

IBM Rational Team Concert for i Beta Program



Installation Guide

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Installation Guide

Note!

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 19.

This edition applies to the Beta version of IBM Rational Team Concert for i (product number 5724-V58) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this book

This installation guide provides information about installing and configuring the beta version of IBM Rational Team Concert for i. Rational Team Concert for i is a collaborative software delivery environment that allows teams to simplify, automate, and govern software delivery on IBM® i. This book is for system administrators responsible for installing and maintaining the Rational Team Concert for i client on their workstation and the Jazz Team Server on IBM i. To use this book, you need to be familiar with the Windows® and IBM i operating systems.

For the latest version of this document, see <http://www.ibm.com/support/docview.wss?rs=3365&uid=swg21305640>

About this beta program

Rational Team Concert for i builds on the core Rational® Team Concert product by providing a Jazz Team Server and Build System Toolkit that runs on IBM i. This beta is intended to provide early access to the Rational Team Concert for i product. It will provide the same capabilities as the core Rational Team Concert product with the ability to run the Jazz Team Server and Build System Toolkit on IBM i. This beta will not allow management and build of applications written in RPG, COBOL, or EGL.

Restrictions:

1. You cannot use the Jazz Team Server setup wizard to configure the Team Server database connection for the Rational Team Concert for i beta product. The required steps are described in this guide.
2. You cannot use the Jazz Team Server setup wizard to assign repository permissions to new users.

Chapter 1. Prerequisites and system requirements

Ensure you have the following prerequisite applications installed and operational before you proceed with the installation on IBM i:

- IBM i 5.4 or 6.1 with the following PTFs:
 - IBM i 5.4:**
 - SI31547 for Product 5722JC1
 - SI32280 for Product 5722SS1
 - IBM i 6.1:**
 - SI31554 for Product 5761JC1
 - SI31976 for Product 5761SS1
- WebSphere® Application Server V6.1
- IBM J2SE 5.0 32-bit JVM with latest Java™ group PTF applied

Note: By default the application server is configured to use the IBM i Java Developer Kit 5.0 JVM (also known as the classic JVM). Rational Team Concert for IBM i requires IBM J2SE 5.0 32-bit JVM. For instructions, see *enablejvm command* in the WebSphere Application Server information center at http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.iseries.doc/info/series/ae/rxml_enablejvm.html.

For support and access to additional online information, register at Jazz.net at <https://jazz.net/pub/user/register.jsp>.

Chapter 2. Locating and installing the files

Complete the following steps to download and install Rational Team Concert for i files.

1. Get the package from the Rational Team Concert for System z™ and IBM i Open Beta Web site at http://www.ibm.com/services/forms/preLogin.do?lang=en_US&source=swerprat1-rtciz2008-3
2. Download the following files to a temporary directory:

Table 1. Rational Team Concert for i installation files

Description	File name
Jazz Team Server for IBM i	RTC-TeamServer-on-i-1.0Beta1.zip
Rational Team Concert Eclipse-based client	RTC-Client-for-i-and-z-1.0Beta1.zip
OPTIONAL: Build System Toolkit for IBM i	RTC-BuildSystemToolkit-on-i-1.0Beta1.zip

3. Create a directory in your integrated file system (IFS) on IBM i for storing the downloaded files. For example, you can create a directory structure `/QIBM/UserData/RTCi/V1/TeamServer` but you can use any directory to which you have write access. This directory will be referred to as **<yourDirectory>** in the following steps. Copy **RTC-TeamServer-on-i-1.0Beta1.zip** to the directory you created.
4. Unzip the file using the following steps:
 - From the main menu, type the **qsh** command
 - Once you are in **QShell**, change directories using the **cd** command to the location of the zip file you downloaded.
 - Use the **jar** command to unzip the file. For example:

```
jar -xf RTC-TeamServer-on-i-1.0Beta1.zip
```

You should now have a **jazz** directory.

5. Edit the following items in **<yourDirectory>/jazz/server/teamserver.properties**
 - Replace **jazzDBuser** with a user ID with the authority to create and write to a library on the system.
 - Replace **jazzDBpswd** with a password for **jazzDBuser**

Note: Do not modify `password={password}`.

- By default, Jazz will create and use the library **JAZZREPO01** as its repository. If you want to use a different library, uncomment the line with **com.ibm.team.repository.db.db2i.schema.name** and replace **JAZZREPO01** with the name of the library you want to use.

For example,

```
#
# DB2i configuration
#
# Comment out above lines, uncomment the following three lines and customize
example location to use DB2i
com.ibm.team.repository.db.vendor = DB2i
com.ibm.team.repository.db.jdbc.location=//localhost;hold statements=true;
```

```
user=jazzDBuser;password={password};
com.ibm.team.repository.db.jdbc.password=jazzDBpswd
#com.ibm.team.repository.db.db2i.schema.name=JAZZREP001
```

- **OPTIONAL:** Rational Team Concert for i supports IBM i local authentication and LDAP for security. If you are using local operating system authentication for WebSphere Application Server security, you also need to add the following statement to **teamserver.properties**:

```
com.ibm.team.repository.user.registry.type=UNSUPPORTED
```

6. Edit **<yourDirectory>/jazz/server/provision_profiles/profile.ini**. Replace `url=file:./update-site`

with the full path to your **jazz/server/update-site** directory.

For example,

```
url=file:/QIBM/UserData/RTCi/V1/TeamServer/jazz/server/update-site
```

7. Edit **<yourDirectory>/jazz/server/provision_profiles/i-license-profile.ini**. Replace `url=file:./license-update-site`

with the full path to your **jazz/server/license-update-site** directory.

For example,

```
url=file:/QIBM/UserData/RTCi/V1/TeamServer/jazz/server/license-update-site
```

Chapter 3. Configuring your installation

After successfully installing the required and optional components, complete the following tasks to configure your installation.

Creating the Jazz Team Server database tables

You can create the Jazz Team Server repository by using the provided repository tools. Run the following command to create the repository library and tables:

```
./reptools.qsh -createTables
```

By default, this command looks for a **teamserver.properties** file in the current directory, and uses the configuration parameters in that file to create the repository. It uses the user ID and password you specified in that file to create the repository library and tables, and will create the repository in the library using the name you specified (if you changed the default from **JAZZREPO01**). This command will create a log file called **reptools_createTables.log**, which will contain information recorded when creating the tables and a statement about whether creation of the tables was successful.

Note: If you create another properties file, for example, **teamserver_test.properties** then you have to pass it using this command: **./reptools.qsh -createTables teamserver.properties=teamserver_test.properties logFile=createTables.log**

Run the command **./reptools.qsh -createTables** to create the database tables for a Jazz Team Server repository. The repository tools file is located in **<yourDirectory>/jazz/server**.

The parameter **teamserver.properties** can be used to reference a different properties file. This command creates the tablespace and all the required tables and indexes for a Jazz Team Server repository.

Setting up the WebSphere Application Server

Setting up the WebSphere Application Server takes place in four parts: setting the Java Virtual Machine (JVM) parameters, securing the WebSphere Application Server, installing the Jazz Web archive file, and verifying the installation.

Before you set up the WebSphere Application Server, run the following commands to provide read and write access to the **/tmp** directory by the WebSphere Application Server:

```
cd /tmp  
chmod -R 777
```

These steps are not intended to provide complete instructions for WebSphere Application Server administration. Instead, these instructions are intended to provide basic guidance. The following sections assume that you are installing the Jazz Team Server to the **default** WebSphere Application Server instance. If you choose to create a new WebSphere Application Server profile to be used with the Jazz Team Server, you should substitute that profile name for **default** in the following sections. Consult the WebSphere Application Server 6.1 Information Center at <http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/topic/>

com.ibm.websphere.base.iseries.doc/info/welcome_base.html for more details on creating and managing WebSphere Application Server profiles and WebSphere Application Server administration.

Part 1: Setting the Java Virtual Machine parameters

To set up the Java Virtual Machine (JVM) parameters, complete the following steps:

1. Log on to IBM i, and enter the **QSH** command.
2. To start the server, navigate to the directory containing the WebSphere Application Server commands and executable files. For example,


```
cd /QIBM/UserData/WebSphere/AppServer/V61/Base/profiles/default/bin
```
3. Start the server using the **./startServer** command. When the server has started, the system will provide a port number that you can use to access the WebSphere Application Server Integrated Solutions console. For example,


```
CPC1221: Job 107206/QEJBSVR/SERVER1 submitted to job queue QWASJOBQ in
      library QWAS61.
      CWNATV00I: Application server server1 in profile default has started and is
      ready to accept connections on admin port 9060.
```
4. To access the WebSphere Application Server console, replace *portnumber* with the port number the system provided in the following URL:


```
http://serverip:portnumber/ibm/console
```
5. Log on to the WebSphere Application Server Integrated Solutions console.
6. Expand **Servers**, click **Application servers** and select *YourApplicationServer*
7. On the **Configuration** tab, under **Server Infrastructure**, expand **Java and Process Management** and click **Process Definition**
8. Under **Additional Properties**, click **Java Virtual Machine**
9. Under **Additional Properties**, click **Custom Properties** and then click **New**
10. Insert the following values for the property fields:

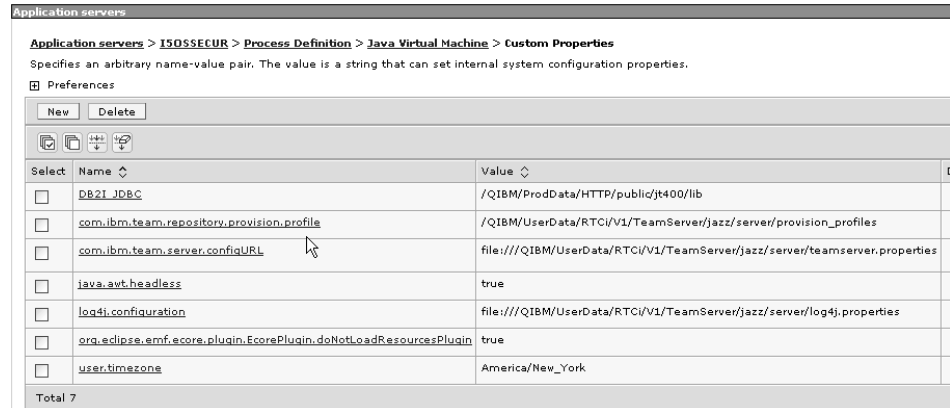
Table 2. Property values to enter in WebSphere Application Server

Property	Value to enter
DB2I_JDBC	/QIBM/ProdData/http/public/jt400/lib ^a
com.ibm.team.repository.provision.profile	<yourDirectory>/jazz/sever/ provision_profiles
com.ibm.team.server.configURL	file:///<yourDirectory>/jazz/server/ teamserver.properties
java.awt.headless	true
log4j.configuration	file:///<yourDirectory>/jazz/server/ log4j.properties
org.eclipse.emf.ecore.plugin.EcorePlugin.doNotLoadResourcesPlugin	true
OPTIONAL: user.timezone	America/New_York ^b

Notes:

- a. Ensure that is the correct directory for your installation.
- b. Set timezone according to your region. See *Time zone IDs that can be specified for the user.timezone property* at http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/topic/com.ibm.websphere.base.iseries.doc/info/series/ae/rrun_svr_timezones.html for details.

When complete, your screen should look like the screen below.



11. Save directly to the master configuration.

Part 2: Securing the WebSphere Application Server with IBM i authentication

The Jazz Team Server requires that WebSphere Application Server administrative security and application security are enabled. If you choose to secure the WebSphere Application Server using IBM i as the security provider, you need to complete the following steps.

Note: This step will be different if you are setting up security using LDAP. For more information on LDAP security and Jazz, see https://jazz.net/jazzdocs/topic/com.ibm.team.install.doc/topics/c_plan_identity_management.html

1. Navigate to the WebSphere Application Server administration directory using the **cd** command. For example:

```
cd /QIBM/UserData/WebSphere/AppServer/V61/base/profiles/default/bin
```

2. Use the **wsadmin** command to start the WebSphere Application Server admin tool. For example:

```
./wsadmin
WASX7209I: Connected to process "server1" on node L0T119 using
SOAP connector ; The type of process is: UnManagedProcess
WASX7029I: For help, enter: "$Help help"
```

3. Secure the WebSphere Application Server profile with a valid user ID and password by entering the following command: **===> securityon YourUserID YourPassword**. This user ID and password will be used to access the secure WebSphere administrative console, and has authority to stop the application server after it is secured.

4. Use the **quit** command to stop the WebSphere Application Server admin tool.

5. For the changes to take effect, you must stop the server using the **./stopServer** command and restart it using the **./startServer** command. When the server has restarted, you should have the following message:

```
CPC1221: Job 107206/QEJBSVR/SERVER1 submitted to job queue QWASJOBQ in
library QWAS61.
CWNATV00I: Application server server1 in profile default has started and is
ready to accept connections on admin port 9060.
```

Part 3: Installing the Jazz Web archive file

You need to install the Jazz Web archive file **jazz.war** on your application server. Install the **jazz.war** file using the WebSphere Application Server Integrated Solutions console by completing the following steps:

1. Use a Web browser to log on to the WebSphere Application Server Integrated Solutions console with a URL like this: **http://YourServer:YourPortNumber/ibm/console/**. For example:

`http://serverip:9060/ibm/console`

If you have already enabled WebSphere Application Server security, you will be redirected to a secure port.

2. Expand **Applications**, click **Enterprise Applications**
3. On the **Enterprise Applications** window, click the **Install** button
4. For **Path to new application**, select **Remote file system**
5. Browse to the **jazz.war** file at `<yourDirectory>/jazz/server/jazz.war`

Note: Select a node name to browse the file system.

6. Set **Context root** to `/jazz`
7. Under **How do you want to install the application?** select **Show me all installation options and parameters** and click **Next**
8. Accept all defaults until you get to **Step 8: Map security roles to users or groups**. The security roles and levels of access include:

JazzAdmins

Jazz repository administrators with full read-write access

JazzDWAdmins

Jazz repository administrators with specific permissions to control the data warehouse on a Jazz Team Server

JazzGuests

Users with read-only access to the Jazz repository

JazzUsers

Users with regular read-write access to the Jazz repository

9. Select **JazzAdmins** and click **Look up users**

Note: This step will be different if you are setting up security using LDAP. For more information on LDAP security and Jazz, see https://jazz.net/jazzdocs/topic/com.ibm.team.install.doc/topics/c_plan_identity_management.html

10. On the next screen, click **Search**, and select at least one user ID from the **Available** list and move it to **Selected** using `>>`
11. Repeat steps 8 and 9, for the following groups: **JazzDWAdmins**, **JazzUsers**, and **JazzGuests**
12. Check all the check boxes under **All Authenticated** and then click **Next**
13. In **Step 9** click **Finish** and click **Save**
14. The **jazz.war** is now installed and will have a red cross shown under **Application Status**
15. Restart the WebSphere Application Server to use the changes you made to the JVM properties. The Jazz Team Server application should start automatically when you restart the WebSphere Application Server.

Part 4: Verifying the installation

Complete the following steps to ensure the application is installed and set up properly:

1. The WebSphere Application Server logs provide helpful informational messages and error messages related to the Jazz Team Server. First verify that the correct

JVM is being used by this application server instance. For example, navigate to `/QIBM/UserData/WebSphere/AppServer/V61/ND/profiles/default/logs/server1` and check the **SystemOut.log**. Verify that J9VM is initiated by ensuring the first lines of the log include text that refers to the IBM J9 JVM. Your log should be similar to the following:

```
Java version = J2RE 1.5.0 IBM J9 2.3 OS400 ppc-32 j9vmap3223-20080315
(JIT enabled)
  J9VM - 20080314_17962_bHdSMr
  JIT  - 20080130_0718ifx2_r8
  GC   - 200802_08, Java Compiler = j9jit23, Java VM name = IBM J9
```

2. Access the Jazz Team Server administrative Web interface using the secure port associated with the application server virtual host to which you installed the **jazz_war** application. In a default application server, this is port **9443**. Use this port to access the Jazz Team Server administrative Web interface to verify the server status using a Web browser with the following URL:
`https://yourServer.com:yourSecurePort/jazz/admin`. Log in with a user ID that has **JazzAdmins** permission and verify that the **Server Status summary** does not show error messages.

Note: If you are unsure of the secure port used for your WebSphere Application Server profile, you can determine the port from the **IBM i HTTP Server Administration**, which you can access at `http://yourSystem:2001/HTTPAdmin`. Click the **Manage** tab, ->**Application Servers** and select your WebSphere Application Server profile. Click **Server Ports** in the left menu. The **Secure HTTP port** is where the Jazz server will be available. Use this port as the secure port to access the Jazz Team Server.

Completing the installation

After the server is installed, you must consider some configuration options before continuing.

- Some files contain passwords. Those files should be protected so that they are readable only by users authorized to know the password for the accounts. The Jazz Team Server requires that the database password is stored in **JazzInstallDir/server/teamserver.properties**. When properties files are saved, the application always makes a backup copy of the previous version in the same directory. If you want to remove all files that contain the clear-text password, remove the backup properties files after configuring the server for the first time.
- If you configured the application server to use ports other than the defaults, these ports should also be configured in the Jazz configuration. These port numbers are used for composing URLs for things like feed links and item links in email notifications. To update the defaults, use the advanced properties configuration page of the Admin Web UI to modify the following properties:
 - `com.ibm.team.repository.servlet.internal.ServletConfigurationService`
 - Repository HTTP port
 - Repository HTTPS port
 - `com.ibm.team.repository.service.internal.webuiInitializer.ConfigPropertyInitializer`
 - URL HTTP Port
 - URL HTTPS Port

You are now ready to connect to the server with the Rational Team Concert client or a Web browser.

Chapter 4. Setting up the Rational Team Concert client

Complete the following steps to install the Rational Team Concert client (also called the Eclipse client) on Windows:

1. Download the client zip file **RTC-Client-for-i-and-z-1.0Beta1.zip**
2. Extract the .zip file to an installation directory of your choice. Relative to the installation directory you choose, the client path is **JazzInstallDir/client**.
3. To start the client, double click on the **TeamConcert.exe** application in the directory **JazzInstallDir/client/eclipse**.

You will use the Rational Team Concert Eclipse client with the Tutorial exercises. See Chapter 6, "Getting started with Rational Team Concert for i," on page 15.

Chapter 5. Setting up the build engine

Complete the following steps to set up the build engine on IBM i:

1. Download the Build System Toolkit zip **RTC-BuildSystemToolkit-on-i-1.0Beta1.zip** to an integrated file system (IFS) location on IBM i where you want to run the Jazz Build Engine. For example, /QIBM/UserData/RTCi/V1/Build.
2. Unzip the file by completing the following steps:
 - a. From the Main Menu, type the **qsh** command.
 - b. Once you are in QShell, using the **cd** command, change to the directory where you downloaded the Build System Toolkit zip file
 - c. Use the **jar** command to unzip the file. For example,

```
jar -xf RTC-BuildSystemToolkit-on-i-1.0Beta1.zip
```
 - d. You should now have a jazz directory containing the build engine
3. Change your directory to **jazz\buildsystem\buildengine\eclipse**.
4. If you have extracted the .zip file to a different directory than /QIBM/UserData/RTCi/V1/Build, then edit **jbe.qsh** to update the BUILD_ECLIPSE variable to point to your specific directory.
5. Use the Rational Team Concert client to define a build engine. See *Lesson 8: Team Builds* in the tutorial, *Getting Started with Rational Team Concert* at https://jazz.net/jazzdocs/index.jsp?topic=/com.ibm.team.concert.tutorial.doc/topics/tut_rtc_build.html.
6. Start the build engine using the following command:

```
jbe.qsh -repository REPOSITORYURI -engineID ENGINENAME  
-userId USERNAME -pass PASSWORD
```

For example:

```
./jbe.qsh -repository https://elcrtp21.rtp.raleigh.ibm.com:9444/  
jazz -engineID MY_ENGINE -userId JOHNDOE -pass pas1wr1
```

7. Look for the following text to indicate a successful startup:

```
> ./jbe.qsh -repository https://elcrtp21.rtp.raleigh.ibm.com:9444/jazz  
-engineID  
MY_ENGINE -userId JOHNDOE -pass pas1wr1  
BUILD_ECLIPSE=<yourDirectory>/jazz/buildsystem/  
buildengine/eclipse  
  
osgi> 2008-07-01 17:13:13 [Jazz build engine] Running build loop...  
2008-07-01 17:13:13 [Jazz build engine] Waiting for request...
```

Restriction: You must leave this window open for as long as you need the build engine to build.

If you get an error message like, cd: 001-0008 Error found changing to directory ..., you have the incorrect directory specified for BUILD_ECLIPSE in **jbe.qsh**.

You have now set up the Jazz Build Engine on IBM i.

Note: When this Jazz Build Engine instance processes build requests, the builds are executed under the authority of the user profile that was used to start the engine. As a result, it is possible for users to request builds specifying

commands they should not have authority to execute. You can control who is able to request builds by only assigning the **Request Build** permission to specific roles. It is not recommended that you grant this permission to everyone.

Chapter 6. Getting started with Rational Team Concert for i

Keep in mind that the Rational Team Concert for i Beta is an early release version. The documentation referenced is included with the distributed version of Rational Team Concert and many but not all of the topics are applicable to Rational Team Concert for i Beta product.

The Jazz.net Web site has many resources to help you get started with Jazz components and Rational Team Concert. Register at Jazz.net and see *Tutorial: Get started with Rational Team Concert* at https://jazz.net/jazzdocs/topic/com.ibm.team.concert.tutorial.doc/topics/tut_rtc_abstract.html. The tutorial will teach you to:

- Set up a project and team
- Get connected as a user
- Create and understand work items
- Organize team work
- Save and share source
- Use the Web user interface
- Examine the Jazz build

Expect to spend a few hours to complete the tutorial.

For a faster introduction, see the *Jazz technology platform quick reference* at https://jazz.net/jazzdocs/topic/com.ibm.team.platform.doc/topics/c_jazz-platform-quick-ref.html. In addition, see the Rational Team Concert online help at <https://jazz.net/jazzdocs/index.jsp> for additional information.

To get started using Rational Team Concert for i, start with the following online help topics:

- *Managing the Jazz Team Server through the Web interface* at <https://jazz.net/jazzdocs/topic/com.ibm.team.repository.web.admin.doc/topics/tworkwithadminwebui.html>
- *Working with projects, teams, and process* at https://jazz.net/jazzdocs/topic/com.ibm.team.platform.doc/topics/t_projects_teams_process.html

Explore the online help and the Jazz.net Web site for product details, concepts, and troubleshooting for Rational Team Concert, the Jazz platform, and new incubator technologies.

Notes:

1. Jazz Repository permissions cannot be assigned using the Jazz Team Server Web administration user interface or the Rational Team Concert client. These must be configured using the WebSphere Application Server administration console **Security Role to User/Group mapping** settings for the **jazz.war** file. See “Part 3: Installing the Jazz Web archive file” on page 7.
2. Jazz repository user IDs are case sensitive. If you are using IBM i authentication for your security provider, you should use upper case Jazz repository IDs.

Chapter 7. Troubleshooting and getting help

The Jazz.net forum and bug tracking page are available for solving problems, creating bug reports, and answering questions related to the Rational Team Concert for i Beta program. To use the forums or open bug reports, first register with Jazz.net. When you receive your password, log on to Jazz.net using those credentials.

To use the forum:

1. Browse the Jazz.net forums at <https://jazz.net/community/forums.jsp>
2. Use the **jazz.user** forum at <https://jazz.net/forums/viewforum.php?f=1> to search for similar problems or questions by clicking the **Search** link at the bottom of the page
3. To create a new forum topic, click the **New topic** button, and fill in the following fields:
 - In the **Subject** field enter **[RTCi]** along with a brief topic description. For example, "[RTCi] Starting Jazz Team Server generates errors."
 - Enter a description in the **Message body**.
 - Click **Submit**.

To search for or create a bug report or work item, go to the *Jazz Bug Tracking* page at <https://jazz.net/bugs/bugs.jsp> to browse or search for bug reports. To search existing bug reports you can use a predefined work item query or create a custom query of your own. To get a list of all of the work items for Rational Team Concert for System z, run the **RTC on IBM i work items** query.

To submit a work item or bug report, complete the following steps:

- Click **New work item**
- In the **Summary** field enter a brief topic description
- From the **Type** list, select **Defect** (the default option) if you are reporting a problem, or **Enhancement** if you are suggesting a new feature or improvement.
- From the **Filed against** list, select the **(Show All)** category and then open the **Filed against** drop-down list again and choose "RTC on IBM i"
- Enter a detailed description in the **Description** field
- **Optional:** Enter a level of **Severity** and/or **Priority**
- If you want to add a file attachment or screen capture of the problem, that option is available on the **Links** tab
- Click **Save** to submit your work item
- Record your work item number for future reference

You can use the discussion section of the work item to add comments using the **Add Comment** link on the right of the discussion section at the bottom of the **Overview** tab. Developers can also add comments or respond to your questions there. You will be notified by e-mail when the work item changes or when comments are added.

Tip: For advice on effective bug reporting, see *How to Report Bugs Effectively* at <http://www.chiark.greenend.org.uk/~sgtatham/bugs.html>

Frequently asked questions

Question:

Where are the **startserver** and **stopserver** files located and how do I use them?

Answer:

Navigate to your WebSphere Application Server bin directory, for example
/qibm/ProdData/
Websphere/AppServer/V61/Base/bin

and use the **./startserver** command to start or the **./stopserver** command to stop.

Question:

Why can't I assign a Client Access License to a user from the Web user interface?

Answer:

If you are unable to assign Client Access Licenses to users, check the **profile.ini** and **i-license-profile.ini** files and ensure that you put all the parameters on the same line.

Notices

This information was developed for products and services offered in the U.S.A.

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