

Installation and configuration of IBM RTC

3.0.1.2 on Windows

©2013 Navneet Kumar. All rights reserved. This document is provided "as-is." Information and views expressed in this document, including URL and other Internet Web site references, may change without notice. You bear the risk of using it.

Some examples are for illustration only and are fictitious. No real association is intended or inferred.

This document does not provide you with any legal rights to any intellectual property. All the software download, installation and configuration were done at author's home using his personal internet connection and on his own personal devices. All the software used for this installation and configuration are either open source or licensed to the author. You may copy and use this document only for your internal, reference purposes.

Installation and configuration of IBM RTC 3.0.1.2 on Windows Server 2008 R2 x64 and SQL Server 2008 R2 x86

June 2013

Applies to: RTC 3.0.1.2 | Windows Server 2008 R2 | Microsoft SQL Server 2008 R2

Author contact details

Name: **Navneet Kumar**

E-mail address: **navneet.kumar-at-gmail.com**

Mobile: India: **+91.9766228780**, USA: **+1.408.898.2440**

Summary

This white paper provides steps that will help you install and configure IBM RTC 3.0.1.2 on 64-bit Windows Server 2008 R2. It includes instructions for configuring SQL Server 2008 and Apache webserver for proper functioning of RTC 3.0.1.2.

Contents

Author contact details.....	2
Summary	2
Overview	4
Software prerequisites for Access apps	4
Installation of RTC 3.0.1.2 Server.....	5
Download and launch RTC 3.0.1.2 Installer:	5
Selection of packages:	6
International Program License Agreement:	7
Directory selection for “shared resources” and “installation manager”	8
Package selection	9
Language package selection	10
Feature selection	11
Context root selection	12
Installation summary	13
SQL Server configuration.....	15
Download JDBC Driver 2.0	15
[Optional] Configure SQL Server port	16
RTC Server configuration	18
Apache Tomcat configuration	18
Starting up RTC server	19
JAZZ Team Server configuration	19
Jazz Team Server configuration involves following 6 steps:	19
Configure Public URI	19
Database configuration	20
Email Configuration	21
Application registration	22
Setup user registry	23
Configure Data Warehouse	24
Application configuration	26

Overview

This white paper assumes that you have installed SQL Server 2008 R2 and your system meets the requirement for installation of RTC 3.0.1.2. Details of system requirements for RTC is available on jazz.net website at following location -

<https://jazz.net/library/article/632/>

You will have to signup on <http://jazz.net> for downloading RTC 3.0.1.2 installer. This is an important setup and you cannot proceed with installation without this.

If you are planning to expose RTC Server on extranet or internet then you need to configure the firewall to allow traffic from Apache server. RTC server allows both SSL (Secure Socket Layer) and non-SSL traffic.

Software prerequisites for Access apps

The following are software pre-requisites for installation of RTC 3.0.1.2:

SQL Server: SQL Server 2008 R2 Standard or Enterprise. You can also use free version of SQL Server 2008 R2 – SQL Server 2008 R2 Express edition. It is also recommended that you install SQL Server Management Studio (SSMS). SSMS simplifies the task for creation and configuration of databases.

Apache Tomcat: Apache Tomcat 7.0.32 is recommended because it contains critical security fixes. Apache Tomcat installation is optional as Apache Tomcat 7.0.32 5.5.30 is bundled along with RTC 3.0.1.2 installer.

JDBC Driver: JDBC Driver 2.0 is required for configuring database for RTC Server. This can be downloaded from Microsoft website.

Java Runtime Environment: IBM Java SDK 5.0 SR11 is bundled along with the RTC Installer.

You can refer to following article on jazz.net for more details on software prerequisites - <https://jazz.net/library/article/632/>

Installation of RTC 3.0.1.2 Server

RTC Server installer can be downloaded from <http://jazz.net>. Logon to the Jazz website using your credentials and navigate to RTC download page - <https://jazz.net/downloads/rational-team-concert/>. Download the correct version of the RTC Installer based on your server configuration.

Download and launch RTC 3.0.1.2 Installer:

Download the RTC 3.0.1.2 installer with file name - **RTC-Web-Installer-Win-3.0.1.2.zip** and save it on your disk. Extract the contents of the zip archive on your disk and run **Launchpad.exe**. This will launch the RTC Installer. Image-1 below is the screenshot of the first page of the RTC installer.

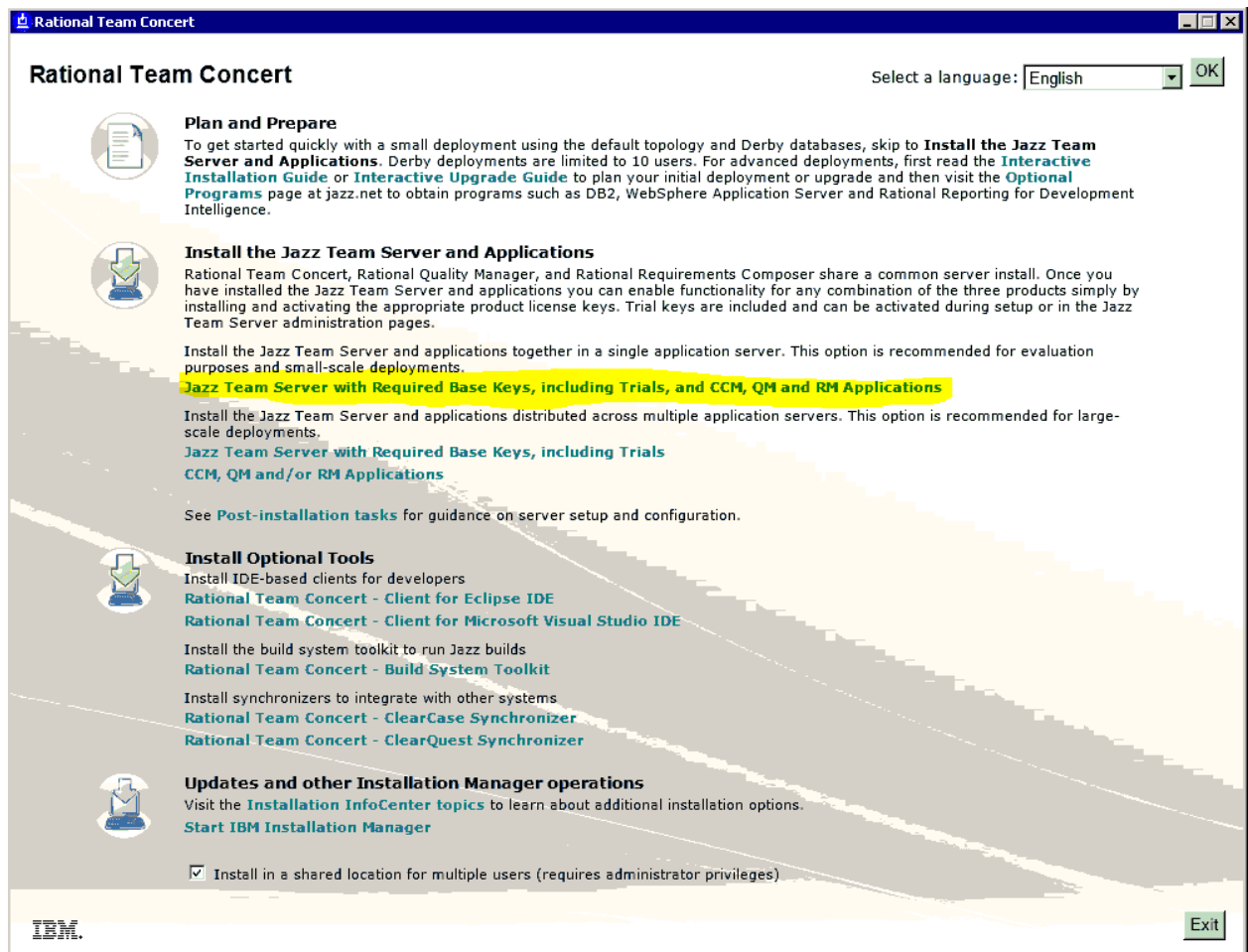


Image-1: Launch screen of RTC 3.0.1.2 Installer

As highlighted in Image-1 above, click on ***“Jazz Team Server with Required Keys, including Trials, and CCM, QM and RM applications”*** to proceed with the installation. This will launch the IBM Installation Manager. You’ll have to authenticate yourself using the Jazz.net credentials before proceeding with the installation.

Selection of packages:

On next screen you will have to select the packages that you would like to install on your setup. These packages include:

- IBM Installation Manager

- Jazz Team Server and CCM, QM and RM applications

- Required Base License Keys, including trials

Select all three options and press Next button. You can also check for other versions, fixes and extensions by clicking on the *“Check for other versions, fixes and extensions”* button on right side. Image-2 shows the screenshot of this page.

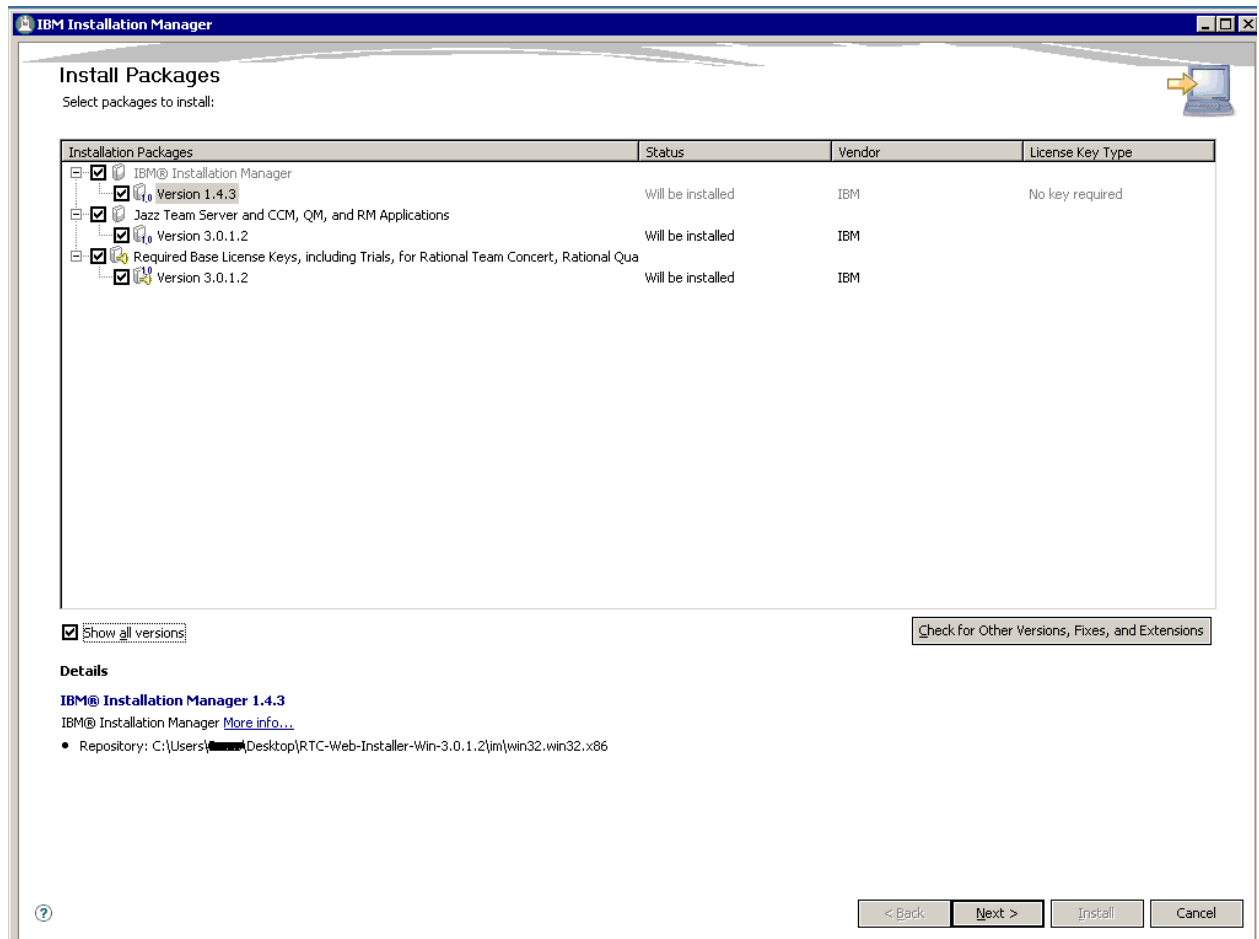


Image-2: High level installation package selection

International Program License Agreement:

Go through the license agreement. If license terms are acceptable to you, click on the checkbox – *"I accept the terms in the license agreement"* and press *Next* button. See the Image-3 for the screenshot of this page.

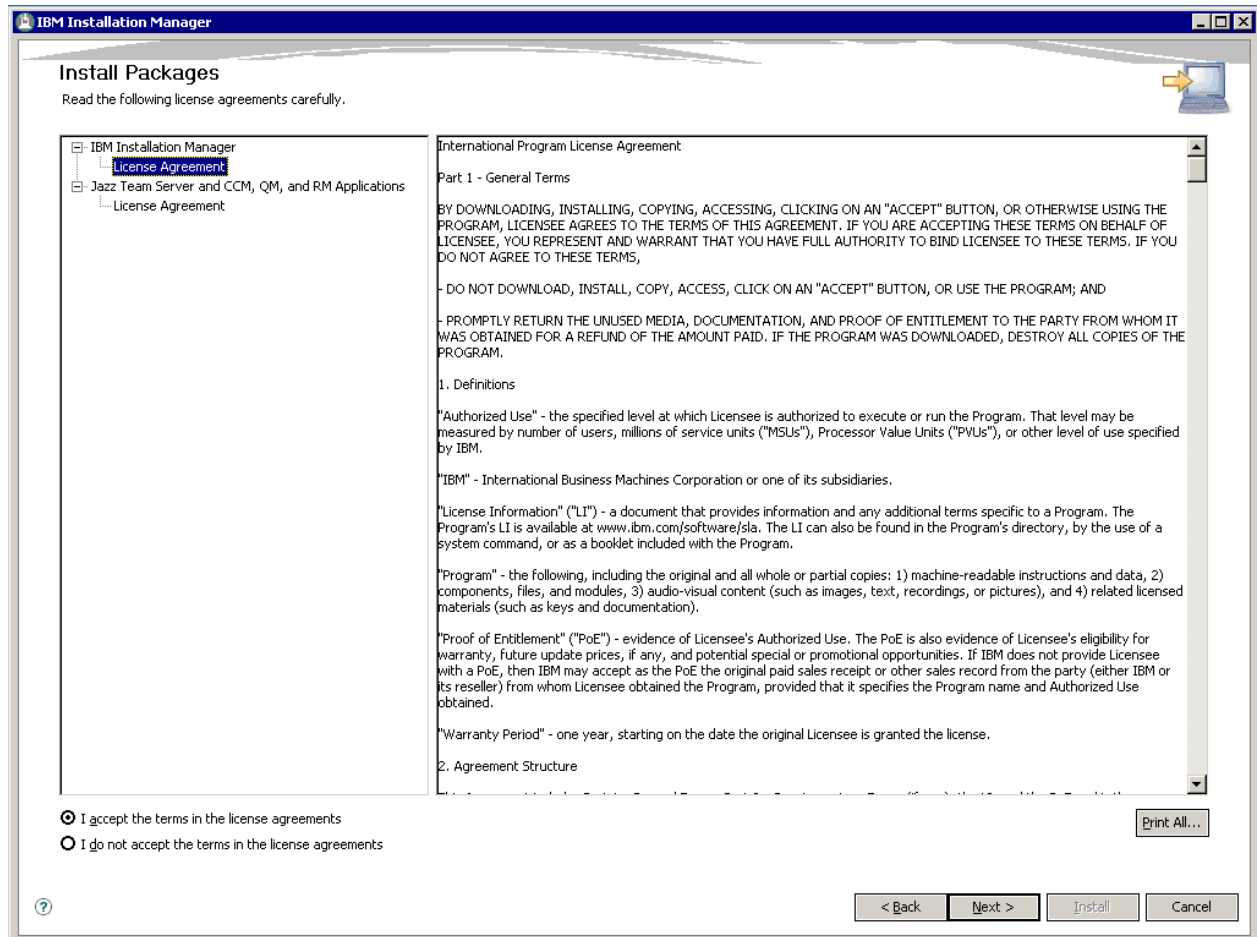


Image-3: International Program License Agreement

Directory selection for “shared resources” and “installation manager”

On this screen you will have to provide installation directory for shared resources and installation manager. You need to make sure that there is sufficient space available on the drive. This is important to keep space for future packages and their shared resources. Image-4 is a screenshot of this page. Press *Next* button to continue with the installation.

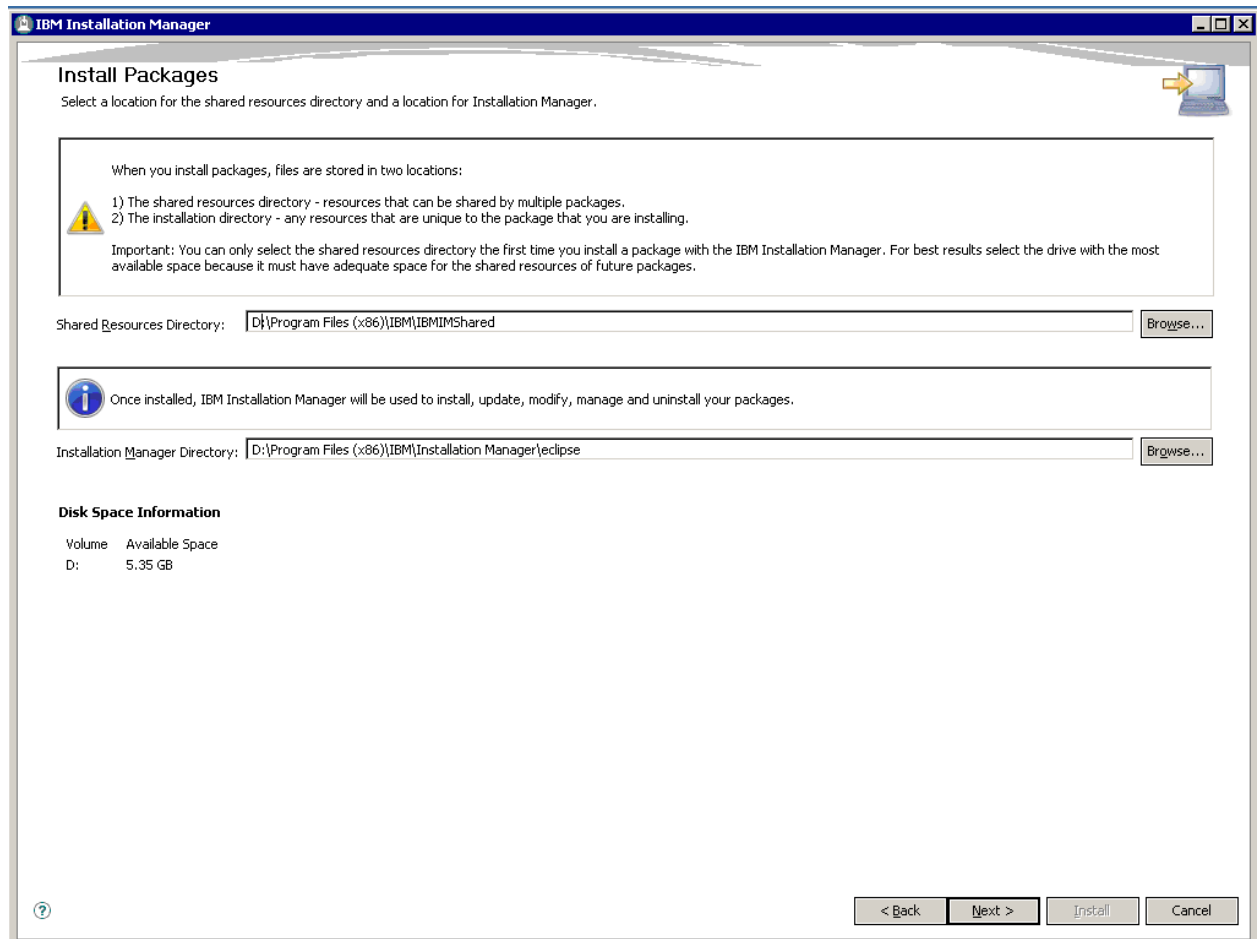


Image-4: Directory selection for "shared resources" and "installation manager"

Package selection

Since this is a fresh installation, you need to create a new package group for installing RTC Server. Name of the default package is "*Jazz Team Server*" and you cannot change it. You'll have to specify the installation directory for this package. Image-5 shows the screenshot of this page. Press *Next* button to continue with the installation.

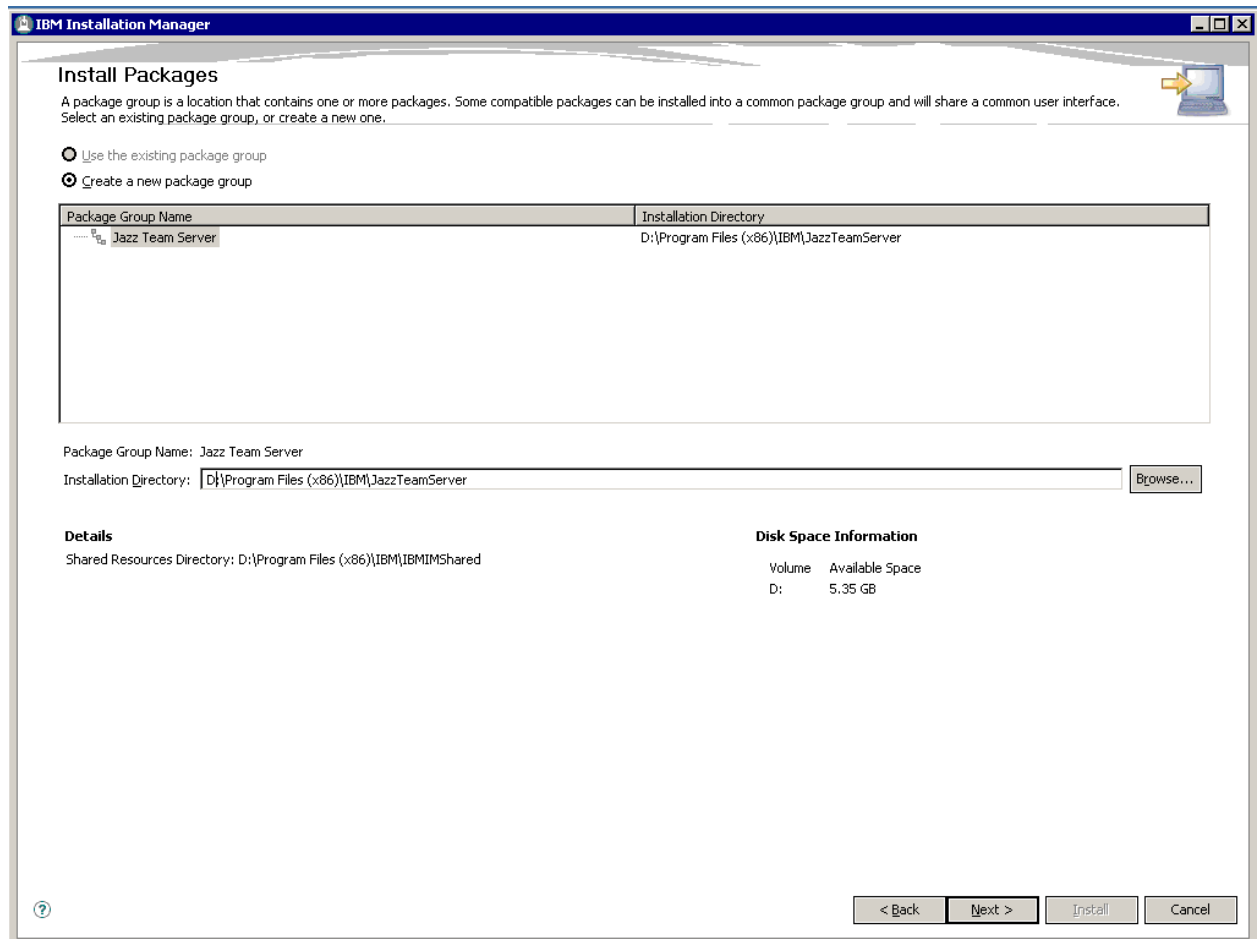


Image-5: Package selection page

Language package selection

On this page you can select the language package you would like to install. Default selection is *English* and it cannot be unselected. Image-6 shows the screenshot of this page. Press *Next* to continue with the installation.

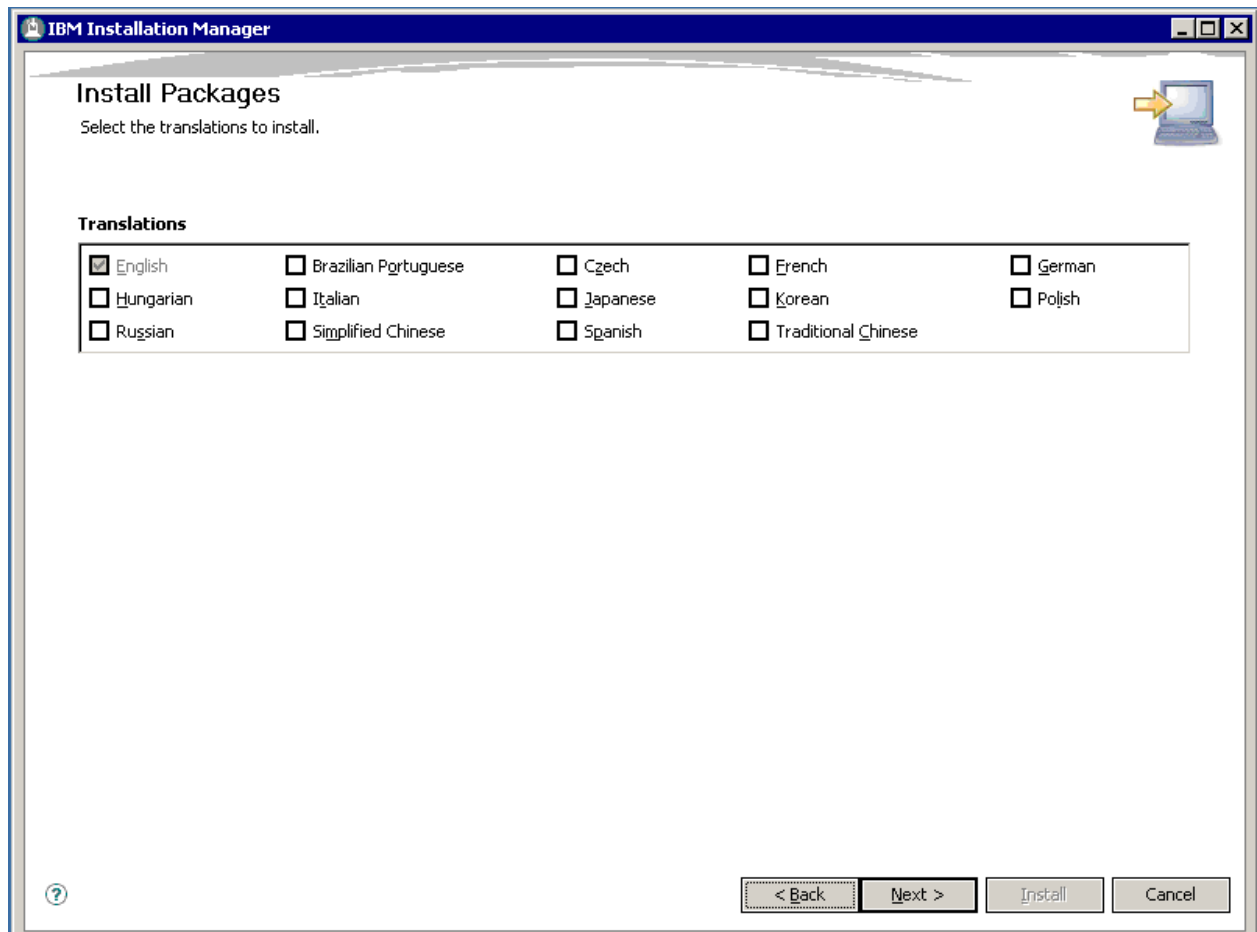


Image-6: Language package selection page

Feature selection

On this page you can select the features that you would like to install. You can unselect the Apache Tomcat installation if you have it installed already. Following three applications are also bundled along with Jazz Team Server:

CCM: Change and configuration Management

RM: Requirement Management

QM: Quality Management

You can select the applications which you would like to install. Following two features are mandatory installation and cannot be unselected:

IBM Installation Manager 1.4.3

Required Base License Keys, including trials, for Rational Team concert...

Select the features that you would like to install and press Next button. Image-7 is a screenshot for this page.

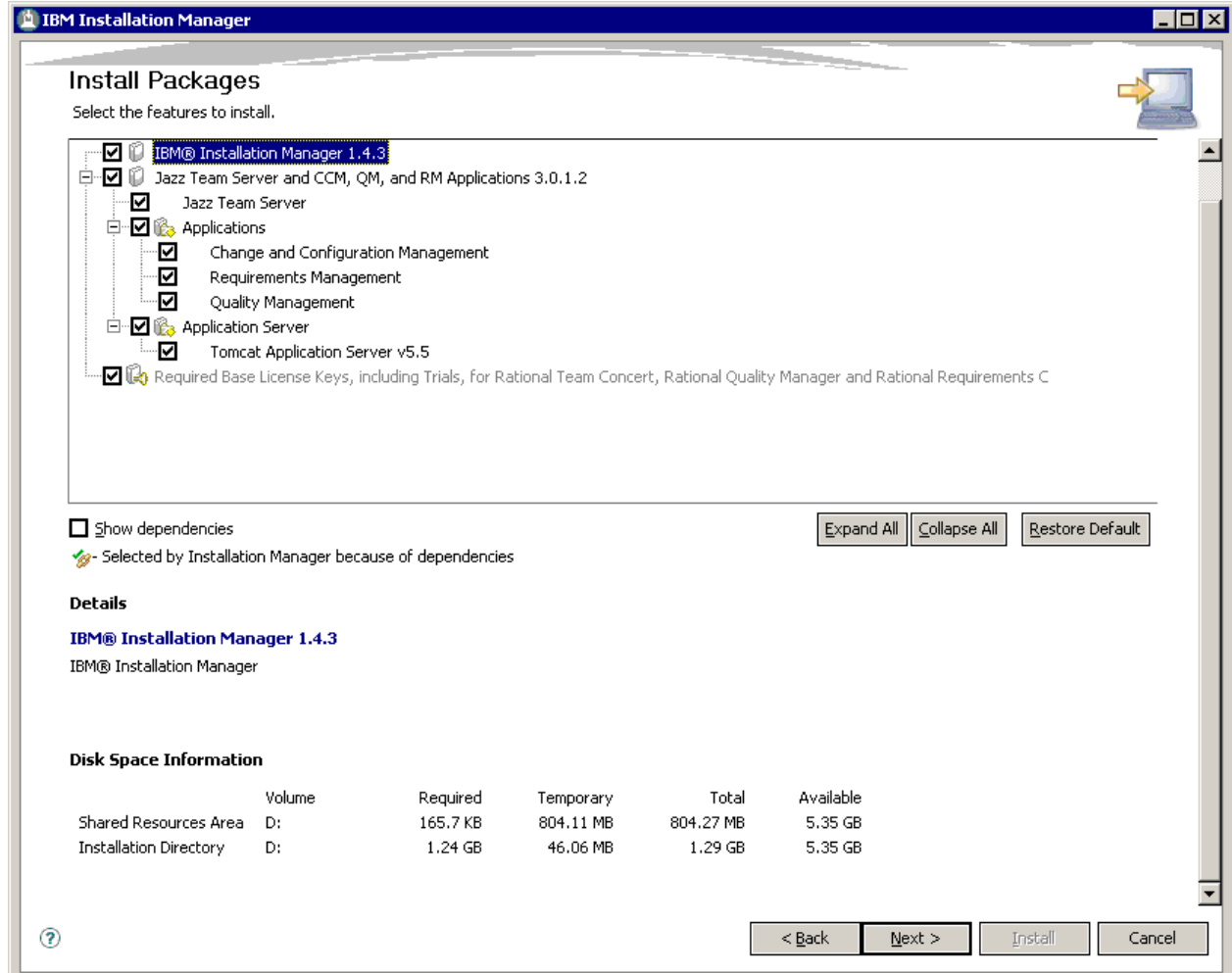


Image-7: Feature selection page

Context root selection

On this page you can select the application context for Jazz Team server and other applications that you had selected in the previous step. It is recommended to use default (3.x) context root for installation. Following context root values are used for default installation:

Jazz Team Server - /jts

Change and configuration management - /ccm

Quality Management - /qm

Requirements Management - /rm

Press *Next* button to continue with the installation. Image-8 shows the screenshot of this page.

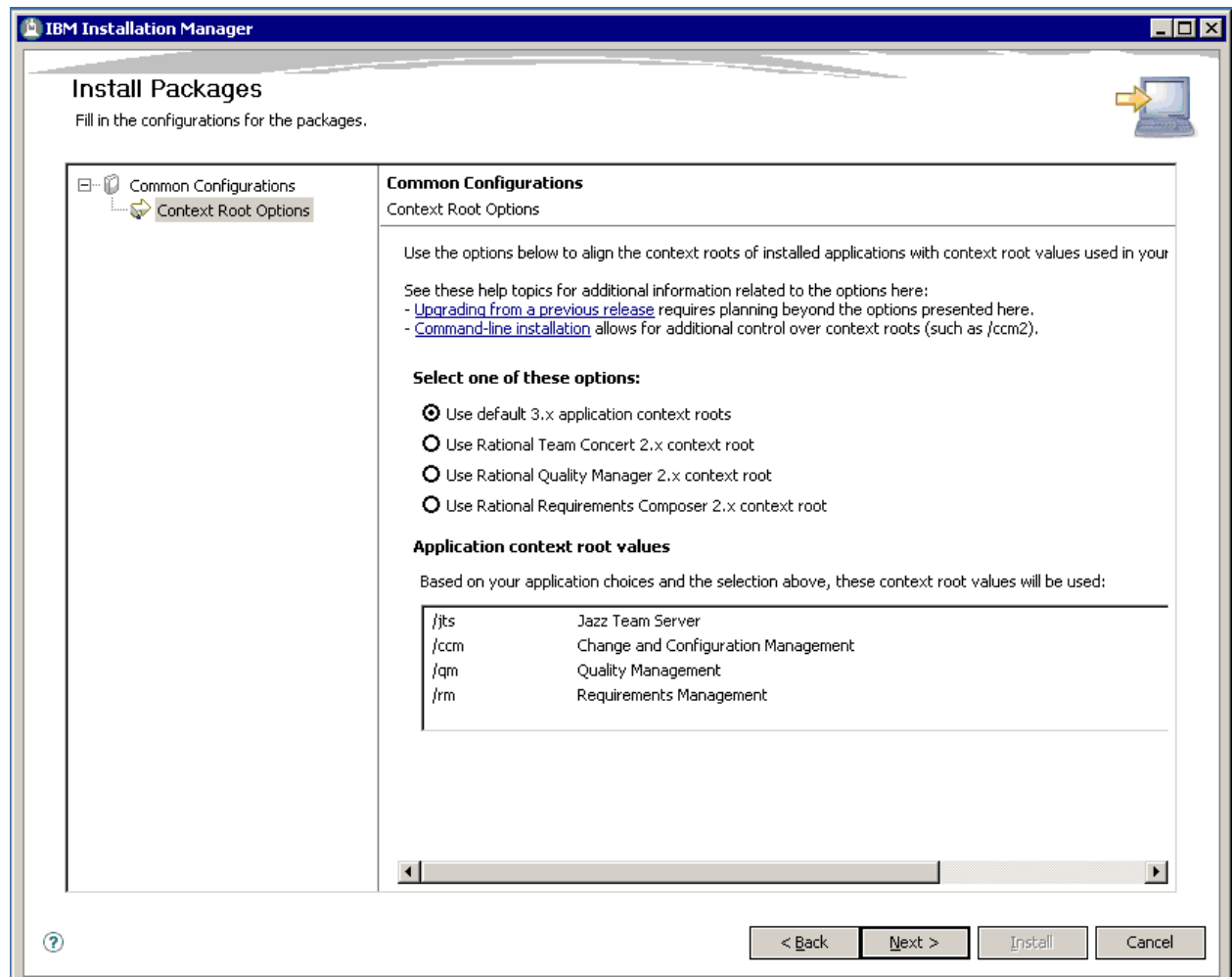


Image-8: Context root selection page

Installation summary

On this page you can view the installation summary and proceed with the installation of the Jazz team server and the applications selected by you. This page shows the total download size of the installation package.

Press *INSTALL* button to begin installation. This will download the latest files from the server and deploy it on your machine. You'll have to make sure that you have

an active internet connection available for the installation. Images-9 shows the screenshot of this page.

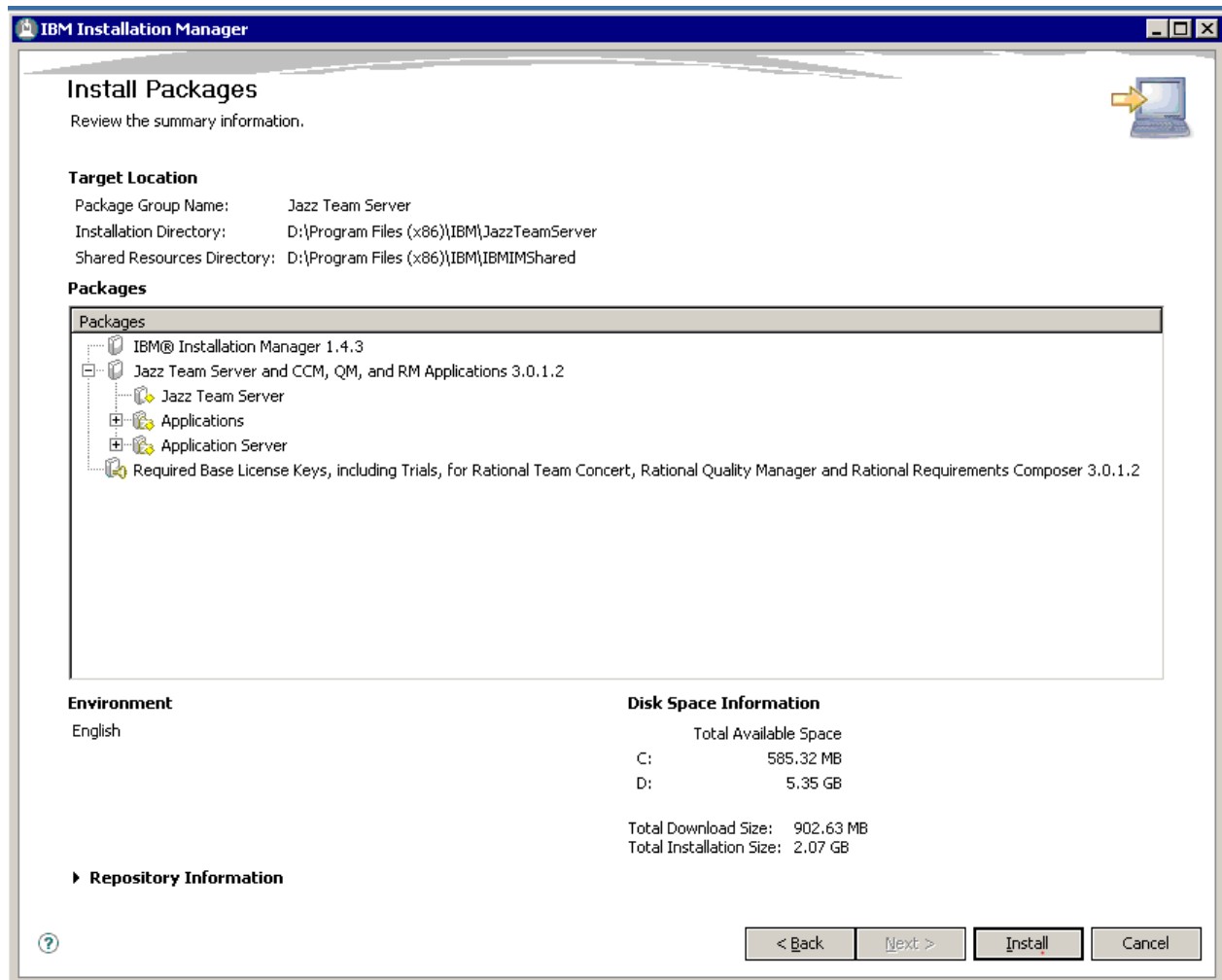


Image-9: Installation summary page

You will see the post installation page once the installation is over. Press *FINISH* button on this page to exit the installer. This will bring up an article in RTC documentation to configure the server. You can read the documentation online at following location -

http://pic.dhe.ibm.com/infocenter/clmhelp/v3r0m1/index.jsp?topic=/com.ibm.jazz.install.doc/topics/c_post_install.html. Image-10 shows the screenshot of this page.

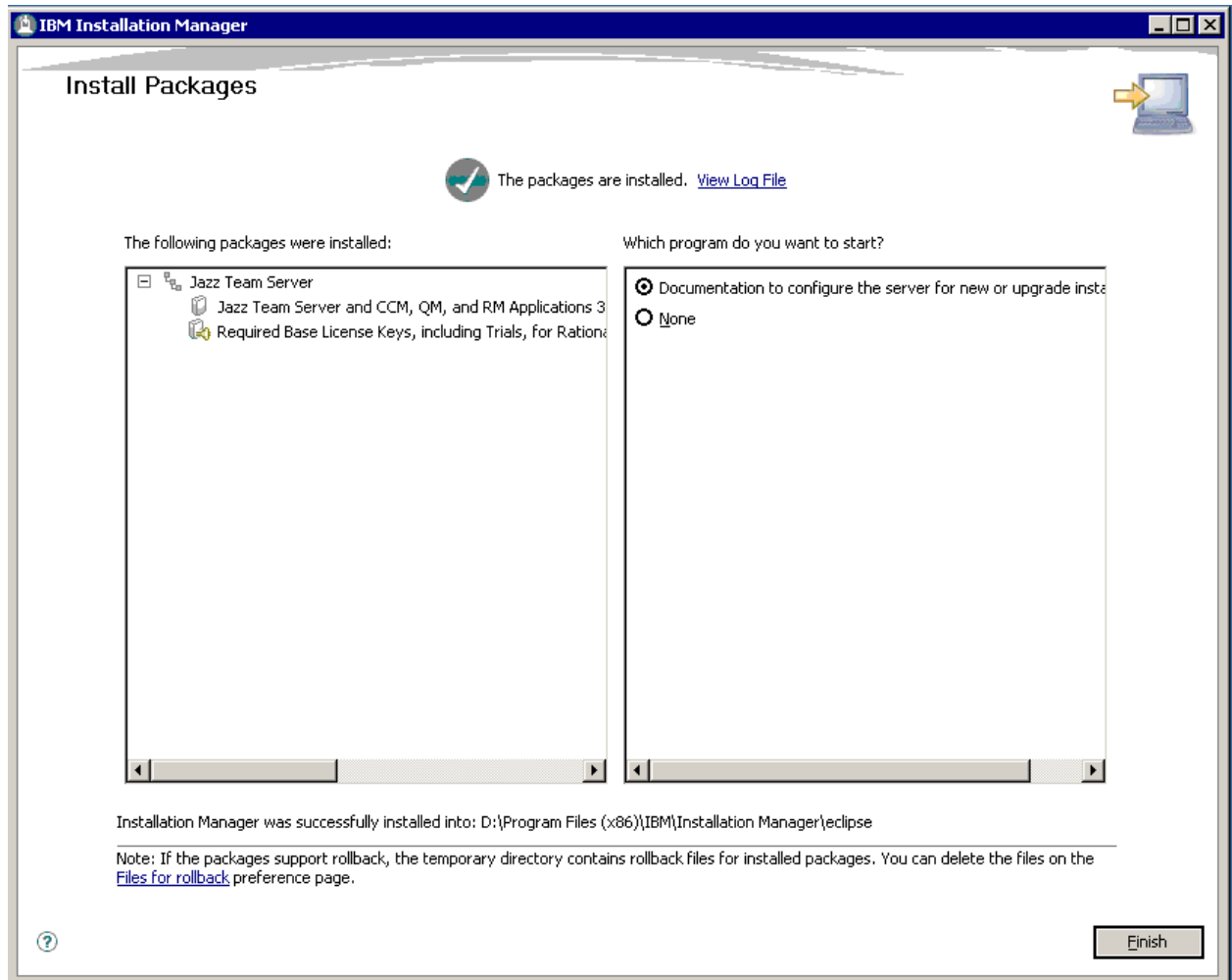


Image-10: Post Installation page

SQL Server configuration

SQL Server will host databases for Jazz Team Server and other applications selected during the installation. Detailed information on configuring SQL Server for RTC is available at following location -

http://pic.dhe.ibm.com/infocenter/clmhelp/v3r0m1/index.jsp?topic=%2Fcom.ibm.jazz.install.doc%2Ftopics%2Fts_server_installation_setup_sql.html

Download JDBC Driver 2.0

You will have to download and install JDBC Driver 2.0 from Microsoft website. JDBC Driver can be downloaded from following location -

<http://www.microsoft.com/downloads/details.aspx?FamilyID=99b21b65-e98f-4a61-b811-19912601fdc9&displaylang=en>

[Optional] Configure SQL Server port

Configuring SQL Server on custom port is an optional step. This is required if you have multiple SQL Server running on your machine. You can configure SQL Server 2008 R2 to run on custom port. Detailed steps on configuring SQL Server 2008 R2 is available on following location – [http://msdn.microsoft.com/en-us/library/ms177440\(v=sql.105\).aspx](http://msdn.microsoft.com/en-us/library/ms177440(v=sql.105).aspx)

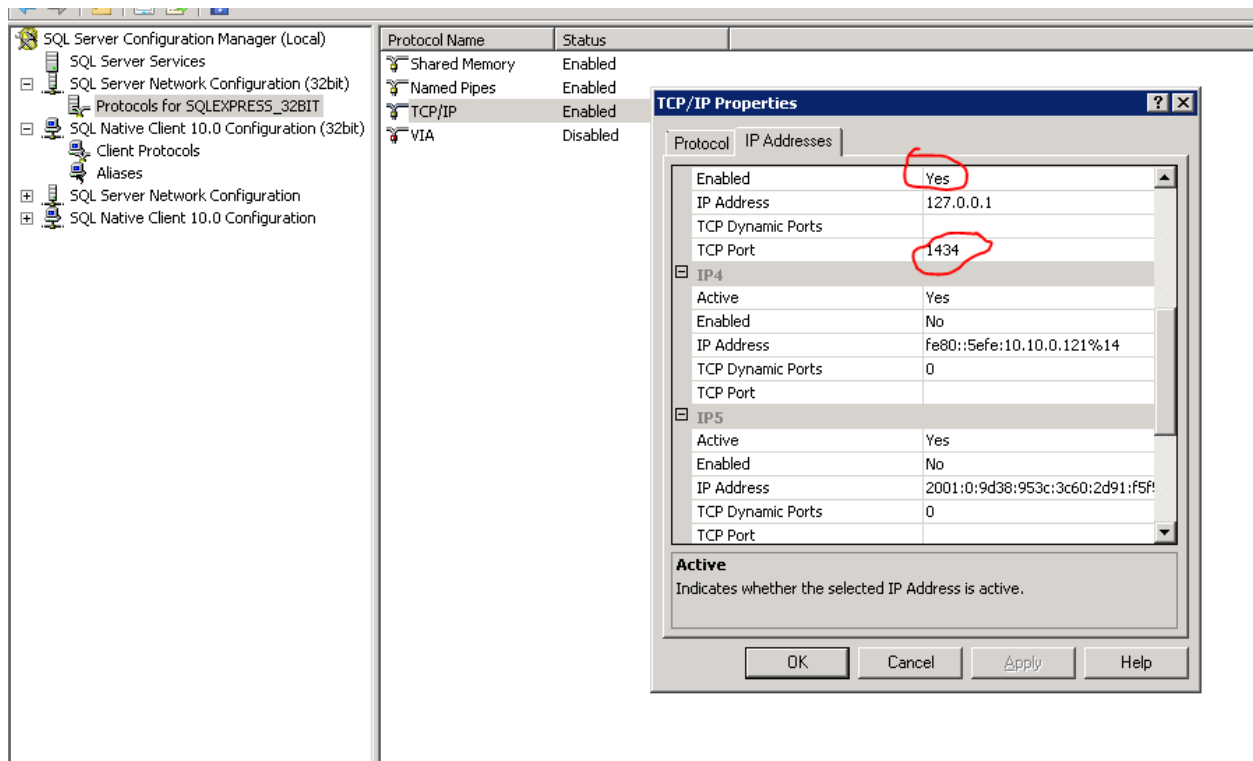


Image-11: Configuring SQL Server port

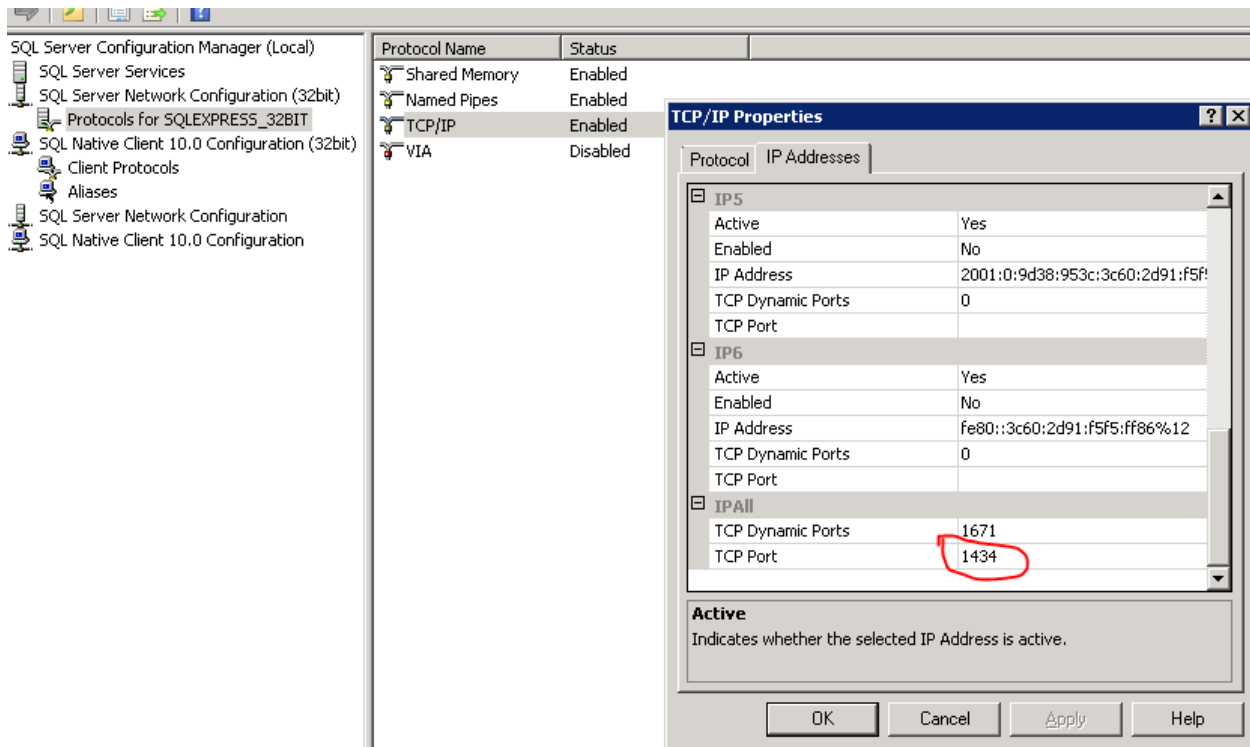


Image-12: Configuring SQL Server port

This port number will be used in the connection string while configuring database and data warehouse for Jazz Team Server and other applications.

Following commands / steps will come handy while configuring SQL Server 2008 R2 with JDBC Driver.

1. Use following command to get version on JVM -
%installdir%\IBM\JazzTeamServer\server\jre\bin>JAVA -version
2. Also make sure that users have full access on **%installdir%\IBM** folder
3. Another simple way is to create a new folder "**sqlserver**" under the installation directory and place the driver in that directory. Please refer to comments from Walter Mansur given on Aug 03 '11, 9:09 a.m at following location -
<https://jazz.net/forum/questions/60079/cannot-create-jazz-database-tables-sql-server>
4. Use following command to verify SQL Server configuration -
%installdir%\IBM\JazzTeamServer\server>repotools-jts.bat -verify

SQL configuration is complete if the connection verification succeeds in step 4 above.

You should also configure SQL Server authentication in case you are not planning to use windows authentication. You can refer to following article for more details - [http://msdn.microsoft.com/en-us/library/ms188670\(v=sql.110\).aspx](http://msdn.microsoft.com/en-us/library/ms188670(v=sql.110).aspx)

RTC Server configuration

Apache Tomcat configuration

If you want to change the default ports for SSL and non-SSL you'll have to configure the *server.xml* file for Apache Tomcat. This XML is located at following path: **%installdir%\IBM\JazzTeamServer\server\tomcat\conf\server.xml**

Default port for SSL is 9443 and for non-SSL is 9080. In current installation this has been changed to 443 for SSL and 8080 for non-SSL. Here are the relevant sections from server.xml:

```
<!-- Define a non-SSL HTTP/1.1 Connector on port 9080 -->
<Connector port="8080" maxHttpHeaderSize="8192"
    maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
    enableLookups="false" redirectPort="443" acceptCount="100"
    connectionTimeout="20000" disableUploadTimeout="true"
    URIEncoding="UTF-8" />

<!-- Define a SSL HTTP/1.1 Connector on port 9443 -->
<Connector port="443"
    connectionTimeout="20000"
    maxHttpHeaderSize="8192"
    maxThreads="150"
    minSpareThreads="25"
    maxSpareThreads="75"
    enableLookups="false"
    disableUploadTimeout="true"
    acceptCount="100"
    scheme="https"
    secure="true"
```

```
clientAuth="false"  
keystoreFile="ibm-team-ssl.keystore"  
keystorePass="ibm-team"  
sslProtocol="${jazz.connector.sslProtocol}"  
algorithm="${jazz.connector.algorithm}"  
URIEncoding="UTF-8" />
```

You can read more about this here -

http://pic.dhe.ibm.com/infocenter/clmhelp/v3r0m1/topic/com.ibm.jazz.install.doc/topics/t_ports_change.html

Starting up RTC server

Use following command to start the RTC Server: **IBM\JazzTeamServer\server> .\server.startup.bat**

JAZZ Team Server configuration

Jazz Team Server configuration involves following 6 steps:

1. Configure Public URI
2. Configure Database
3. Enable e-mail notification
4. Register application
5. Setup user registry
6. Configure Data warehouse

Logon to **https://localhost/jts/setup**

Username: **ADMIN**

Password: **ADMIN**

Configure Public URI

You can now configure the public URI of the RTC Server. This is particularly important if you are planning to have RTC server is accessible over the Internet. You'll have to make sure that relevant ports are open on firewall. Image-13 shows the screenshot of the public URI configuration page. Press "*Test Connection*"

button to verify the connection. You need to make sure that this test succeeds before proceeding further with the configuration.

Configure this value in the following format: "https://<public_hostname><port>/<context>" (e.g. https://host.my.company.net:9443/jts)

Step 1: Configure Public URI

Property	Current Value
Public URI Root	<input type="text" value="https://host.my.company.net/jts"/>

Step 2: Confirm Public URI

⚠ WARNING

The Public URI (which includes the fully qualified hostname) must be chosen carefully because once it is set, it becomes integral to the data on the server and can not be modified. This is particularly important when configuring a production server. Please review the information on this page and refer to the [Planning your URIs](#) topic for guidance and recommendations on configuring the Public URI.

I understand that once the Public URI is set, it can not be modified.

✔ The configuration test succeeded. Click Next to save the settings and continue. Restore to Saved Test Connection

< Back Next > Finish

Image-13: Public URI configuration

Database configuration

Image-14 shows the screenshot of database configuration page for Jazz Team Server. If you have configured SQL Server with custom port number, you'll have to mention it in the connection string.

JDBC connection string:

```
//sqlserver:port;databaseName=dbname;user=username;password={password}
```

Press "Test Connection" button to test the connectivity with the SQL Server. This should work if the SQL Server has been configured properly. Press *Create Table* button to create tables in the database.

- ✓ Introduction
- ✓ Configure Public URI
- ➔ **Configure Database**
- Enable E-mail Notification
- Register Applications
- Setup User Registry
- Configure Data Warehouse
- ▼ FINISH SETUP
 - Summary

Configure Database

By default, this Jazz Team Server includes a pre-configured database using a JDBC connection. You can either keep this default or choose a different database vendor and/or connection type. If you change the default, you may need to configure some additional properties. Also use the "Test Connection" button to verify that the Jazz Team Server can successfully communicate with the database using the connection information you provided.

Step 1: Configure Database Vendor and Connection Type

Database Vendor:

Connection Type:

Step 2: Configure Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="text" value="*****"/> Default Value none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=jts;user=rtcadm;password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser;password={password} Default Value none

Step 3: Create Database Tables

The specified database exists but there are no Jazz tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

i The database exists, but is not configured to contain Jazz. Use the "Create Tables" button in Step 3 to configure the database for Jazz. ID: CRJAZ15671

Image-14: Database configuration

Email Configuration

You can configure your SMTP server to send emails. You can also use your Gmail server to send emails. Image-15 shows the screenshot of email configuration using Gmail. You can read more about configuring Gmail as email server at following location - <https://jazz.net/forum/questions/26597/gmail-smtp-configuration?redirect=%2Fforum%2Fquestions%2F26597%2Fgmail-smtp-configuration>

Press *Test Connection* button to verify connectivity SMTP Server.

Step 2: Configure E-mail Server

Property	Current Value	Default Value	Description
SMTP Server The SMTP server for sending change notification e-mail, (e.g smtp.yourcompany.com)	<input type="text" value="smtp.gmail.com"/>	none	
SMTP Username The username used to authenticate to the SMTP server (if required).	<input type="text" value="[REDACTED]"/>	none	
SMTP Password The password used to authenticate to the SMTP server (if required).	<input type="password" value="[REDACTED]"/>	none	
E-mail From Address The 'Sender:' e-mail address sent with notification e-mail, as in 'jazz-user@ibm.com'.	<input type="text" value="[REDACTED]"/>	none	
E-mail From Name Defines the name to use as sender of the notification e-mails, as in 'jazz-user'.	<input type="text" value="RTC Demo Server"/>	none	
SMTP Reply Address The 'Reply To:' e-mail address sent with notification e-mail, as in 'jazz-user@ibm.com'.	<input type="text" value="[REDACTED]"/>	none	
Property	Current Value	Default Value	Description
SMTP Server port	<input type="text" value="587"/>	25	The SMTP server port.
Use STARTTLS	<input checked="" type="checkbox" value="true"/>	false	Whether to issue a STARTTLS command before authentication or not.

Step 3: Specify E-mail Notification Mailing List

E-mail notifications can be sent to all recipients or to a specified group of recipients.

Restrict E-mail Notification to:

The configuration test succeeded. Click Next to save the settings and continue.

Image-15: Email configuration

Application registration

This step is required to register the installed applications with Jazz Team Server. On this page you will have to verify and update the URLs of the applications. Image-16 shows the screenshot of this page.

- ▼ RATIONAL JAZZ TEAM SERVER (JTS)
- ✓ Introduction
- ✓ Configure Public URI
- ✓ Configure Database
- ✓ Enable E-mail Notification
- ➔ **Register Applications**
- Setup User Registry
- Configure Data Warehouse
- ▼ FINISH SETUP
- Summary

Register Applications

Use this step to register installed applications with the Jazz Team Server. For simple installations with all applications on the same host, you can accept the defaults and continue.

Step 1: Verify and Update Discovered Applications

The following applications were detected on the local file system. The Application Instance name will appear in the user interface. A name proposal was generated based on the context root of the application. You can edit the proposal. The name should be unique on this Jazz Team Server and meaningful within your organization. The Discovery URL has been defaulted based on the public URI of this server and the context root of the application. A default functional user ID has been computed for each application. Associating a functional user ID allows applications to make requests within background activities, such as sending e-mail notifications, without user intervention. You can manually add a new application (for example, an application installed on a remote server), or choose not to register an application by clicking the "X" icon.

Application Instance	Application Type	Discovery URL	Functional User ID
<input type="text" value="/rm"/>	Requirements Management	<input type="text" value="https://[redacted]/rm/scr"/>	rm_user <input type="checkbox"/>
<input type="text" value="/qm"/>	Quality Management	<input type="text" value="https://[redacted]/qm/scr"/>	qm_user <input type="checkbox"/>
<input type="text" value="/ccm"/>	Change and Configuration Management	<input type="text" value="https://[redacted]/ccm/scr"/>	ccm_user <input type="checkbox"/>
<input type="text" value="/admin"/>	Lifecycle Project Administration	<input type="text" value="https://[redacted]/admin/scr"/>	lpa_user <input type="checkbox"/>

[Add Application...](#)

Step 2: Register Applications

Once you have verified the applications and their URLs in the previous step, you should register the applications with this Jazz Team Server. As part of the registration process, the server will attempt to contact each application and send configuration data to it. This operation may take a few minutes to complete.

Image-16: Application registration with Jazz Team Server

Setup user registry

Jazz team server relies on a user registry to provide basic information about users and groups. On this page you need to provide following information:

- Select the type of user registry you will use. You can choose one of the following three options:
 1. Tomcat user database
 2. LDAP
 3. Non-LDAP External registry
- Provide the user ID, name, password, and email address of the user who will have administrative access to the Jazz Team Server.
- Option to disable default admin access

Image-17 shows the screenshot of this page.

- ▼ RATIONAL JAZZ TEAM SERVER (/jts)
 - ✓ Introduction
 - ✓ Configure Public URI
 - ✓ Configure Database
 - ✓ Enable E-mail Notification
 - ✓ Register Applications
 - ➔ **Setup User Registry**
 - Configure Data Warehouse
- ▼ CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
 - Configure Database
 - Finalize Application
 - Configure Data Warehouse
- ▼ QUALITY MANAGEMENT (/qm)
 - Configure Database
 - Finalize Application
 - Configure Data Warehouse
- ▼ REQUIREMENTS MANAGEMENT (/rm)
 - Finalize Application
- ▼ LIFECYCLE PROJECT ADMINISTRATION (/admin)

i Please complete the form to create a new user and press the 'Next' button.

Setup User Registry

Jazz Team Server relies on a *user registry* to provide basic information about users and groups. You may choose one of these options for your user registry:

Step 1: Select the type of user registry you will use

User Registry Type	Description
<input checked="" type="radio"/> Tomcat User Database	This is the simplest configuration option and allows the Jazz Team Server to manage users and groups for you with the Tomcat user database.
<input type="radio"/> LDAP	If your organization uses LDAP to centrally manage users and groups and you have configured your application server and LDAP server as described in the server setup guide, choose this option and the Jazz Team Server will use your LDAP server for user and group information.
<input type="radio"/> Non-LDAP External Registry	If you wish to use an external registry other than LDAP, choose this option. Note that if you choose this option you must manually create users in the Jazz Repository to correspond to the users in your external registry.

You are currently logged in as the default user (ADMIN). Please create an administrator account for yourself using the form below. When you press the "Next" button, the new user account will be created in the Jazz Team Server. Your new account will have the JazzAdmins role, which will allow you to log in to the Admin UI.

Property	Value	Description
User ID	<input type="text" value="admin"/>	Your user ID (e.g. 'jsmith')
Name	<input type="text" value="Jazz Administrator"/>	Your full name (e.g. 'John Smith')
Password	<input type="password" value="****"/>	Enter a password that you can remember but won't be easy for others to guess.
Re-type Password	<input type="password" value="****"/>	Re-type your password to help prevent typos.
E-mail Address	<input type="text" value="jsmith@example.com"/>	Your e-mail address (e.g. 'jsmith@example.com')

The default ADMIN user is defined in Jazz to allow you to log into a new server, configure the server, and create an initial JazzAdmins user. For enhanced server security we recommend that you disable default ADMIN access at this time.

Disable default ADMIN access

Image-17: Setup user registry

Configure Data Warehouse

On this page you need to provide information to setup connection to a data warehouse. This database is used for reporting and analytics.

You need to first create the database with proper collation. You can use SQL Server Management Studio to first create the database and alter its collation. **Changing the collation of the database is an important step.** You can use following query to change the collation of the database;

```
ALTER DATABASE <DatabaseName> COLLATE SQL_Latin1_General_CP437_CS_AS
GO
ALTER DATABASE <DatabaseName> SET READ_COMMITTED_SNAPSHOT ON
GO
```

Image-18 shows the screenshot of the data warehouse configuration page. On this

page you need to select database vendor as "SQL Server", connection type as "JDBC". In Step-2 you should provide connection details for SQL Server.

- [Configure Public URI](#)
- [Configure Database](#)
- [Enable E-mail Notification](#)
- [Register Applications](#)
- [Setup User Registry](#)
- [Configure Data Warehouse](#)
- [CHANGE AND CONFIGURATION MANAGEMENT \(/ccm\)](#)
 - [Configure Database](#)
 - [Finalize Application](#)
 - [Configure Data Warehouse](#)
- [QUALITY MANAGEMENT \(/qm\)](#)
 - [Configure Database](#)
 - [Finalize Application](#)
 - [Configure Data Warehouse](#)
- [REQUIREMENTS MANAGEMENT \(/rm\)](#)
 - [Finalize Application](#)
- [LIFECYCLE PROJECT ADMINISTRATION \(/admin\)](#)
 - [Finalize Setup](#)
- [FINISH SETUP](#)
 - [Summary](#)

Configure Data Warehouse

The data warehouse is a database used for reporting and analytics. By default, this is a pre-configured database using a JDBC connection. You can either keep this default or choose a different database vendor and/or connection type. If you change the default, you may need to configure some additional properties. Also if you change the default, use the "Test Connection" button to verify that the server can successfully communicate with the database using the connection information you provided.

I do not wish to configure the data warehouse at this time.

Step 1: Configure Data Warehouse Database Vendor and Connection Type

Database Vendor:

Connection Type:

Step 2: Configure Data Warehouse Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="text" value="*****"/> Default Value: none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=itsDW;user=rtcadmin,password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser,password={password} Default Value: none
Database Table Space Folder The folder on the database server where the table space will be created. This folder must exist already and be valid for table space files for this vendor or data warehouse creation may fail.	<input type="text" value="d:\Program Files (x86)\MSSQL10_50.SQLEXPRESS_32BIT\MSSQLDATA"/> Default Value: none
Custom Report Database User The name of the database user to generate custom reporting permissions for. This user must exist in the database.	<input type="text" value="rtcadmin"/> Default Value: RPTUSER

Step 3: Create Database Tables

The specified database exists but there are no data warehouse tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

Image:-18: Configure Data Warehouse

Step 3: Create Database Tables

The specified database exists but there are no data warehouse tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

Please use the form below to specify the user information for running the data collection jobs. If the user does not exist in the Jazz Repository it will be created and have the appropriate Client Access License applied. If you are using an LDAP or external user registry this will only create the contributor in the Repository, it will need to match a user defined in your registry. If left blank, the data collection jobs will use an automatically created OAuth Consumer named 'Jazz Reporting' with a Functional User ID of 'etl_user'.

Property	Value	Description
User ID	<input type="text" value="admin"/>	The user ID (e.g. 'etl_user')
Password	<input type="password" value="*****"/>	Enter a password that you can remember but won't be easy for others to guess.
Re-type Password	<input type="password" value="*****"/>	Re-type your password to help prevent typos.
E-mail Address	<input type="text" value="*****"/>	Your e-mail address (e.g. 'etl_user@example.com')

Image:-19: Configure Data Warehouse

For the user that will run the data collection jobs, you must enter a different user ID than the ID you are using to configure the application. Press *Test Connection* button to test the connection. Press *Create Table* button to create tables and then press *Next* to proceed.

Application configuration

Based on the applications installed by you, there are three applications to be configured.

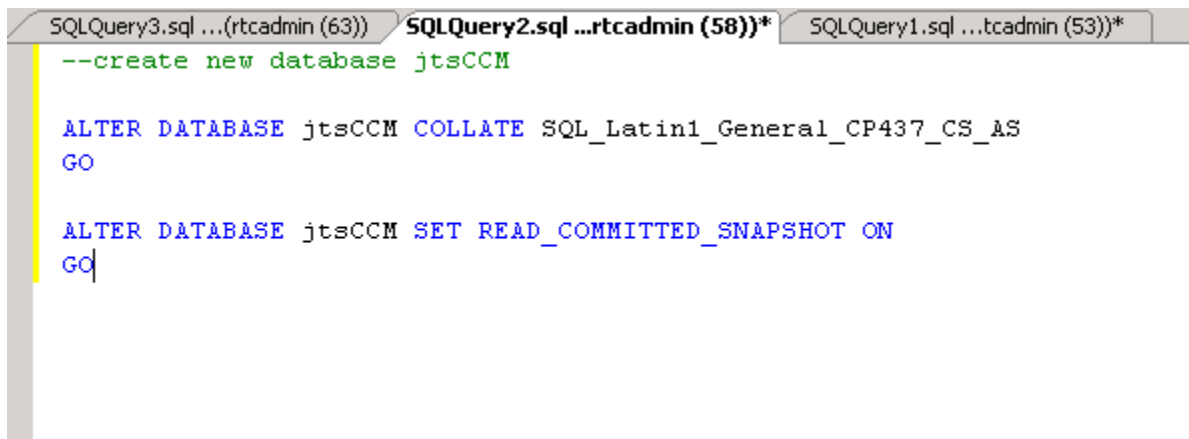
1. CCM – Change and Configuration Management
2. QM – Quality Management
3. RM – Requirements Management

In addition to these three applications there is one more application to be configured: Lifecycle Project Administration (/admin).

Configuration of all these applications involves three steps:

1. Create database and change the collation
2. Finalize application
3. Configure Data Warehouse

Steps for application configuration are similar to that of Jazz Team Server. Image-20 to Image-29 are screenshots of these steps.



```
SQLQuery3.sql ...rtcadm (63))  SQLQuery2.sql ...rtcadm (58))*  SQLQuery1.sql ...tcadm (53))*  
--create new database jtsCCM  
  
ALTER DATABASE jtsCCM COLLATE SQL_Latin1_General_CP437_CS_AS  
GO  
  
ALTER DATABASE jtsCCM SET READ_COMMITTED_SNAPSHOT ON  
GO
```

Image-20: Configuring database collation for CCM database

- ▶ RATIONAL JAZZ TEAM SERVER (/jts)
- ▼ CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
 - ➔ **Configure Database**
 - Finalize Application
 - Configure Data Warehouse
- ▼ QUALITY MANAGEMENT (/qm)
 - Configure Database
 - Finalize Application
 - Configure Data Warehouse
- ▼ REQUIREMENTS MANAGEMENT (/rm)
 - Finalize Application
- ▼ LIFECYCLE PROJECT ADMINISTRATION (/admin)
 - Finalize Setup
- ▼ FINISH SETUP
 - Summary

i The database exists, but is not configured to contain Jazz. Use the "Create Tables" button in Step 3 to configure the database for Jazz. ID: CRJAZ1567I

Configure Database

By default, this application includes a pre-configured database using a JDBC connection. You can either keep this default or choose a different database vendor and/or connection type. If you change the default, you may need to configure some additional properties. Also use the "Test Connection" button to verify that the application can successfully communicate with the database using the connection information you provided.

Step 1: Configure Database Vendor and Connection Type

Database Vendor:

Connection Type:

Step 2: Configure Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="text" value="*****"/> Default Value: none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=jtsCCM;user=rtcadmin;password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser;password={password} Default Value: none

Step 3: Create Database Tables

The specified database exists but there are no Jazz tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

i The database exists, but is not configured to contain Jazz. Use the "Create Tables" button in Step 3 to configure the database for Jazz. ID: CRJAZ1567I

Image-21: Database Creation for CCM

- RATIONAL JAZZ TEAM SERVER (/jts)
- ▼ CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
 - ✔ Configure Database
 - ⇒ **Finalize Application**
 - Configure Data Warehouse
- ▼ QUALITY MANAGEMENT (/qm)
 - Configure Database
 - Finalize Application
 - Configure Data Warehouse
- ▼ REQUIREMENTS MANAGEMENT (/rm)
 - Finalize Application
- ▼ LIFECYCLE PROJECT ADMINISTRATION (/admin)
 - Finalize Setup
- ▼ FINISH SETUP
 - Summary

Finalize Application

In order to finish the configuration of this application, there are a few operations that need to be completed. This step will provide feedback regarding the status of these operations. Once this step is complete, the application setup will be complete.

Step 1: Initiate Finalization Process

The finalization process is composed of two parts: Storing Consumer Key and Secret, and User Synchronization. To begin, click the button below.

[Finalize Application Setup](#)

Step 2: View Progress

Finish Registration

Now that this application's database has been configured, this operation will complete the application's registration with the Jazz Team Server.

Perform User Synchronization

This operation will synchronize the user records stored in the Jazz Team Server into this application.

< Back

Next >

Finish

Image-22: Application finalization for CCM

Step 1: Configure Data Warehouse Database Vendor and Connection Type

Database Vendor:

Connection Type:

Step 2: Configure Data Warehouse Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="text" value="*****"/> Default Value none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=jtsCCMDW;user=rtcadmin;password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser;password={password} Default Value none
Database Table Space Folder The folder on the database server where the table space will be created. This folder must exist already and be valid for table space files for this vendor or data warehouse creation may fail.	<input type="text" value="d:\Program Files (x86)\MSSQL10_50.SQLEXPRESS_32BIT\MSSQL\DATA1"/> Default Value none
Custom Report Database User The name of the database user to generate custom reporting permissions for. This user must exist in the database.	<input type="text" value="rtcadmin"/> Default Value RPTUSER

Step 3: Create Database Tables

The specified database exists but there are no data warehouse tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

Image-23: Data Warehouse configuration for CCM

```
SQLQuery3.sql ...(rtcadmin (63)) SQLQuery2.sql ...(rtcadmin (58))* SQLQuery1.sql ...tca
--create new database jtsQM

ALTER DATABASE jtsQM COLLATE SQL_Latin1_General_CP437_CS_AS
GO

ALTER DATABASE jtsQM SET READ_COMMITTED_SNAPSHOT ON
GO
|
```

Image-24: Update database collation for Quality Management

i Database tables are being created. This may take a few minutes...

Configure Database

By default, this application includes a pre-configured database using a JDBC connection. You can either keep this default or choose a different database vendor and/or connection type. If you change the default, you may need to configure some additional properties. Also use the "Test Connection" button to verify that the application can successfully communicate with the database using the connection information you provided.

Step 1: Configure Database Vendor and Connection Type

Database Vendor:

Connection Type:

Step 2: Configure Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="text" value="*****"/> Default Value none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=itsQM;user=rtcadmin;password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser;password={password} Default Value none

Step 3: Create Database Tables

The specified database exists but there are no Jazz tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

i Database tables are being created. This may take a few minutes...

Image-25: Database configuration for Quality Management

Step 2: Configure Data Warehouse Database Connection Properties

Property	Current Value
JDBC Password The password of the JDBC database. This value will be substituted into the JDBC location value where {password} is found.	<input type="password" value="*****"/> Default Value none
JDBC Location The location of the JDBC database. Use the value {password} instead of the actual password.	<input type="text" value="//localhost:1434;databaseName=jtsQMDW;user=rtcadmin;password={password}"/> Example: //localhost:1433;databaseName=jazz;user=jazzDBuser;password={password} Default Value none
Database Table Space Folder The folder on the database server where the table space will be created. This folder must exist already and be valid for table space files for this vendor or data warehouse creation may fail.	<input type="text" value="d:\Program Files (x86)\MSSQL10_50.SQLEXPRESS_32BIT\MSSQL\DATA2"/> Default Value none
Custom Report Database User The name of the database user to generate custom reporting permissions for. This user must exist in the database.	<input type="text" value="rtcadmin"/> Default Value RPTUSER

Step 3: Create Database Tables

The specified database exists but there are no data warehouse tables present. Please click the "Create Tables" button below to create the required tables. Table creation may take a few minutes.

Please use the form below to specify the user information for running the data collection jobs. If left blank, the data collection jobs will use an automatically created OAuth Consumer named 'Jazz Reporting' with a Functional User ID of 'etl_user'.

Property	Value	Description
User ID	<input type="text" value="admin"/>	The user ID (e.g. 'etl_user')
Password	<input type="password" value="*****"/>	Enter a password that you can remember but won't be easy for others to guess.
Re-type Password	<input type="password" value="*****"/>	Re-type your password to help prevent typos.


 Data warehouse tables are being created. This may take a few minutes...

Image-26: Data Warehouse configuration for admin application

- CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
- QUALITY MANAGEMENT (/qm)
- ▾ REQUIREMENTS MANAGEMENT (/rm)
 - ➔ **Finalize Application**
- ▾ LIFECYCLE PROJECT ADMINISTRATION (/admin)
 - Finalize Setup
- ▾ FINISH SETUP
 - Summary

Finalize Application

In order to finish the configuration of this application, there are a few operations that need to be completed. This step will provide feedback regarding the status of these operations. Once this step is complete, the application setup will be complete. You may click "Next" to continue.

Step 1: Initiate Finalization Process

The finalization process is composed of three parts: applying an internal license, configuring storage on the Jazz Team Server and building indexed data. To begin, click the button below.

[Finalize Application Setup](#)

Step 2: Rebuild Indexed Data Only (Optional)

The Jazz Team Server maintains an index of the data. To begin rebuilding the index, click the button below.

[Rebuild Index](#)

Step 3: View Progress

- ✔ **Apply Internal License**
The application uses a preauthorized user to communicate with the Jazz Team Server. This user must have an internal license for the application to operate.
- ➔ **Configure Storage on the Jazz Team Server**
The application stores user data on the Jazz Team Server. In order to store data, the application must configure storage on the Jazz Team Server. This operation also creates the data necessary for the application to function.
- Rebuild Indexed Data**
This operation will rebuild an index of the data on the Jazz Team Server. Depending on the amount of data stored on the Jazz Team Server, the index rebuild can take several minutes. While the index rebuild is active, using the application can result in unexpected behavior and is not recommended.

i Finalization is in progress. This can take a few minutes...


< Back
Next >
Finish

Image-27: Requirement Management Application finalization

- ▶ RATIONAL JAZZ TEAM SERVER (/jts)
- ▶ CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
- ▶ QUALITY MANAGEMENT (/qm)
- ▶ REQUIREMENTS MANAGEMENT (/rm)
- ▼ LIFECYCLE PROJECT ADMINISTRATION (/admin)
 - ➔ **Finalize Setup**
 - ▼ FINISH SETUP
 - Summary

Finalize Setup

In order to finish the configuration of this application, there are a few operations that need to be completed. This step will provide feedback regarding the status of these operations. Once this step is complete, the application setup will be complete. You may click "Next" to continue.

 Please wait while the application is being finalized. This may take a minute.

Step 1: Initiate Finalization Process

The finalization process is composed several steps including LPA license assignment, application linking, storage area creation, and default template deployment. To begin, click the button below.

[Finalize Application Setup](#)

Step 2: View Progress

Apply Internal License

The application uses a preauthorized user to communicate with the Jazz Team Server. This user must have an internal license for the application to operate.

Create Storage Areas

The application stores user data on the Jazz Team Server. In order to store data, the application must configure storage on the Jazz Team Server.

Link Applications

Now that all the applications have registered with the Jazz Team Server, the applications must be linked together so they can communicate with one another. Linking applications enables project area linking between applications as well as other cross-application communication.

Deploy Templates

There are a number of predefined templates available in the Lifecycle Project Administration application. Deploying the predefined templates will make some default templates available which can then be used for lifecycle project creation.

Image-28: Admin application finalization

Jazz
TEAM SERVER & APPLICATION SETUP

▶ RATIONAL JAZZ TEAM SERVER (/jts)
 ▶ CHANGE AND CONFIGURATION MANAGEMENT (/ccm)
 ▶ QUALITY MANAGEMENT (/qm)
 ▶ REQUIREMENTS MANAGEMENT (/rm)
 ▶ LIFECYCLE PROJECT ADMINISTRATION (/admin)
 ▼ FINISH SETUP
 ➔ **Summary**

✔ Congratulations, you have successfully completed the setup. Click Finish to go to the Jazz Team Server Administration Home page, or select Create Users or Create a Lifecycle Project to get started with one of those tasks right away.

Summary

Jazz Team Server Setup

▶ Database Configuration	sqlserver connection successful
▶ Public URL	https://pasdm.aaa.saama.com/jts
▶ E-mail Notification	Enabled
▶ User Registry	DETECT
▶ Registered Applications	4 Applications registered
▶ Data Warehouse Configuration	sqlserver connection successful

We recommend that you visit the [Jazz Team Server Administration](#) site to complete the next steps to get your project started:

1. Create Users

Create users in the Jazz Team Server and continue to manage them from within this single source.

OR ...

2. Create a Lifecycle Project

Create a project within Project Administration to manage relationships across the lifecycle.

You may also skip these steps and go to the [Jazz Team Server Administration "Home"](#) page where these options will also be available, or browse the complete [Jazz Tutorial](#) to take a tour of some of the major Jazz components.

< Back Next > Finish



Licensed Material - Property of IBM Corp. © Copyright IBM Corp. and its licensors 2008, 2011. All Rights Reserved. IBM, the IBM logo, Jazz, and Rational are trademarks of IBM Corporation, in the United States, other countries and regions, or both. Built on Eclipse is a trademark of Eclipse Foundation, Inc. Java and all Java-based trademarks and logos are trademarks of Oracle and/or its affiliates.



Image-29: Summary of Jazz Team Server Setup

This completes the installation and configuration of RTC 3.0.1.2 Server on Windows Server 2008 R2 with SQL Server 2008 R2. You can now start using the RTC Server.