled per the option selected in the previous session.
WEBDE-134	The Redpages.dll providing COM-based support for ASP and other COM applications has been deprecated and is now replaced by RedpagesNET.dll. This new RedpagesNET.dll provides full support for .NET-based applications using C# and VB.NET only.
WEBDE-146	A new log parameter named "Times" has been added in the rgw5.ini file to allow logging of method execution times if the value is Times=1.
WEBDE-302	U2 Web Designer code has been upgraded for compatibility with Eclipse 3.5, Java 5.0, and the current versions of all associated plug-ins.
WEBDE-446	U2 Web DE 5.0 pioneers a tool that employs a wizard allowing the user to select the deployable U2 Web DE server components and install the server components on a UniData or UniVerse (U2) data server. On UNIX systems this replaces the former "rbappsvr" script. The tool can also be used to transfer any user-selected file or folder to a folder on the U2 data server.
WEBDE-457	In version 4.4.x, inserting a zero-length string in a RedField and calling the ins() method to insert a value after the zero-length string produced an exception that caused the application to fail. This issue has been resolved in version 5.0.
WEBDE-459	The U2 Web DE installation program has been upgraded to use InstallShield 2009.
WEBDE-948	When creating a new RBO, if you opted not to save it, the RBO Editor returned an error and wrote details to the error log. This occurred because the Editor attempted to update an item that was already disposed of. The code now checks for disposed status and if present, it skips that step, preventing the error.

Issue number	Description
WEBDE-959	The **U2 Connections** view in U2 Web Designer has been replaced by the **U2 ReSource** view, conforming to the new standard used in all Eclipse-based U2 tools.
WEBDE-975	In version 4.4.x, attempting to use the Copy and Paste functions of U2 Web Designer to copy an RBO and paste it to a module already containing an RBO by the same name produced the error, "The name already exists. No duplicates allowed." The validation routine has been changed in version 5.0, so in this situation, a dialog box asks if the user wants to overwrite the RBO. If "No," the naming dialog box is redisplayed; if "Yes," the existing RBO by the same name is overwritten.
WEBDE-996	Use of the Apache gateway, rgw.dll, or IP_address:port is no longer valid as the connection URL for an RBO. The only valid entry is the name of the account as found in the rgw5.ini file.
WEBDE-1014	Customers experienced slow response time when expanding the Accounts node in the U2 ReSource view. Multiple fixes resolve this problem in version 5.0, and accounts are now displayed instantly.
WEBDE-1029	In certain cases, if an RBO property was set to an empty string, the wrong property value was updated. This has been corrected.

Requirements for v5.0

The following lists provide detail about the requirements to support components of U2 Web DE v5.0.

RedBack Object Server (Windows or UNIX)

Operating system

- Windows XP Professional, Windows Server 2003, Windows Server 2008 (including R2), or Windows7
- IBM AIXreg
- Sun Solaris
- HP-UX
- RedHat Linux

Data server

- UniData v7.2 or later, or
- UniVerse v10.3 or later

Web Server for .NET applications (RedPages.NET)

Recommended Web server software

- Microsoft Internet Information Services (IIS) v6.x or later

  If you are using IIS v7 or later, you must select the option for IIS v6 compatibility. To do so, navigate to **Control Panel > Programs and Features > Turn Windows features on or off**. Drill down in the list of features as follows:

  - Expand the Internet Information Services node.
  - Expand the Web Management Tools node.
  - Expand the IIS 6 Management Compatibility node, and select the **IIS Metabase and IIS 6 configuration compatibility** check box.

Common language runtime and class libraries

▪ Microsoft .NET Framework v2.0 or later

Web Server for Java applications (RedBeans)

Recommended Web server software

▪ Tomcat v6.x or later

Java Runtime Environment (JRE)

▪ JRE v1.5 or later

Additional notes for v5.x

The following information contains additional notes for setting up U2 Web DE v5.x.

Entering logon credentials in rgw5.ini

Due to the architecture change in U2 Web DE v5.x to use UniObjects (UO) connections, an OS-level user ID and password are required to connect client to server.

The `rgw5.ini` configuration file comes by default with a sample connection to the rbexamples account using a guest user ID and password. These details in the `rgw5.ini` file must be changed to point to your data server machine, and you must supply a user ID and password with access to your data server machine. The path to the rbexamples account may be modified if it does not accurately reflect your server installation.

Setting up performance monitoring samples

The RedBeans component of U2 Web DE v5.x provides performance monitoring samples. To get up and running quickly with these samples, complete the steps below.

1. Set up the RedBeans component on your web server machine. The method depends on the operating system on your web server machine:

    ▪ Windows – From the product CD image, run `setup.exe` and install the RedBeans component on your web server machine.

    ▪ UNIX – Navigate to the RedBeans directory on the product CD image and transfer all contents from this directory to your web server machine.

2. Copy `redbeans.jar` to the application server library directory or to your client application directory. For example, when using Tomcat, `redbeans.jar` should be placed in `C:\%TOMCAT_HOME%\lib`.

3. Copy `asjava.jar` to the same location as `redbeans.jar`.

4. On UNIX platforms only, copy the `rgw5.ini` file to `/etc` or set an environment variable called $U2WDE to the path of your choice, and then copy the `rgw5.ini` file to that location.

5. The monitor folder on the product CD image contains JSP Web pages and Java programs that provide example usage of the new performance monitoring API. Copy the JSP and/or Java classes to your Tomcat or equivalent application server to preview.
   This is the full listing of the available performance monitoring methods:

    a. Get an account object:
       Account acct = Connection.getAccount("rbexamples");

    b. Get the number of connections that have been made to the account:
       long connections = acct.getConnections();
       a connection is a uo/session connection to the account.

    c. Get the number of method calls that have been made to the account:

long calls = acct.getMethodCalls();
a method call is an rbo method such as ReadData on a stateful rbo.

d. Get the number of session requests made for the account/connection pool:
long requests = acct.getSessionRequests();
a session request is a request for a uoj connection pool session.

e. Get the number of failed session requests made for the account/connection pool:
long failedRequests = acct.getFailedSessionRequests();

f. Get the number of active session requests or busy sessions on the account/connection pool:
int BusySessions = acct.getActiveSessions();

g. Get the total time in millisecounds for all method calls made against the account/connection pool:
long totalTime = acct.getMethodTime();
The average method call time would be totalTime / calls.

Migrating old RBOs to v5.x

RBOs created in earlier versions of U2 Web DE can be reused in v5.x. With a v5.x account and module created (such as EXMOD in rbexamples), locate the equivalent module at the OS-level in your old account. Locate the file *xx*`CLASSES` (where *xx* is the module ID, as in `EXMODCLASSES`) and copy it to the v5.x account.

New connections made to the v5.x account in U2 Web Designer should now show the RBOs from the old in account in the appropriate module under the U2 Web DE Elements node.

Notices

Edition

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Corporate information

Rocket Software, Inc. develops enterprise infrastructure products in four key areas: storage, networks, and compliance; database servers and tools; business information and analytics; and application development, integration, and modernization.

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To contact Rocket Software by telephone for any reason, including obtaining pre-sales information and technical support, use one of the following telephone numbers.

Country	Toll-free telephone number
United States	1-855-577-4323
Australia	1-800-823-405
Belgium	0800-266-65
Canada	1-855-577-4323
China	400-120-9242
France	08-05-08-05-62
Germany	0800-180-0882
Italy	800-878-295
Japan	0800-170-5464
Netherlands	0-800-022-2961
New Zealand	0800-003210
South Africa	0-800-980-818
United Kingdom	0800-520-0439

Contacting Technical Support

The Rocket Community is the primary method of obtaining support. If you have current support and maintenance agreements with Rocket Software, you can access the Rocket Community and report a problem, download an update, or read answers to FAQs. To log in to the Rocket Community or to request a Rocket Community account, go to www.rocketsoftware.com/support.

In addition to using the Rocket Community to obtain support, you can use one of the telephone numbers that are listed above or send an email to support@rocketsoftware.com.