

TIBCO ActiveMatrix® Runtime UDDI Server

Administrator's Guide

*Software Release 3.1
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Preface

TIBCO ActiveMatrix Runtime UDDI Server provides an integrated UDDI registry that can be used by TIBCO ActiveMatrix products or other products that use the standard UDDI V3 API.

This manual describes how administrator users configure ActiveMatrix Runtime UDDI Server after installation.

Topics

- [Related Documentation, page xii](#)
- [Typographical Conventions, page xiv](#)
- [Terminology and Acronyms, page xvi](#)
- [How to Contact TIBCO Support, page xvii](#)

Related Documentation

This section lists documentation resources you may find useful.

TIBCO ActiveMatrix Runtime UDDI Server Documentation

The following documents form the TIBCO ActiveMatrix Runtime UDDI Server documentation set:

- *TIBCO ActiveMatrix Runtime UDDI Server Installation* Read this manual for instructions on site preparation and installation.
- *TIBCO ActiveMatrix Runtime UDDI Server Administrator's Guide* Read this manual for instructions on configuring the product by administrator users.
- *TIBCO ActiveMatrix Runtime UDDI Server User's Guide* Read this manual for instructions on using the product.
- *TIBCO ActiveMatrix Runtime UDDI Server Release Notes* Read the release notes for a list of new and changed features. This document also contains lists of known issues and closed issues for this release.

Third-Party Documentation

The following documents are related to the TIBCO ActiveMatrix Runtime UDDI Server.

- *UDDI Spec V3.0* This document describes the web services and behaviors of all instances of a UDDI registry. It is available from the following web site: <http://uddi.org/pubs>
- *Oracle Database Administrator's Guide* This manual provides information about operating an Oracle database. It is available from the Oracle web site: http://download.oracle.com/docs/cd/B14117_01/server.101/b10739.pdf
- *MySQL 5.1 Reference Manual* This manual provides information about operating a MySQL database. It is available from the MySQL web site: <http://dev.mysql.com/doc/refman/5.1/en/>
- *Server Products and Technologies for SQL Server* This online book provides information about operating a SQL Server database. It is available from the SQL Server web site: <http://technet.microsoft.com/en-us/library/default.aspx>
- *Sybase Adaptive Server Enterprise (Archive)* This online book provides information about operating a Sybase ASE database. It is available from the Sybase web site:

<http://sybooks.sybase.com/nav/summary.do?prod=9938&lang=en&prodName=Adaptive+Server+Enterprise&archive=0&Submit.x=25&Submit.y=16>

- *IBM DB2 Information Center* You can find information about operating an IBM DB2 database from the IBM web site:
<http://publib.boulder.ibm.com/infocenter/db2luw/v8/index.jsp>
- *HSQldb User Guide* This manual provides information about operating an HSQldb. It is available from the HSQldb web site:
<http://www.hsqldb.org/doc/guide/>
- *JBoss Application Server Documentation* You can find information about configuring the JNDI resource for the JBoss application server in the documentation. It is available from the JBoss web site:
<http://www.jboss.org/jbossas/docs/>.
- *Apache Tomcat 6.0 JNDI Resources HOW-TO* This online book provides information about configuring the JNDI resource for the Apache Tomcat server. It is available from the Apache Tomcat web site:
<http://tomcat.apache.org/tomcat-6.0-doc/jndi-resources-howto.html>
- *IBM WebSphere Application Server, Version 7.0 Information Center* You can find information about configuring the JNDI resource for the IBM Websphere application server from the IBM web site:
<http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp>




Typographical Conventions

The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
TIBCO_HOME ENV_HOME	<p>Many TIBCO products must be installed within the same home directory. This directory is referenced in documentation as <i>TIBCO_HOME</i>. The value of <i>TIBCO_HOME</i> depends on the operating system. For example, on Windows systems, the default value is C:\tibco.</p> <p>Other TIBCO products are installed into an installation environment. Incompatible products and multiple instances of the same product are installed into different installation environments. The directory into which such products are installed is referenced in documentation as <i>ENV_HOME</i>. The value of <i>ENV_HOME</i> depends on the operating system. For example, on Windows systems the default value is C:\tibco.</p>
CONTAINER_HOME TOMCAT_HOME JBoss_HOME WEBSphere_HOME	<p><i>CONTAINER_HOME</i> is the directory where you install a web container. In this release, the following web containers are supported: Apache Tomcat, JBoss, and IBM WebSphere.</p> <p><i>TOMCAT_HOME</i> is the directory where the Apache Tomcat server is installed. For example, if the Apache Tomcat server is installed at C:/apache-tomcat-6.0.16 on Windows systems, the value of <i>TOMCAT_HOME</i> is C:/apache-tomcat-6.0.16</p> <p><i>JBoss_HOME</i> is the directory where the JBoss server is installed. For example, if the JBoss server is installed at C:/JBoss on Windows systems, the value of <i>JBoss_HOME</i> is C:/JBoss</p> <p><i>WEBSphere_HOME</i> is the directory where the IBM WebSphere server is installed. For example, if the IBM WebSphere server is installed at C:/websphere on Windows systems, the value of <i>WEBSphere_HOME</i> is C:/websphere</p>
CONTAINER_TYPE DATABASE_TYPE	<p><i>CONTAINER_TYPE</i> indicates the type of web container chosen. See Web Container on page 4.</p> <p><i>DATABASE_TYPE</i> indicates the type of database chosen. See Database on page 4.</p>

Table 1 General Typographical Conventions (Cont'd)

Convention	Use
code font	Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example: Use <code>MyCommand</code> to start the foo process.
bold code font	Bold code font is used in the following ways: <ul style="list-style-type: none"> • In procedures, to indicate what a user types. For example: Type admin. • In large code samples, to indicate the parts of the sample that are of particular interest. • In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, <code>MyCommand</code> is enabled: <code>MyCommand [enable disable]</code>
<i>italic font</i>	Italic font is used in the following ways: <ul style="list-style-type: none"> • To indicate a document title. For example: See <i>TIBCO ActiveMatrix BusinessWorks Concepts</i>. • To introduce new terms. For example: A portal page may contain several portlets. <i>Portlets</i> are mini-applications that run in a portal. • To indicate a variable in a command or code syntax that you must replace. For example: <code>MyCommand PathName</code>
Key combinations	Key name separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C. Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.
	The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.
	The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.
	The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.

Terminology and Acronyms

The following acronyms are used in this manual:

Table 2 Terminology and Acronyms

Acronym	Meaning
API	Application Programming Interface
GUI	Graphical User Interface
UDDI	Universal Description, Discovery, and Integration
XML	Extensible Markup Language

How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, please contact TIBCO Support as follows.

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

<http://www.tibco.com/services/support>

- If you already have a valid maintenance or support contract, visit this site:

<https://support.tibco.com>

Entry to this site requires a user name and password. If you do not have a user name, you can request one.

Chapter 1

Preparing Databases and Web Containers for Deployment

This chapter provides information about preparing databases and web containers that will be used to deploy TIBCO ActiveMatrix Runtime UDDI Server.

Topics

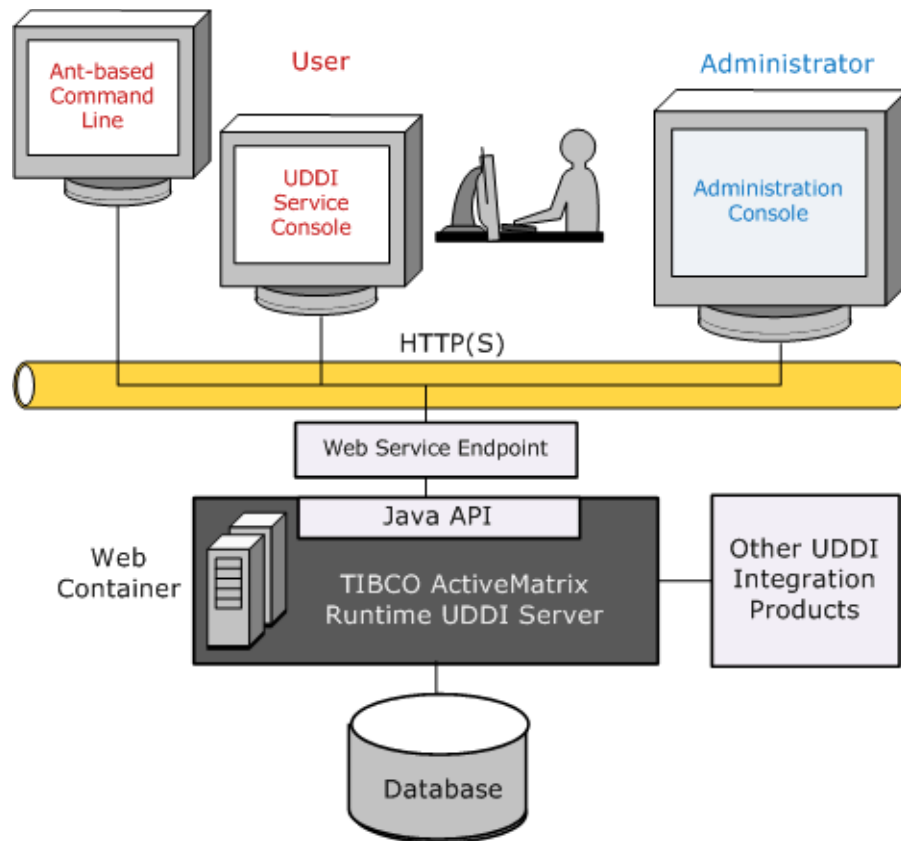
- [Overview, page 2](#)
- [Requirements, page 4](#)
- [Default Server, page 6](#)
- [Preparing a Database for Deployment, page 7](#)
- [Preparing a Web Container for Deployment, page 15](#)
- [Securing TIBCO ActiveMatrix Runtime UDDI Server, page 23](#)
- [Running TIBCO ActiveMatrix Runtime UDDI Server in Fault Tolerant Mode, page 26](#)
- [Configuring the Customized JAAS Login Module for LDAP Users, page 27](#)

Overview

UDDI (Universal Description, Discovery, and Integration) is a standard that enables organizations to publish and discover services. It encourages service reuse.

TIBCO ActiveMatrix Runtime UDDI Server provides an integrated UDDI registry that can be used by TIBCO ActiveMatrix products. There are four major components included in this product: a client with the Ant-based Command Line interface, the web-based UDDI Service Console, the web-based Administration Console, and TIBCO ActiveMatrix Runtime UDDI Server, as shown in [Figure 1](#).

Figure 1 TIBCO ActiveMatrix Runtime UDDI Server Structure



- The Ant-based Command Line interface allows Ant-based tasks to access TIBCO ActiveMatrix Runtime UDDI Server. Detailed information is provided

in Chapter 3, Command Line Interface, of *TIBCO ActiveMatrix Runtime UDDI Server User's Guide*.

- UDDI Service Console is a web application that enables you to access TIBCO ActiveMatrix Runtime UDDI Server through a web browser. It is explained in Chapter 2, TIBCO ActiveMatrix UDDI Service Console, of *TIBCO ActiveMatrix Runtime UDDI Server User's Guide*.
- Administration Console is a web-based graphic interface that administrators use to configure the TIBCO ActiveMatrix Runtime UDDI Server. It is explained in [Administration Console on page 58](#).
- TIBCO ActiveMatrix Runtime UDDI Server provides an integrated UDDI registry. Ant-based Command Line Interface, UDDI Service Console, and Administration Console communicate with TIBCO ActiveMatrix Runtime UDDI Server through HTTP(S), Web Service Endpoint, and JAVA API.
 - The registry information is stored in a database. For detailed information about how to prepare a database for deployment, refer to [Preparing a Database for Deployment on page 7](#).
 - TIBCO ActiveMatrix Runtime UDDI Server is deployed to a web container. For detailed information about how to prepare a web container for deployment, refer to [Preparing a Web Container for Deployment on page 15](#).

Requirements

For this release, the following software is required, but not provided in the TIBCO ActiveMatrix Runtime UDDI Server installation package. You must download the software from the vendors' official sites.

- [Database](#)
- [Web Container](#)

Database

The following databases are supported for this release. Install one of them to run TIBCO ActiveMatrix Runtime UDDI Server:

- MySQL 5.0 and 5.1
- Microsoft SQL Server 2005 and 2008
- Oracle 10g Release1, 10g Release2, 11g Release1, and 11g Release1 RAC
- Sybase ASE 15.0.2
- IBM DB2 8.2 and 9.5
- HSQLDB 1.8 with the following modes:
 - Server
 - Standalone (In-process)



Other TIBCO products may not support HSQLDB 1.8 for production use.



If you have chosen to install the default server, you can skip all the preparation for the database.

Web Container

The following web containers are supported. Install one of them to run TIBCO ActiveMatrix Runtime UDDI Server.

- Apache Tomcat 5.5 and 6.0
 - For Apache Tomcat 5.5
Download from <http://archive.apache.org/dist/tomcat/tomcat-5/>
 - For Apache Tomcat 6.0
Download from <http://archive.apache.org/dist/tomcat/tomcat-6/>



You must choose a binary version file to download, such as `apache-tomcat-5.5.25.zip`.

- JBoss Application Server 5.0.0
Download from <http://www.jboss.org/jbossas/downloads/>
- IBM WebSphere Application Server 7.0
Download from
<http://www.ibm.com/developerworks/websphere/downloads/>



IBM WebSphere Application Server 7.0 cannot work with HSQLDB1.8.

Default Server

When installing TIBCO ActiveMatrix Runtime UDDI Server, you can choose to install a default server. The default server is on Apache Tomcat 6.0 with the HTTP port *58080* and uses an HSQL database.

The default server is stored in the
TIBCO_HOME/RuntimeUDDIServer/3.1/server directory.

The HSQL database is stored in the
configDirectoryRoot/tibco/cfgmamt/RuntimeUDDIServer/data directory.

To start the default server, run **startup** under the following directory:
TIBCO_HOME/RuntimeUDDIServer/3.1/server/bin

To shut down the default server, run **shutdown** under the following directory:
TIBCO_HOME/RuntimeUDDIServer/3.1/server/bin

After starting up the default server, you can access it from `http://Host:58080` using **admin** as the username and password.

The default domain name is `mydomain.com`.

The useful addresses are listed below:

- To access TIBCO ActiveMatrix Runtime UDDI Server Administration Console, log in to `http://Host:58080/uddi`.
- To access TIBCO ActiveMatrix UDDI Service Console, log in to `http://Host:58080/uddisc`.
- `inquiry_URL` is `http://Host:58080/uddi/services/inquiry`
- `publish_URL` is `http://Host:58080/uddi/services/publication`
- `security_URL` is `http://Host:58080/uddi/services/security`
- `subscription_URL` is `http://Host:58080/uddi/services/subscription`
- `admin_URL` is `http://Host:58080/uddi/services/admin`

Preparing a Database for Deployment

After installing TIBCO ActiveMatrix Runtime UDDI Server, you must install one of the databases listed in [Database on page 4](#).

To conveniently explain the TIBCO ActiveMatrix Runtime UDDI Server features, this manual will use `uddi` as the sample database name, and `myuddiuser` and `myuddisecret` as the sample user account.

MYSQL

After installing the MySQL database server on your computer, complete the following preparatory steps:

- [Create a Database, page 7](#)
- [Create a User Account and Assign Roles for the Newly Created Account, page 7](#)
- [Download a Supported JDBC Driver, page 8](#)



To increase query performance, insert the following in the MySQL server configuration file, `[mysqld]` section:

```
optimizer_search_depth=4
```

For detailed information about working with MySQL, refer to *MySQL Reference Manual*.

Create a Database

To create a MySQL database, run the command below.

```
mysql> CREATE DATABASE uddi;
```



To support the database transaction and improve its performance, use InnoDB as the default storage engine.

Create a User Account and Assign Roles for the Newly Created Account

After a MySQL database is created, you need to create a new user account to connect to the database. In addition, you also need to assign roles for the newly created user account.

The newly created user account must have at least the following privileges in the database.

- SELECT
- INSERT
- UPDATE
- DELETE

While configuring the `uddi.war` file, if you choose to automatically create the database tables or you need to update the database schema during the deployment, append the following privileges to the newly created user account:

- CREATE TABLE
- CREATE INDEX
- ALTER TABLE
- DROP TABLE

Download a Supported JDBC Driver

You may need to download a JDBC driver for your database. At the time of this writing, the JDBC driver `mysql-connector-java-5.1.7-bin.jar` for the supported MySQL versions is available from the following link:

<http://dev.mysql.com/downloads/connector/j/5.1.html>

Microsoft SQL Server

After installing a Microsoft SQL Server database on your computer, complete the following preparatory steps:

- [Create a Database, page 9](#)
- [Create a User Account, page 9](#)
- [Assign Roles or Privileges for the Newly Created Account, page 10](#)
- [Download a Supported JDBC Driver, page 10](#)

For detailed information about working with Microsoft SQL Server, refer to *Server Products and Technologies for SQL Server*.



While working with Microsoft SQL Server, you must create a database with case-insensitive collation and create or alter tables with case-sensitive collation.

For example, if you work with Microsoft SQL Server,

- execute the following statement to create a case-insensitive database:

```
Create Database uddi COLLATE Latin_General_CI_AI
```
- modify the COLLATE property of the related columns for the existing database.

```
ALTER table businessname ALTER COLUMN name VARCHAR(255) COLLATE SQL_Latin1_General_CP1_CS_AS
ALTER table servicename ALTER COLUMN name VARCHAR(255) COLLATE SQL_Latin1_General_CP1_CS_AS
ALTER table tmodels ALTER COLUMN name VARCHAR(255) COLLATE SQL_Latin1_General_CP1_CS_AS
```

Create a Database

To create a Microsoft SQL Server database, follow these steps:

1. Open the Microsoft SQL Server Management Studio window.
2. Expand the Databases tree in the left panel.
3. Right-click the Databases node and select **New Database...** from the pop-up menu to open the New Database window.
4. Enter **uddi** in the Database name field.
5. Click the **OK** button.

Create a User Account

After creating a Microsoft SQL Server database, you must create a new user account to connect to the database.

1. Log in to Microsoft SQL Server Management Studio as the system administrator. (The default is **sa**.)
2. Expand the Security tree in the left panel.
3. Right-click the Logins node and select **New Login...** from the pop-up menu.

4. In the Login - New window, complete the following steps:
 - a. Enter **myuddiuser** in the Login name field.
 - b. Select the **SQL Server authentication** radio button and enter **myuddisecret** as the password.
 - c. Uncheck the **Enforce password policy** checkbox.
 - d. Select the **uddi** database from the Default database drop-down list.
5. Click the **OK** button.

Assign Roles or Privileges for the Newly Created Account

After the database is created, the newly created user account that will be configured in the JNDI resource must have at least the following privileges in the database.

- SELECT
- INSERT
- UPDATE
- DELETE

While configuring the `uddi.war` file, if you choose to automatically create the database tables during the deployment, add the following privileges to the newly created user account:

- CREATE TABLE
- CREATE INDEX
- ALTER TABLE
- DROP TABLE

Download a Supported JDBC Driver

You may need to download a JDBC driver for your database. At the time of this writing, the JDBC driver `sqljdbc4.jar` for the supported SQL Server versions is available from the following link:

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

Oracle Database

After installing Oracle on your computer, complete the following preparatory steps.

- Create a `uddi` database.
- Create a user account, for example, `myuddiuser` and `myuddisecret`.

- [Assign Roles or Privileges for the Newly Created Account, page 11.](#)
- [Download a Supported JDBC Driver, page 11.](#)

For detailed information about working with Oracle, refer to *Server Oracle Database Administrator's Guide*.

Assign Roles or Privileges for the Newly Created Account

After the database is created, the newly created user account that will be configured in the JNDI resource must have at least the following privileges in the database.

- CREATE SESSION
- SELECT
- INSERT
- UPDATE
- DELETE

While configuring the `uddi.war` file, if you choose to automatically create the database tables or you need to update the database schema during the deployment, append the following privileges to the newly created user account:

- CREATE TABLE
- CREATE INDEX
- ALTER TABLE
- DROP TABLE

Download a Supported JDBC Driver

You may need to download a JDBC driver for your database. At the time of this writing, the JDBC driver `ojdbc5.jar` or `ojdbc6.jar` for the supported Oracle versions is available from the following link:

http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/htdocs/jdbc_111060.html

Sybase Database

After installing Sybase on your computer, complete the following preparatory steps.

- Create a `uddi` database.
- Create a user account. For example, `myuddiuser` and `myuddisecret`.
- [Assign Roles or Privileges for the Newly Created Account, page 12.](#)
- [Download a Supported JDBC Driver, page 12](#)

For detailed information about working with Sybase, refer to *Sybase Adaptive Server Enterprise (Archive)* .

Assign Roles or Privileges for the Newly Created Account

After the database is created, the newly created user account that will be configured in the JNDI resource must have at least the following privileges in the database.

- SELECT
- INSERT
- UPDATE
- DELETE

While configuring the `uddi.war` file, if you choose to automatically create the database tables or you need to update the database schema during the deployment, append the following privileges to the newly created user account:

- CREATE TABLE
- CREATE INDEX
- ALTER TABLE
- DROP TABLE

Download a Supported JDBC Driver

You may need to download a JDBC driver for your database. At the time of this writing, the JDBC driver (version 6.0.5) `jconn3.jar` for Sybase ASE 15.0 is available from the following link:

<http://downloads.sybase.com/swd/summary.do?client=support&baseprod=63>

IBM DB2

After installing IBM DB2 on your computer, complete the following preparatory steps.

- Create a `uddi` database.
- Create a user account. For example, `myuddiuser` and `myuddisecret`.
- [Assign Roles or Privileges for the Newly Created Account, page 13](#)
- [Download Supported JDBC Drivers, page 13](#)



When you create a DB2 database, the `Pagesize` parameter must be set to at least 8k to contain large amounts of data, such as the data with the long string type.

For detailed information about working with IBM DB2, refer to *IBM DB2 Information Center*.

Assign Roles or Privileges for the Newly Created Account

After the database is created, the newly created user account that will be configured in the JNDI resource must have at least the following privileges in the database.

- SELECT
- INSERT
- UPDATE
- DELETE

While configuring the `uddi.war` file, if you choose to automatically create the database tables or you need to update the database schema during the deployment, append the following privileges to the newly created user account:

- CREATE TABLE
- CREATE INDEX
- ALTER TABLE
- DROP TABLE

Download Supported JDBC Drivers

You may need to download JDBC drivers for your database. At the time of this writing, the JDBC driver `db2jcc.jar` and the license JAR file `db2jcc_license_c.jar` for the supported IBM DB2 versions is available from the following link:

http://www.ibm.com/products/finder/us/finders?pg=ddfinder&cm_re=other_-suprcn_-download

HSQldb

After installing HSQLDB on your computer, complete the following preparatory steps:

- Create a `uddi` database.
- Create a user account. For example, `myuddiuser` and `myuddisecret`.
- Assign roles or privileges for the newly created account.
- [Download Supported JDBC Drivers, page 13](#)

For detailed information about working with HSQLDB, refer to *HSQLDB User Guide*.

Download a Supported JDBC Driver

You may need to download JDBC drivers for your database. At the time of this writing, the JDBC driver `hsqldb.jar` for HSQLDB 1.8 is available from the following link:

<http://www.hsqldb.org>

Preparing a Web Container for Deployment

To connect to the database, TIBCO ActiveMatrix Runtime UDDI Server will use the JNDI resource that has been set up in one of the following web containers.

- [Apache Tomcat](#)
- [JBoss](#)
- [IBM WebSphere](#)

Apache Tomcat

To run TIBCO ActiveMatrix Runtime UDDI Server on the Apache Tomcat server, complete the following preparatory steps:

- [Install a Supported Web Container, page 15](#)
- [Configure the JDBC Driver, page 15](#)
- [Define a JNDI Resource, page 15](#)
- [Work with Oracle 11g RAC, page 16](#)

Install a Supported Web Container

For this release, Apache Tomcat 5.5 and 6.0 are supported.

Configure the JDBC Driver

You need to add the JDBC driver of the database you worked with to the classpath of the Apache Tomcat server.

- For Tomcat 5.5, drop the JAR file in to the classpath `TOMCAT_HOME/common/lib/`
- For Tomcat 6.0, drop the JAR file in to the classpath `TOMCAT_HOME/lib/`

Define a JNDI Resource

You need to define a JNDI resource in the Apache Tomcat server that points to the database you worked with.

After performing the `srvconfig` command to configure the `uddi.war` file, the `context.xml` file for the supported database will be created in the following directory:

`TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/Tomcat/DATABASE_TYPE`

This `context.xml` file contains the sample JNDI resource for the specified database.

You need to modify the properties in the `context.xml` file according to your database server settings, and then overwrite the file into the following Tomcat configuration directory:

`TOMCAT_HOME/conf`



If your web contain has been used for other applications and has some specific configurations written in the `context.xml` file, you cannot directly overwrite the `context.xml` file using the file located in the following directory:

`TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/Tomcat/DATABASE_TYPE.`

Work with Oracle 11g RAC

To run TIBCO ActiveMatrix Runtime UDDI Server on the Apache Tomcat server 6.0 with Oracle 11g RAC using a thin driver (You do not need an Oracle client), complete the following steps:

1. Copy Oracle JDBC driver `ojdbc5.jar` or `ojdbc6.jar` to the `TOMCAT_HOME/lib` directory.
2. Modify the resource element in the `TOMCAT_HOME/conf/context.xml` file:


```
<Resource name="jdbc/UddiDatabase" auth="Container"
  type="javax.sql.DataSource" maxActive="100"
  maxIdle="30" maxWait="10000" username="username"
  password="password"
  driverClassName="oracle.jdbc.driver.OracleDriver"
  url="jdbc:oracle:thin:@(DESCRIPTION=(LOAD_BALANCE=ON)(FAILOVER=
ON)
  (ADDRESS=(PROTOCOL=TCP)(HOST=rac1Host)(PORT=1521))
  (ADDRESS=(PROTOCOL=TCP)(HOST=rac2Host)(PORT=1521))
  (CONNECT_DATA=(SERVICE_NAME=serviceName)
  (failover_mode=(type=select)(method=basic)(retries=20)(delay=20
))))"/>
```

To run TIBCO ActiveMatrix Runtime UDDI Server on the Apache Tomcat server 6.0 with Oracle 11g RAC using a thick driver (You need an Oracle client), complete the following steps:

1. Install an Oracle 10g or 11g client, select the Enterprise mode, and make sure the Oracle BIN folder has been set in the system variable (path for Windows platform, and PATH for UNIX platform).
2. Copy `ojdbc6.jar` for JRE 1.6.0 to `TOMCAT_HOME/lib`.
3. Modify the resource element in the `TOMCAT_HOME/conf/context.xml` file:

```

<Resource name="jdbc/UddiDatabase" auth="Container"
type="javax.sql.DataSource" maxActive="100"
maxIdle="30" maxWait="10000" username="username"
password="password"
driverClassName="oracle.jdbc.driver.OracleDriver"
url="jdbc:oracle:oci:@(DESCRIPTION=(LOAD_BALANCE=ON)(FAILOVER=O
N)
(AADDRESS=(PROTOCOL=TCP)(HOST=rac1Host)(PORT=1521))
(AADDRESS=(PROTOCOL=TCP)(HOST=rac2Host)(PORT=1521))
(CONNECT_DATA=(SERVICE_NAME=serviceName)
(failover_mode=(type=select)(method=basic)(retries=20)(delay=20
))))"/>

```

JBoss

To run TIBCO ActiveMatrix Runtime UDDI Server on the JBoss web container, complete the following preparatory steps:

- [Install a Supported Web Container, page 17](#)
- [Configure the JDBC Driver, page 17](#)
- [Define a JNDI Resource, page 18](#)

Install a Supported Web Container

For this release, JBoss 5.0.0 is supported.

Configure the JDBC Driver

Add the JDBC driver of the database you worked with to the classpath of the JBoss web container: *JBoss_HOME/server/default/lib*

Define a JNDI Resource

Define a JNDI resource in the JBoss web container that points to the database you worked with.

Complete the following steps:

1. Copy the `tamrus-DATABASE_TYPE-ds.xml` file in the `TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/JBoss/DATABASE_TYPE` directory to the `JBOSS_HOME/server/default/deploy` directory.



After performing the `srvconfig` command to configure the `uddi.war` file, the `tamrus-DATABASE_TYPE-ds.xml` file for the supported database will be created in the following directory:

`TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/JBoss/DATABASE_TYPE`

This `tamrus-DATABASE_TYPE-ds.xml` file contains the sample JNDI resource for the specified database. For example, the `tamrus-mssql-ds.xml` file is used to configure the JNDI resource in Microsoft SQL Server.

You need to modify the properties in the `tamrus-DATABASE_TYPE-ds.xml` file according to your database server settings.

For detailed information about configuring the JNDI resource for the JBoss web container, refer to *Installation and Getting Started Guide* at <http://www.jboss.org/jbossas/docs/>.

2. Append the following content in the `login-config.xml` file that is available in the following directory:

`JBOSS_HOME/server/default/conf`

```
<application-policy name="tamrus-login">
  <authentication>
    <login-module
      code="com.novell.uddi3.security.InternalJAASModule"
      flag="required">
    </login-module>
  </authentication>
</application-policy>
```



When configuring the `uddi.war` file using the customized JAAS Login Module for authentication, change the `login-module` class shown above to the Customized JAAS Login Module implementation class name.

IBM WebSphere

To run TIBCO ActiveMatrix Runtime UDDI Server on the IBM WebSphere server, complete the following preparatory steps:

- [Install a Supported Web Container, page 19](#)
- [Configure the JDBC Driver, page 19](#)
- [Define a JNDI Resource, page 19](#)

Install a Supported Web Container

For this release, IBM WebSphere 7.0 is supported.

Configure the JDBC Driver

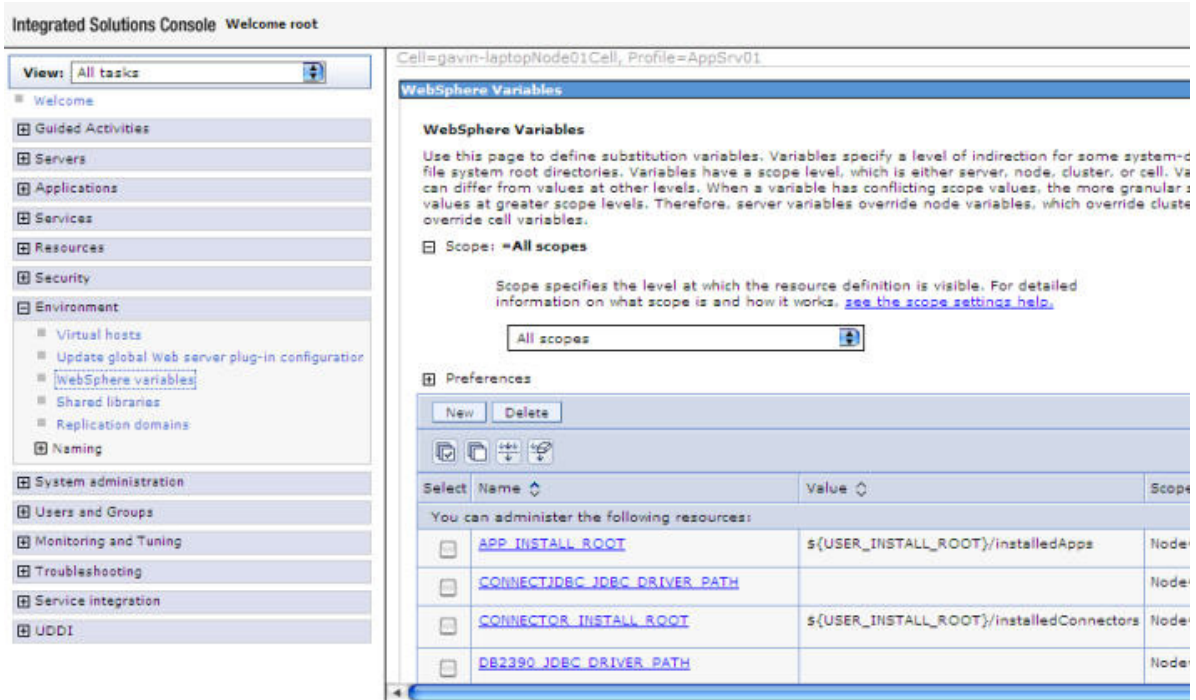
You need to add the JDBC driver of the database you worked with to the classpath of the IBM WebSphere web container
WEBSPHERE_HOME/server/server_config/lib/

Define a JNDI Resource

To configure the JNDI resource in the IBM WebSphere server, follow these steps:

1. Open a web browser and connect to the Integrated Solutions Console.
2. Expand the Environment tree in the left pane and click **WebSphere variable** to open the WebSphere Variables page on the right, as shown in [Figure 2](#).

Figure 2 Integrated Solutions Console



3. Select the scope for the new variable, and then click the **New** button to create a variable. For example, create **JDBC_DRIVERS_PATH** as the new variable that points to the directory where the JDBC driver is stored.
4. Add a JDBC provider:
 - a. Expand the Resources tree in the left pane and click **JDBC > JDBC providers**. The JDBC providers page appears on the right.
 - b. Select the scope for the new JDBC provider, and then click the **New** button to create a JDBC provider.
 - c. In the Create new JDBC provider pane, select the associated database type in the Database type drop-down list. DB2, Oracle, Sybase, and SQL Server can be selected from the Database type drop-down list.

For example, if you select **SQL Server** as the database type, then select **Microsoft SQL Server JDBC Driver** as the provider type and **Connection pool data source** as the implementation type. Click the **Next** button. In the

next page, enter `${JDBC_DRIVERS_PATH}/sqljdbc.jar` for the JDBC driver in the Class path field.

MySQL is not a default item listed in the Database type drop-down list. If you want to create a JDBC provider for MySQL, select **User-defined** in the Database type drop-down list, enter

`com.mysql.jdbc.jdbc2.optional.MysqlConnectionPoolDataSource` in the Implementation class name field, and enter **MySQL JDBC Provider** as the name. Click the **Next** button. In the next page, enter `${JDBC_DRIVERS_PATH}/mysql-connector-java-5.1.7-bin.jar` for the JDBC driver in the Class path field.

- d. Click the **Next** button to create other configurations and then finish the operation.



WebSphere 7.0 does not support creating a JDBC provider for HSQLDB 1.8.

5. Add a data source:

- a. Expand the Resources tree in the left pane, and then click **JDBC > Data sources**. The Data sources page appears on the right.
- b. Select the scope for the new data source, and then click the **New** button to create a data source.
- c. In the Enter basic data source information pane, enter the name of the data source in the Data source name field and enter `jdbc/UddiDatabase` in the JNDI name field.
- d. Click the **Next** button. In the next page, select the JDBC provider created in [step 4](#).
- e. Click the **Next** button. In the next page, enter the corresponding value in the Database name, Port number, and Server name fields.
- f. Click the **Next** button to create other configurations and then finish the operation.
- g. Expand the Resources tree in the left pane, and then click **JDBC > Data source** to open the Data sources page in the right pane. Click the newly created data source to open the configuration page.
- h. Click **Custom properties** in the Additional Properties area.
- i. For SQL Server, Oracle, Sybase, or DB2 provider, in the Custom properties pane, click the **New** button. Under the Configuration tab, enter `user` in the

Name field and the username used to access the database in the Value field. Click the **OK** button to save the configuration.

In the Custom properties pane, click the **New** button. Under the Configuration tab, enter **password** in the Name field and the password used to access the database in the Value field. Click the **OK** button to save the configuration.

- j. For a MySQL JDBC provider, you also need to specify the **URL** and **driverType** properties in addition to the **user** and **password** properties.

In the Custom properties pane, click the **New** button. Under the Configuration tab, enter **URL** in the Name field and **jdbc:mysql://localhost:3306/uddi** in the Value field. Click the **OK** button to save the configuration.

In the Custom properties pane, click the **New** button. Under the Configuration tab, enter **driverType** in the Name field and **com.mysql.jdbc.Driver** in the Value field. Click the **OK** button to save the configuration.

- k. For a IBM DB2 JDBC provider, you also need to specify the **currentSchema** property in addition to the **user** and **password** properties.

In the Custom properties pane, click the **New** button. Under the Configuration tab, enter **currentSchema** in the Name field and specify the value, for example **UDDI**, in the Value field. Click the **OK** button to save the configuration.

Securing TIBCO ActiveMatrix Runtime UDDI Server

The following functions help you secure TIBCO ActiveMatrix Runtime UDDI Server.

- [Setting the Default Administrator User](#)
- [Encrypting a Password for the UDDI Server](#)
- [Encrypting the Database Password](#)
- [SSL Support](#)

Setting the Default Administrator User

During the TIBCO ActiveMatrix Runtime UDDI Server configuration, you are required to provide the username and password of the default administrator. The default values for the administrator are the username 'admin' and the password 'admin'. For detailed information, refer to [Configure the Server Root User and Password, page 39](#).

Encrypting a Password for the UDDI Server

When connecting to TIBCO ActiveMatrix Runtime UDDI Server, you are required to provide a username and password. You can encrypt your password for greater security.

To encrypt your password, follow these steps:

1. Open a Command Prompt and change the path to:
`TIBCO_HOME/RuntimeUDDIServer/3.1/bin`
2. Run `uddiant encrypt`

The following prompts appear in the command line window:

- Enter the file location in the relative or absolute path (required)

Enter the relative or absolute path of a valid file where your clear-text password is saved. The clear-text password is saved in the text file.

For example:

TIBCO_HOME\RuntimeUDDIServer\3.1\sample_password.txt.

The content of the *sample_password.txt* file is shown below:

#!yourPassword1

#!!yourPassword2

#! and *#!!* are the two prefixes of your passwords and they are also reserved symbols. They must not be used in your password. The encrypted password with the *#!* prefix can be used by other computers. The encrypted password with the *#!!* prefix can only be used on your computer where you encrypt your password.

- Enter the output file location in the relative or absolute path (required)

Enter the relative or absolute path of a valid file where your encrypted password will be saved.

To avoid user interaction, enter the following parameters as the command line arguments.

uddiant encrypt -Dfile=fileName -Doutput=outputFileName

After encrypting the password, replace the clear-text password with the encrypted password. For example, the clear-text password can be replaced in the *uddi.properties* file that is available from the following directory:

TIBCO_HOME\RuntimeUDDIServer\3.1\script\client

Encrypting the Database Password

In TIBCO ActiveMatrix Runtime UDDI Server, you can implement your own factory to encrypt the database password used in the JNDI resource configuration file.

For detailed information, refer to the Apache Tomcat and JBoss documentation.

SSL Support

SSL (Secure Socket Layer) technology allows web browsers and web servers to communicate over a secure connection.

If you want to access TIBCO ActiveMatrix Runtime UDDI Server using SSL support, you must export the certificate from the server and import it to your client machine. For detailed information, refer to *TIBCO ActiveMatrix Runtime UDDI Server User's Guide*.

For Apache Tomcat

To enable SSL on Apache Tomcat, uncomment the SSL/TLS connector in `TOMCAT_HOME/conf/server.xml` and change the values of the `keyStoreFile` and `keyStorePass` properties to your actual values.

For example:

If your keystore named `uddi.keystore` is located in the `TOMCAT_HOME` directory with the password `TAMRUS`, then your default connector

```
<Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"
maxThreads="150" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS" />
```

need to be changed into:

```
<Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"
maxThreads="150" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS"
keyStoreFile="uddi.keystore" keyStorePass="TAMRUS" />
```

For detailed information, refer to *Apache Tomcat 6.0 JNDI Resources HOW-TO* available at

<http://tomcat.apache.org/tomcat-6.0-doc/jndi-resources-howto.html>

For JBoss

To enable SSL on JBoss, uncomment the SSL/TLS connector in `JBOSS_HOME/server/default/deploy/jbossweb.sar/server.xml` and change the values of the `keyStoreFile` and `keyStorePass` properties to your actual values.

For IBM WebSphere

IBM WebSphere supports SSL by default.

Running TIBCO ActiveMatrix Runtime UDDI Server in Fault Tolerant Mode

To let TIBCO ActiveMatrix Runtime UDDI Server work in a high availability mode and avoid potential hardware or software issues, you can deploy the application in a clustering environment.

For Apache Tomcat

TIBCO ActiveMatrix Runtime UDDI Server can work in the Apache Tomcat clustering environment.

- To set up Tomcat 5.5.2+ clustering, refer to the Tomcat documentation at <http://tomcat.apache.org/tomcat-5.5-doc/cluster-howto.html> and <http://tomcat.apache.org/connectors-doc/>
- To set up Tomcat 6.0 clustering, refer to the Tomcat documentation at <http://tomcat.apache.org/tomcat-6.0-doc/cluster-howto.html> and <http://tomcat.apache.org/connectors-doc/>

After setting up the Tomcat clustering, deploy the `uddi.war` file on all the Tomcat clustering nodes and configure the database to allow all the clustering nodes to share it.

To access TIBCO ActiveMatrix Runtime UDDI Server in the clustering environment, point to <http://host:port/uddi>.

For JBoss

TIBCO ActiveMatrix Runtime UDDI Server can work in the JBoss clustering environment.

To set up JBoss 5.0 clustering, refer to the JBoss documentation at <http://community.jboss.org/wiki/JBossAS5ClusteringGuide>

For IBM WebSphere

TIBCO ActiveMatrix Runtime UDDI Server runs in the IBM WebSphere clustering environment.

To set up IBM WebSphere 7.0 clustering, refer to the IBM WebSphere documentation at <http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp>

Configuring the Customized JAAS Login Module for LDAP Users

There are four roles predefined in TIBCO ActiveMatrix Runtime UDDI Server. They are readonly, subscribers, publishers, and administrators. For detailed information, refer to [User Management on page 67](#).

To customize JAAS Login Module, map the LDAP users to one of the above four roles.

To plug in a customized JAAS Login Module for LDAP users, follow these steps:

1. Import the template project into the eclipse. This step is optional. The template project is in the
`TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig/loginModule` folder.
2. Write your own `LoginModule` class. A sample `LoginModule` can be found in the following location:
`TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig/loginModule/src/com/tibco/uddi/security/login/SampleLdapLoginModule.java`
3. Change the content of the `authentication.properties` file according to your `LoginModule` class.
4. Run **ant zip**
 Build and pack the project. The `login.jar` module will be generated in the `bin` folder.
5. Customize the JAAS login configuration during the `uddi.war` file configuration. When configuring the `uddi.war` file, you will be prompted to customize the `LoginModule`. To do this,
 - a. enter the path and the file name of the `authentication.properties` file mentioned above.
 - b. enter the path and the file name of the `login.jar` file mentioned above.



For detailed information, refer to [Configuring the UDDI Server in the Interactive Mode on page 35](#).

When configuring the `uddi.war` file using the customized JAAS Login Module for authentication, if you select JBoss as your target web container, change the login-module class shown below to the Customized JAAS Login Module implementation class name in the `login-config.xml` file. The `login-config.xml` file is available in the `JBOSS_HOME/server/default/conf` directory.

```
<application-policy name="tamrus-login">
  <authentication>
    <login-module
      code="com.novell.uddi3.security.InternalJAASModule"
      flag="required">
    </login-module>
  </authentication>
</application-policy>
```

To get more information about JAAS authentication and authorization, go to <http://java.sun.com/javase/6/docs/technotes/guides/security/jaas/JAASRefGuide.html>

Chapter 2

Configuring TIBCO ActiveMatrix Runtime UDDI Server

This chapter provides information about how to configure TIBCO ActiveMatrix Runtime UDDI Server.



Apache-ant-1.7.1 and JRE 1.6.0 must be pre-installed and set into the system path if you want to use Ant-based commands to configure TIBCO ActiveMatrix Runtime UDDI Server.

Topics

- [UI Re-Branding, page 30](#)
- [Configuring the UDDI Server in the Interactive Mode, page 35](#)
- [Configuring the UDDI Server in the Silent Mode, page 43](#)
- [Configuration Results, page 48](#)

UI Re-Branding

UI re-branding allows you to change the Administration Console and Service Console default logo and product name.

After installing TIBCO ActiveMatrix Runtime UDDI Server on your computer, the default `uibranding.properties`, `uibranding-logo.gif` and `sc-uibranding-log.gif` files are found in the `TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig` directory.

- `uibranding.properties`

The default content of the `uibranding.properties` file is shown below. You can change the value of each parameter if needed.

— `welcomeMessage=Welcome to TIBCO ActiveMatrix Runtime UDDI Server Administration Console`

When accessing the Administration Console, you can see the welcome message shown on the login page, as shown in [Figure 3](#).

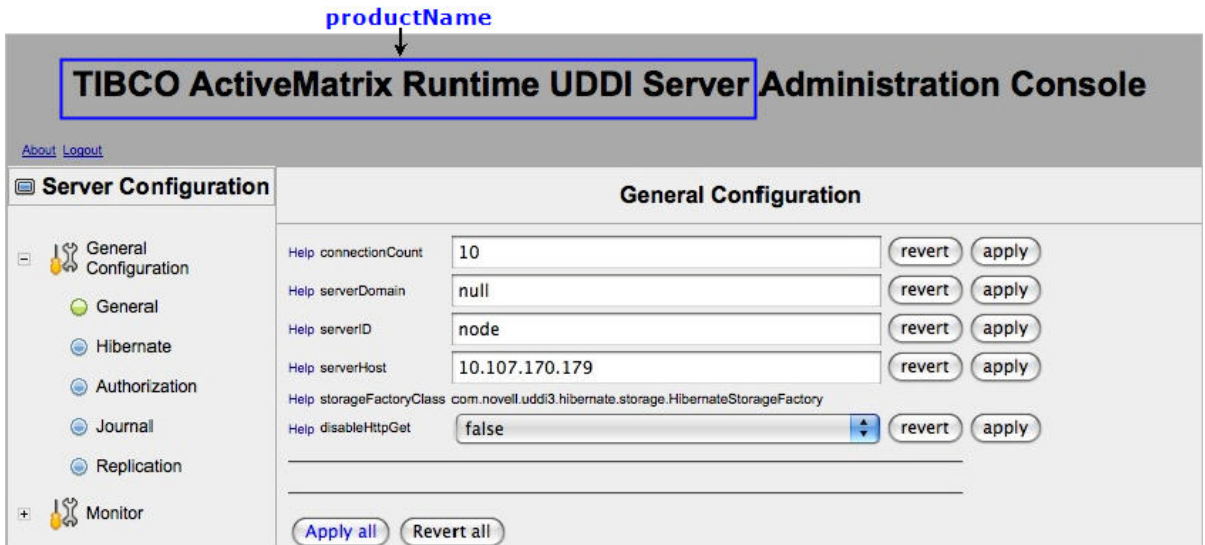
Figure 3 The Administration Console Login Page



— `productName=TIBCO ActiveMatrix Runtime UDDI Server`

After logging in to the Administration Console, you can see the product name shown on the screen, as shown in [Figure 4](#).

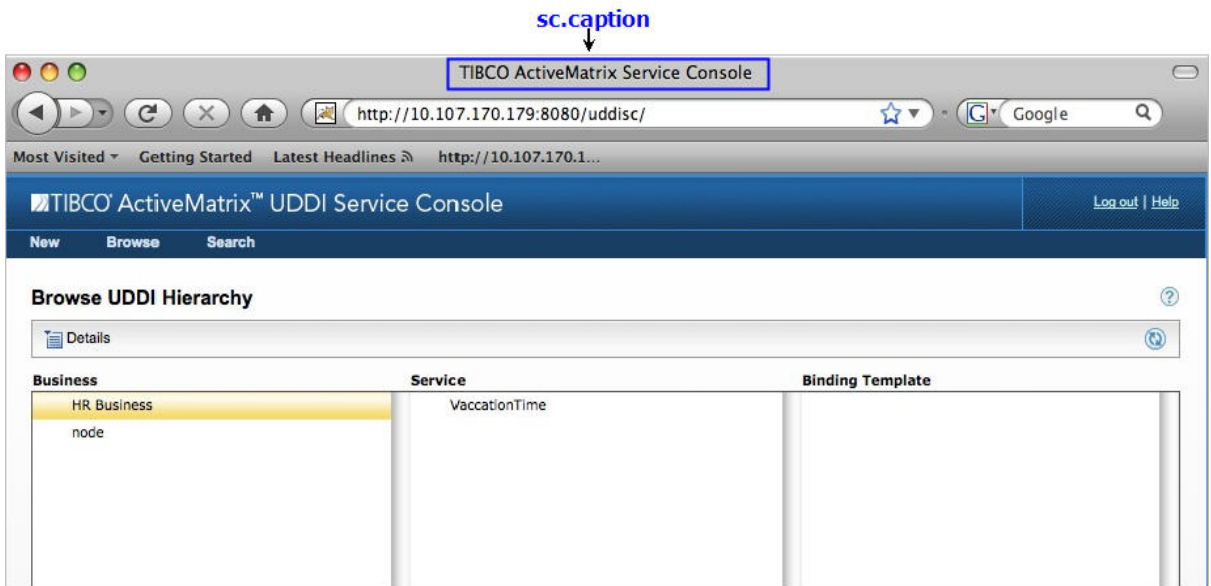
Figure 4 The Product Name shown on the Administration Console



— `sc.caption=TIBCO ActiveMatrix Service Console`

After logging in to the Service Console, you can see the caption of the Service Console shown on the top of your browser, as shown in Figure 5.

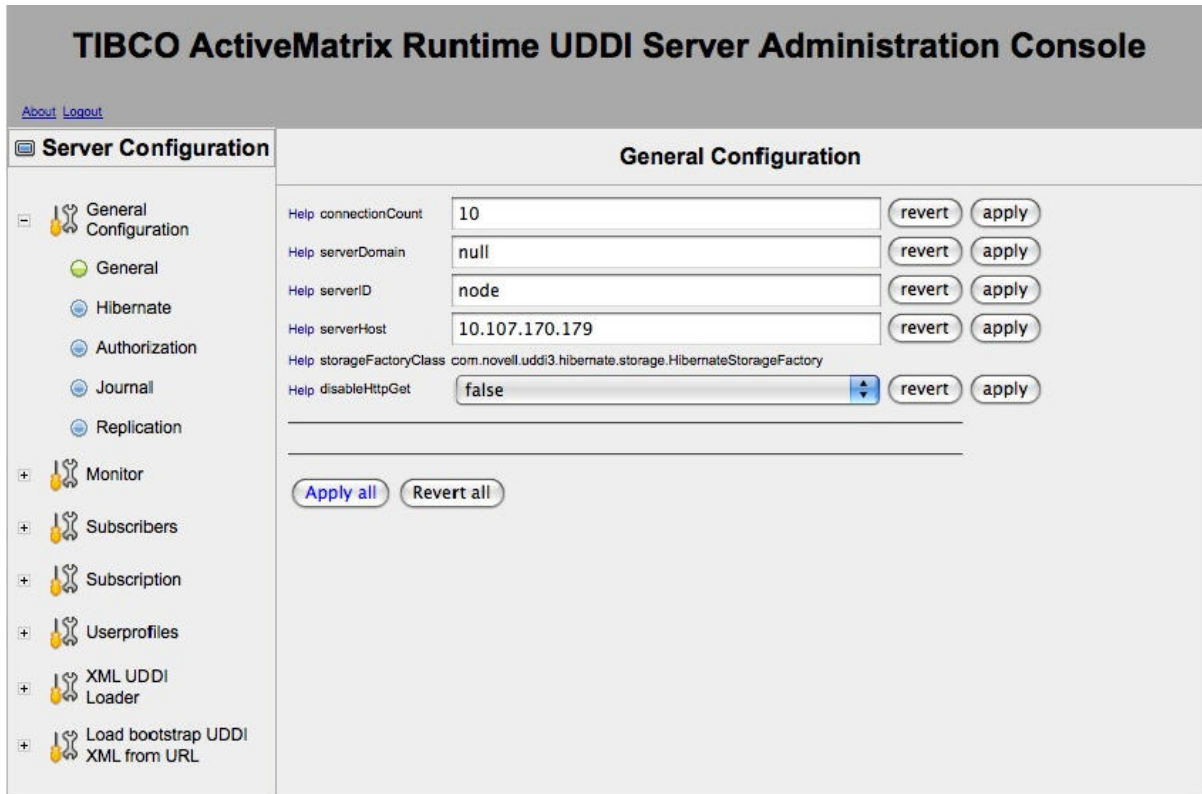
Figure 5 The Service Console Caption



- uibranding-logo.gif

The Administration Console default logo picture is saved in this file. You can see this logo picture after logging in to the Administration Console, as shown in [Figure 6](#). You can customize the logo picture. The logo picture size should be less than 129 * 56 pixels.

Figure 6 The Logo Picture shown on the Administration Console



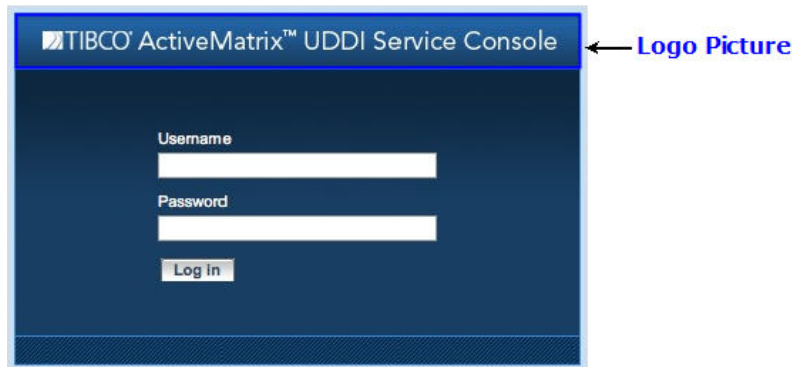
Logo Picture →



- sc-uibranding-logo.gif

The Service Console default logo is saved in this file. You can see this logo picture when accessing to the Service Console, as shown in [Figure 7](#). You can customize the logo picture. The logo picture size should be less than 393* 38 pixels.

Figure 7 The Logo Picture shown on the Service Console



UI Re-Branding Methods

When configuring the `uddi.war` file, you can change the Administration Console and Service Console default logo and product name. For detailed information, refer to the [Configure the Product Name and Logo for UI](#) part in the [Configuring the UDDI Server in the Interactive Mode](#) section.

using the specific files when configuring the `uddi.war` file, follow these steps:

1. Copy the default `uibranding.properties`, `uibranding-logo.gif`, and `sc-uibranding-log.gif` files to the following directory:
`TIBCO_HOME/RuntimeUDDIServer/3.1/template`
2. Modify the contents of the three files if needed.
 - `uibranding.properties`
 - `uibranding-logo.gif`
 - `sc-uibranding-logo.gif`
3. Open the command prompt and change the directory to:
`TIBCO_HOME/RuntimeUDDIServer/3.1/bin`
4. Run: `srvconfig`

Following the prompt shown on the screen, select (10): Configure Product Name and Logo for UI.

Enter **no** for the following questions:

- Would you like to replace the names of Administration Console and Service Console?
- Would you like to replace the logo of Administration Console?
- Would you like to replace the logo of Service Console?

If you want to set the logo and the product name on Administration Console and Service Console by yourself, follow these steps:

1. Open the command prompt and change the directory to:
`TIBCO_HOME/RuntimeUDDIServer/3.1/bin`

2. Run: `srvconfig`

Following the prompt shown on the screen, select (10): Configure Product Name and Logo for UI.

Enter **yes** for the following questions:

- Would you like to replace the names of Administration Console and Service Console?
- Would you like to replace the logo of Administration Console?
- Would you like to replace the logo of Service Console?

For detailed information, refer to [Configure the Product Name and Logo for UI on page 41](#).

Configuring the UDDI Server in the Interactive Mode

After installing TIBCO ActiveMatrix Runtime UDDI Server, the configuration commands must be run before deployment. See *TIBCO ActiveMatrix Runtime UDDI Server Installation* for information about installing TIBCO ActiveMatrix Runtime UDDI Server.

1. Open a command prompt.
2. Run one of the following commands and use the interactive mode to configure the UDDI server.
 - Run **srvconfig** under the `TIBCO_HOME/RuntimeUDDIServer/3.1/bin` directory.
 - Run **ant -f srvconfig.xml** under the `TIBCO_HOME/RuntimeUDDIServer/3.1/scripts/server` directory.

If there is no `build.properties` file under the `TIBCO_HOME/RuntimeUDDIServer/3.1/template` directory, the command execution will switch to the interactive mode and will prompt the following questions:

Please choose the following options:

- (1): Configure All
 - (2): Configure the Database
 - (3): Configure the Container
 - (4): Configure the Server Domain
 - (5): Configure the Server Host and Port
 - (6): Configure the Server Root User and Password
 - (7): Configure SMTP for the Subscription Email Notification
 - (8): Configure the Folder for the Server Log File(s)
 - (9): Configure the Customized JAAS Module
 - (10): Configure the Product Name and Logo for UI
- Your Option: ([1], 2, 3, 4, 5, 6, 7, 8, 9, 10)

The default option is option (1).



The first time you configure the `uddi.war` file you must choose option (1) to configure all the items.

Configure All

If you choose option (1), items (2) through (10) listed above will be configured in order. Then the `uddi.war` file will be generated.

If you need to reconfigure the items (2) through (10), you will be asked to indicate the previously configured container and database. The following prompts appear on the screen:

- Please choose the container type that you have configured:
 - (1) Tomcat
 - (2) JBoss
 - (3) WebSphere
 Your Option: ([1], 2, 3)

Choose the container type that you have previously configured. Option (1) is the default option.
- Please choose the database type that you have configured:
 - (1): HSQLDB
 - (2): SQL Server
 - (3): Oracle
 - (4): MySQL
 - (5): DB2
 - (6): Sybase
 Your Option: ([1], 2, 3, 4, 5, 6)

Choose the database type that you have previously configured. Option (1) is the default option.

Configure the Container

To configure the web container, use the following prompt that appears on the screen:

- Please choose the container type:
 - (1) Tomcat
 - (2) JBoss
 - (3) WebSphere
 Your Option: ([1], 2, 3)

Choose the type of the web container that you want to use.

Configure the Database

To configure the database, use the following prompts that appear on the screen:

- Please choose the database type:
 - (1): HSQLDB
 - (2): SQL Server

```
(3): Oracle
(4): MySQL
(5): DB2
(6): Sybase
Your Option: ([1], 2, 3, 4, 5, 6)
```

Choose the database type that you want to use.

- Would you like to automatically create database tables when deploying the .war file?
 - yes: tables are created automatically during deployment
 - no: tables need to be created manually before deployment
 - Your option: ([yes], no)

Whether to auto-create the database schema.

The `uddi.sql` script to create the database schema is generated in the following location:

```
TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/CONTAINER_TYPE/
DATABASE_TYPE
```

If you do not choose to automatically create the database schema, you need to manually execute the script to create the tables in the database before deployment, otherwise the database schema are automatically created during the first deployment.

- Would you like to specify `default_schema` attribute (required for DB2 and Oracle RAC only)
 - For DB2 and Oracle RAC, please select yes
 - For all other database types, please select no
 - yes: `default_schema` attribute is added in `hibernate.cfg.xml`
 - no : no `default_schema` attribute is added in `hiberante.cfg.xml`

If you select **yes**, then the following prompts appear on your screen.

- HSQLDB: please use "PUBLIC"
- SQL Server: please use "dbo"
- Oracle: please use database user name
- MySQL: please use database name
- DB2: please use database current schema
- Sybase: please use "dbo"

You need to specify the default schema for the database user that creates or updates uddi server database.



When using Oracle 11g RAC, you need to specify the `default_schema` attribute only if two users use the same tablespace.

For Oracle, MySQL and DB2 databases, the value you specify here for the default schema must be consistent with the value written in the `content.xml` file. If you have installed the default server for the TIBCO ActiveMatrix Runtime UDDI Server, the `content.xml` file is located in the `TIBCO_HOME\RuntimeUDDIServer\3.1\server\conf` directory.

For example:

- For Oracle, if you specify **UDDI** as the default schema, the value of the user name written in the `content.xml` file must be `username="UDDI"`.
- For DB2, if you specify **UDDI** as the default schema, the value written in the `content.xml` file must be
`url="jdbc:db2://Host:Port/DatabaseName:traceLevel=3;driverType=4;currentSchema=UDDI;"`
- For MySQL, if you specify **UDDI** as the default schema, the value written in the URL attribute must be
`url="jdbc:mysql://Host:Port/UDDI?autoReconnect=true"`

Configure the Server Domain

To configure the server domain, use the following prompt that appears on the screen:

- Please enter the server domain: []

Enter the domain name of the server.



- The server domain will be the part of the default generated UDDI key. For example, `uddi:serverDomain:UniqueValue`
- You cannot modify the server domain name after it has been configured and TIBCO ActiveMatrix Runtime UDDI Server has been deployed. This is true even if you reconfigure it.

Configure the Server Root User and Password

To configure the root username and password, use the following prompts that appear on the screen:

- Please specify the login name for the root user: [admin]
Enter the default administrator's login name.
- Please specify the password for the root user : [admin]
Enter the default administrator's password.

Configure the Server Host and Port

To configure the host and port number, use the following prompt that appears on the screen:

- Please enter the server host and the port number:
[localhost:8080]
Enter the host name where your web container runs and the port number configured in the web container to accept the HTTP request. The default host name and port number is localhost:8080.



You cannot modify the host name and port number after they have been configured and TIBCO ActiveMatrix Runtime UDDI Server has been deployed. This is true even if you reconfigure them.

Configure SMTP for Subscription Email Notification

To configure email notification, use the following prompts that appear on the screen:

- Please specify the SMTP hostname (optional):
Enter the host name for the SMTP server.
- Please specify the SMTP port: [25]
Enter the port number for the SMTP server. The default port number is 25.
- Please specify the SMTP default sender's email: [uddiadmin]
Enter the email address from which the subscription notification will be sent.
- Is the SMTP server authentication enabled? (true, [false])
This option allows you to require authentication for the SMTP server. The default is false.

If you choose `true`, the following options will appear on the screen:

- Please specify the SMTP account name (required):

Enter your email account in the SMTP server.

- Please specify the SMTP password (required):

Enter the password to access the SMTP server.

Configure the Folder for Server Log File

While running TIBCO ActiveMatrix Runtime UDDI Server, two log files are created in the log output folder. One log file records how TIBCO ActiveMatrix Runtime UDDI Server runs, and the other records how the client accesses TIBCO ActiveMatrix Runtime UDDI Server.

To configure log settings, use the following prompt that appears on the screen:

- Please specify a directory where the server log file(s) will be stored: (optional, the default directory is `user.home`)

Enter the absolute path for the log output folder.



If you do not specify the log output folder here, the two log files are created in the default log output folder.

- On Windows, `user.home` refers to `%USERPROFILE%`
- On Unix, `user.home` refers to `$HOME`

You must have the write permission for the log output folder.

Configure Customized JAAS Module

To configure the JAAS module, use the following prompt that appears on the screen:

- Would you like to customize the JAAS Login Module?
 yes: You will be asked for additional question.
 no: No further action is required.

Whether to customize JAAS (Java Authentication and Authorization Service).

- If you enter **yes**, the following prompts appear on the screen:

Please enter the customized JAAS Login Module configuration file:

Enter the path of the customized JAAS Login Module configuration file.

For example: /home/user1/my_jaas.properties

Please enter customized JAAS Login Module implementation file

Enter the path of the customized JAAS Login Module implementation file.

For example: /home/user1/login_module.jar

- If you enter **no**, the default JAAS Login Module is used.

For detailed information about the customized JAAS Login Module, refer to [Configuring the Customized JAAS Login Module for LDAP Users on page 27](#).

Configure the Product Name and Logo for UI

To configure the product name and the logo for Administration Console and UDDI Service Console, use the following prompts that appear on the screen:

Would you like to replace the names of Administration Console and Service Console?

yes: You will be asked for additional question.

no: No further action is required.

Whether to replace the Administration Console or Service Console names.

- If you enter **yes**, the following prompts appear on the screen:
 - Please provide the properties file with the replacement names:
Enter the path of the properties file with the replacement names.
The sample properties file is located in the following directory:
`TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig/uibranding.properties`.
The value of the `sc.caption` property in the properties file will be the Service Console name.
 - Would you like to replace the logo of Administration Console?
yes: You will be asked for additional question.
no: No further action is required.
Whether to replace the Administration Console logo.
If you enter **yes**, the following prompt appears on the screen:
Please provide a .gif file to replace the Administration Console logo:
Enter the path of the .gif logo file.
For example: `/home/user1/admin_logo.gif`
If you enter **no**, the default logo file `uibranding-logo.gif` is used. It is available from the following directory:
`TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig`
 - Would you like to replace the logo of Service Console?
yes: You will be asked for additional question.
no: No further action is required.
Whether to replace the Service Console logo.
If you enter **yes**, the following prompt appears on the screen:
Please provide a .gif file to replace the Service Console logo:
Enter the path of the .gif logo file.
For example: `/home/user1/service_logo.gif`
If you enter **no**, the default logo file `sc-uibranding-logo.gif` is used. It is available from the following directory:
`TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig`
- If you enter **no**, the default names of Administration Console and Service Console are used.

Configuring the UDDI Server in the Silent Mode

After installing TIBCO ActiveMatrix Runtime UDDI Server, the configuration commands must be run before deployment. See *TIBCO ActiveMatrix Runtime UDDI Server Installation* for information about installing the TIBCO ActiveMatrix Runtime UDDI Server.

1. Open a command prompt.
2. Run one of the following commands and use the silent mode to configure the UDDI server.
 - Run **srvconfig** under the *TIBCO_HOME/RuntimeUDDIServer/3.1/bin* directory.
 - Run **ant -f srvconfig.xml** under the *TIBCO_HOME/RuntimeUDDIServer/3.1/scripts/server* directory.

To use the silent mode, provide a `build.properties` file in the *TIBCO_HOME/RuntimeUDDIServer/3.1/template* directory.

The properties in the file must include:

- `hbm2ddl.auto=XXX`

This allows you to decide whether to create database schema automatically. The options are *update* or *none*.

- `hibernate.dialect=XXX`

This allows you to choose the hibernate dialect for database.

The options are as follows:

- `org.hibernate.dialect.SQLServerDialect`
- `org.hibernate.dialect.MySQLDialect`
- `org.hibernate.dialect.OracleDialect`
- `org.hibernate.dialect.HSQLDialect`
- `org.hibernate.dialect.DB2Dialect`
- `org.hibernate.dialect.SybaseDialect`

- `is.default.schema.set=XXX`

If you choose **yes**, the following line must be added to the `build.properties` file.

`default.schema=XXX`

This allows you to choose the default schema for database.

The options are as follows:

- For HSQLDB, use `PUBLIC`.
- For Microsoft SQL Server and Sybase, use `dbo`.
- For Oracle, use the value of the database username.
- For MySQL, use the value of the database name.
- For DB2, use the value of the database `currentSchema`.



For Oracle Database 11g Release1 RAC and DB2, `is.default.schema.set` must be set to **yes**.

- `container.type=XXX`

This allows you to set the web container type for TIBCO ActiveMatrix Runtime UDDI Server.

The options are as follows:

- Tomcat
- JBoss
- WebSphere

- `serverDomain=XXX`

This allows you to set the domain name.

- `serverHost=XXX`

This allows you to set the host name for the web container and the port number.

- `adminLogin=XXX`

This allows you to enter the default administrator's login name. If you do not set the value for the `adminLogin` property, `admin` is the default login name.

- `adminPassword=XXX`

This allows you to enter the default administrator's password. If you do not set the value for the `password` property, `admin` is the default password. Both clear-text passwords and encrypted passwords are accepted.

- `smtpHost=XXX`

This allows you to set the host name for the SMTP server.

- `smtpPort=XXX`

This allows you to set the port number for the SMTP server.

- `smtpAuth=XXX`

This allows you to require authentication for the SMTP server. The options are *true* or *false*.

- `smtpAccount=XXX`

If you set `smtpAuth=true`, then you need to set up your email account in the SMTP server.

- `smtpPassword=XXX`

If you set `smtpAuth=true`, then you need to set up the password for your email account to access the SMTP server.

- `subscriptionNotifierFromAddress=XXX`

This allows you to set the email address from which the subscription notification will be sent.

- `log4j_folder=XXX`

This allows you to enter the absolute path for the log output folder.

If you do not specify the log output folder here, the two log files are created in the default log output folder.

— On Windows, `user.home` refers to `%USERPROFILE%`

— On Unix, `user.home` refers to `$HOME`



You must have the write permission for the log output folder.

- `customize_jaas_authen=XXX`

This allows you to customize JAAS (Java Authentication and Authorization Service). The options are *yes* or *no*.

If you choose **yes**, the following lines must be added to the `build.properties` file.

— `jaas_authen_mod_impl=XXX`

XXX is the location of the JAAS module implementation `.jar` file.

— `jaas_authen_mod_def =XXX`

XXX is the location of the JAAS module definition file.

- `customize_ui_msg=XXX`

This allows you to customize UI messages. The options are *yes* or *no*.

If you choose **yes**, the following line must be added to the `build.properties` file.

- `customize_ui_msg_def=XXX`

XXX is the location of the file where UI messages are saved.

- `customize_ui_logo=XXX`

This allows you to customize the Administration Console logo. The options are *yes* or *no*.

If you choose **yes**, the following line must be added to the `build.properties` file.

- `customize_ui_logo_def=XXX`

XXX is the location of the UI logo file. The file type must be the `.gif` file.

- `customize_sc_logo=XXX`

This allows you to customize the UDDI Service Console logo. The options are *yes* or *no*.

If you choose **yes**, the following line must be added to the `build.properties` file.

- `customize_sc_logo_def=XXX`

XXX is the location of the UDDI Service Console logo file. The file type must be the `.gif` file.

To use the silent mode, you also can run `srvconfig` command with the `-D` parameters:

```
srvconfig -Dhbm2ddl.auto=[update|none]
-Dhibernate.dialect=yourDialect
-Ddis.default.schema.set=[yes|no] {-Ddefault.schema=yourSchema}
-Dcontainer.type=[Tomcat|JBoss|WebSphere]
-DserverDomain=yourServerDomain -DserverHost=yourServerHost
-DadminLogin=yourAdminLoginName -DadminPassword=yourAdminPassword
-DsmtpHost=yourSMTPHost -DsmtpPort=yourSMTPPort
-DsmtpAccount=yourSMTPAccount -DsmtpPassword=yourSMTPPassword
-DsmtpAuth=[true|false]
-DsubscriptionNotifierFromAddress=yourEmailAddress
-Dlog4j_folder=yourLog4jDirectory
-Dcustomize_jaas_authen=[yes|no]
{-Djaas_authen_mod_impl=yourJARFileLocation
-Djaas_authen_mod_def=yourDefinitionLocation}
-Dcustomize_ui_msg=[yes|no]
-Dcustomize_ui_msg_def=yourUIMsgLocation
```



```
-Dcustomize_ui_logo=[yes|no]  
-Dcustomize_ui_logo_def=yourUILogLocation  
-Dcustomize_sc_logo=[yes|no]  
-Dcustomize_sc_logo_def=yourUILogLocation
```

The configurations in { } should be used while the previous configurations are set to **yes**.

Configuration Results

After the configuration, your configuration values will be written in the `build.properties.time_stamp` file.



`time_stamp` is the string that records the date and the time of the file generation.

For example, the file name can be `build.properties.2009-03-31_01-30-59`

The following sample configuration code is listed in the `build.properties.time_stamp` file:

```
hbm2ddl.auto=XXX
hibernate.dialect=XXX
is.default.schema.set=XXX
default.schema=XXX (This line appears while setting
is.default.schema.set=yes)
container.type=XXX
serverDomain=XXX
serverHost=XXX
adminLogin=XXX
adminPassword=XXX
smtpHost=XXX
smtpPort=XXX
smtpAccount=XXX
smtpPassword=XXX
smtpAuth=XXX
subscriptionNotifierFromAddress=XXX
log4j_folder=XXX
customize_jaas_authen=XXX
jaas_authen_mod_impl=XXX (This line appears while setting
customize_jaas_authen=yes)
jaas_authen_mode_def=XXX (This line appears while setting
customize_jaas_authen=yes)
customize_ui_msg=XXX
customize_ui_msg_def=XXX (This line appears while setting
customize_ui_msg=yes)
customize_ui_logo=XXX
```

```
customize_ui_logo_def=XXX (This line appears while setting  
customize_ui_logo=yes)
```

You can find the sample `build.properties` file in the following directory:
TIBCO_HOME/RuntimeUDDIServer/3.1/sample/srvconfig. If you want to
run **srvconfig** using the sample `build.properties` file, put the sample file
into the *TIBCO_HOME/RuntimeUDDIServer/3.1/template* directory.

When the configuration is successfully completed, both the `uddisc.war` file
and the `uddi.war` file are created in the following directory:
*TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/CONTAINER_TYPE/
DATABASE_TYPE*

Chapter 3 **Deployment and Upgrade**

This chapter provides information about how to deploy TIBCO ActiveMatrix Runtime UDDI Server to different web containers and how to upgrade TIBCO ActiveMatrix Runtime UDDI Server to version 3.1.0.

Topics

- [Deploying to Web Containers, page 51](#)
- [Upgrading TIBCO ActiveMatrix Runtime UDDI Server, page 54](#)

Deploying to Web Containers

To deploy TIBCO ActiveMatrix Runtime UDDI Server to different web containers, follow the instructions for each web container.

The `uddi.war` and `uddisc.war` files need to be deployed. They are available from the following directory:

```
TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/CONTAINER_TYPE
/DATABASE_TYPE
```



If you choose to automatically create the database tables during the `uddi.war` file configuration, TIBCO ActiveMatrix Runtime UDDI Server will automatically create the database tables after deployment.

If you do not choose to automatically create the database tables, you must use the file `uddi.sql` to manually create the tables before deploying.

Apache Tomcat

Drop the `uddi.war` and `uddisc.war` files to the correct location for your Apache Tomcat web container. The location is `TOMCAT_HOME/webapps`.



Before dropping the `uddi.war` and `uddisc.war` files to the `TOMCAT_HOME/webapps` directory, check for and remove all the temporary data in the following UDDI-related directories:

- `TOMCAT_HOME/webapps/uddi.war`
- `TOMCAT_HOME/webapps/uddi/*.*`
- `TOMCAT_HOME/work/catalina/localhost/uddi/*.*`

JBoss

Drop the `uddi.war` and `uddisc.war` files in the correct location for your JBoss web container. The location is `JBOSS_HOME/server/default/deploy`.

IBM WebSphere

To deploy TIBCO ActiveMatrix Runtime UDDI Server in the IBM WebSphere server, follow these steps:

1. Open a web browser and connect to the Integrated Solutions Console.

2. Deploy the `uddi.war` file.
 - a. Expand the Applications tree in the left pane and click **Application Types > WebSphere enterprise applications** to open the Enterprise Applications page on the right.
 - b. Click the **Install** button. In the next page, select the directory of the `uddi.war` file in the Full path field, and then click the **Next** button.
 - c. Configure other options in the next page, and then click the **Next** button.
 - d. In the Map modules to servers page, check the **TIBCO ActiveMatrix Runtime UDDI Server** checkbox, and then click the **Next** button. TIBCO ActiveMatrix Runtime UDDI Server is the product name that has been defined in the `uddi.war` file.
 - e. Select your data source in the Target Resource JNDI Name field and check the **TIBCO ActiveMatrix Runtime UDDI Server** checkbox in the same page. Click the **Next** button. For detailed information about creating a data source in WebSphere, refer to [step 5](#) in [page 21](#).
 - f. Check the **TIBCO ActiveMatrix Runtime UDDI Server** checkbox in the Map virtual hosts for Web modules pane, and then click the **Next** button.
 - g. Enter `/uddi` in the Context Root field, and then click the **Next** button to finish the operation.
3. Deploy the `uddisc.war` file:
 - a. Expand the Applications tree in the left pane and click **Application Types > WebSphere enterprise applications** to open the Enterprise Applications page on the right.
 - b. Click the **Install** button. In the next page, select the directory of the `uddisc.war` file in the Full path field, and then click the **Next** button.
 - c. Configure other options in the next page, and then click the **Next** button.
 - d. In the Map modules to servers page, check the **uddi** checkbox, and then click the **Next** button. `uddi` is the product name that has been defined in the `uddisc.war` file.
 - e. Check the **uddi** checkbox in the Map virtual hosts for the Web modules pane, and then click the **Next** button.
 - f. Enter `/uddisc` in the Context Root field, and then click the **Next** button to finish the operation.

4. Expand the Applications tree in the left pane again and click **Application Types > WebSphere enterprise applications** to open the Enterprise Applications page on the right.
 - a. Click the resource name to open the Configuration page.
 For example, the resource name of the `uddi.war` file that was used in [step a](#) should be `uddi_war` and the resource name of the `uddisc.war` file should be `uddisc_war`.
 - b. Click **Manage Modules** to open the next page.
 - c. Click **TIBCO ActiveMatrix Runtime UDDI Server** to open the next page and select **Classes loaded with local class loader first (parent last)** in the Class loader order drop-down list.
 - d. Click the **OK** button and then save the configuration.



After deploying the `uddi.war` and `uddisc.war` files to the IBM WebSphere server, if you want to access TIBCO ActiveMatrix Runtime UDDI Server Service Console, open your web browser and type the following URL in the Address bar
`http://host:port/uddisc/index.html`

Upgrading TIBCO ActiveMatrix Runtime UDDI Server

If you have installed TIBCO ActiveMatrix Runtime UDDI Server 3.0.0 on your computer, you may need to upgrade it to version 3.1.0.



Apache-ant-1.7.1 must be pre-installed and set into the system path if you want to use Ant-based commands to upgrade TIBCO ActiveMatrix Runtime UDDI Server.

If you want to upgrade TIBCO ActiveMatrix Runtime UDDI Server from 1.0.0 to 3.1.0, you need to upgrade it from 1.0.0 to 3.0.0 first.

- If you do not want to keep the configuration in the version 3.0.0, you can run one of the following commands to configure TIBCO ActiveMatrix Runtime UDDI Server version 3.1.0:

- run `ant -f srvconfig.xml` in the `TIBCO_HOME/RuntimeUDDIServer/3.1/scripts/server` directory,
or

- Run `srvconfig` in the `TIBCO_HOME/RuntimeUDDIServer/3.1/bin` directory to configure TIBCO ActiveMatrix Runtime UDDI Server.

For detailed information about how to configure TIBCO ActiveMatrix Runtime UDDI Server, refer to [Chapter 2, Configuring TIBCO ActiveMatrix Runtime UDDI Server, on page 29](#).

During the configuration, you need to answer the question below:

Would you like to automatically create database tables when deploying the .war file?

- Choose **Yes** to upgrade your existing 3.0.0 database automatically after the TIBCO ActiveMatrix Runtime UDDI Server is deployed.
- Choose **No** to upgrade your existing 3.0.0 database manually after the TIBCO ActiveMatrix Runtime UDDI Server is deployed. For detailed information about how to manually upgrade the database, refer to [Manually Upgrading the Database on page 56](#).

- If you want to keep the configuration of the version 3.0.0, run one of the following commands 3.0.0 using the silent mode first,
 - In the *TIBCO_HOME/RuntimeUDDIServer/3.1/bin* directory, run


```
srvconfig
-Dinput_war_folder=TIBCO_HOME/RuntimeUDDIServer/3.0/war/dist
-yourWebContainer/yourDatabase -Ddefault.schema=XXX
```

 or
 - In the *TIBCO_HOME/RuntimeUDDIServer/3.1/scripts/server* directory, run


```
ant -f srvconfig.xml
-Dinput_war_folder=TIBCO_HOME/RuntimeUDDIServer/3.0/war/dist
-yourWebContainer/yourDatabase -Ddefault.schema=XXX
```



The `input_war_folder` attribute indicates the location for 3.0.0 uddi/uddisc war files.

The `default.schema` attribute indicates the schema that is used for the database.

In version 3.0.0, if you have configured the product name and the product logo for Administration Console and Service Console using the `.gif` and `uibranding.properties` files, do not rename or move these files.

Then upgrade the databases used for version 3.0.0.

- If you created the database tables automatically during the version 3.0.0 uddi.war file configuration, the database will upgrade automatically after the version 3.1.0 uddi.war file is deployed.
- If you created the database tables manually during the version 3.0.0 uddi.war file configuration, you must manually upgrade the database. For detailed information about how to manually upgrade the database, refer to [Manually Upgrading the Database on page 56](#).

Upgrading Database

To upgrade the database used in TIBCO ActiveMatrix Runtime UDDI Server 3.1.0, choose one of the following methods:

- [Automatically Upgrading the Database](#)
- [Manually Upgrading the Database](#)



Before upgrading the database, make sure to back up your data.



Before upgrading Sybase used in TIBCO ActiveMatrix Runtime UDDI Server, you need to do the following steps first:

1. Open the Sybase Centrol window and connect to Sybase.
2. Right-click the database you want to upgrade in the database list to open the Database Properties pop-up dialog.
3. Check the **allow nulls by default** checkbox under the Options tab.

Automatically Upgrading the Database

In the [Configuring the UDDI Server in the Interactive Mode](#) section, you can choose to create database tables automatically.

While deploying TIBCO ActiveMatrix Runtime UDDI Server, the database tables will be automatically upgraded.

Manually Upgrading the Database

In the [Configuring the UDDI Server in the Interactive Mode](#) section, you can choose to create database tables manually.

After configuring the `uddi.war` file, you will find the `upgrade.sql` file in `TIBCO_HOME/RuntimeUDDIServer/3.1/war/dist/CONTAINER_TYPE/DATABASE_TYPE`. Execute the `upgrade.sql` file before deployment.



The content in the `upgrade.sql` file may be different according to a specified database type.

For example, the content in the `upgrade.sql` file for MySQL is shown below:

```
alter table addresslines add column keyname varchar(255);
update uddiversion set versionstr='001.001', changedate = now();
alter table addresslines add column keyvalue varchar(255);
update uddiversion set versionstr='001.002', changedate = now();
```

You must execute all the four statements above to upgrade your database.

Error Handling

If you have not successfully upgraded the database tables, you will get the following error message while running Ant-based tasks in the command line or accessing the Administration Console:

```
You are not allowed to log in. Please upgrade the database to
version XXX.XXX (For example, version 001.002).
```

Chapter 4 **Managing TIBCO ActiveMatrix Runtime UDDI Server**

This chapter explains how to manage TIBCO ActiveMatrix Runtime UDDI Server.

Topics

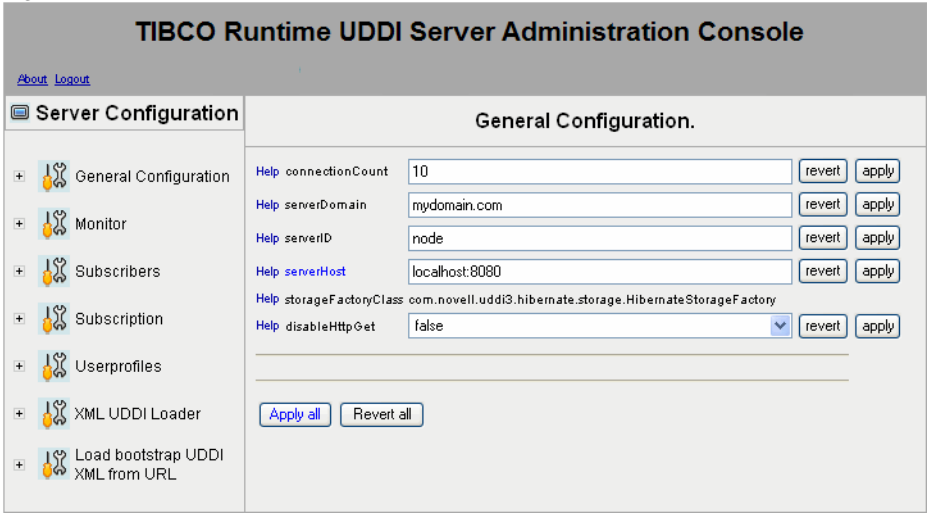
- [Administration Console, page 58](#)
- [User Management, page 67](#)

Administration Console

TIBCO ActiveMatrix Runtime UDDI Server provides a web-based graphic interface called Administration Console that administrator users can use to configure the server.

To start configuring the server, open your web browser and point it to `http://Host:Port/uddi`. Type in the administrator’s username and password, and then click the **Log in** button to access Administration Console. It is structured like a tree, as shown in [Figure 8](#).

Figure 8 Administration Console



General Configuration

The General Configuration node in the tree contains most of the properties relevant for the operation of TIBCO ActiveMatrix Runtime UDDI Server.



While setting the properties in the General Configuration section through Administration Console, you cannot permanently save the configuration changes. After TIBCO ActiveMatrix Runtime UDDI Server restarts, those changes will be lost.

To permanently save the configuration changes, you need to provide the customized configuration files or entries and make the changes using the `srvconfig` command.

General

Expand the tree and click **General** under the General Configuration node to open the General Configuration page in the right pane. Configure the following items on the page.

- **connectionCount**
The number of database connections in the C3P0 connection pool.
- **serverDomain**
The UDDI Server domain. This will be prepended to all generated keys, such as **uddi:domain.com**
- **serverID**
The UDDI Node ID.
- **serverHost**
The server host name and port. This is used for the server's own AccessPoint description in TIBCO ActiveMatrix Runtime UDDI Server.
- **storageFactoryClass**
Storage factory implementation.



Do not change the default implementation here.

- **disableHttpGet**
Disable HTTP_GET support.

If enabled, you can view the HTTP_GET endpoint through the browser by accessing `http://Host:Port/uddi/http_get`.

For detailed information about accessing the UDDI endpoint with a HTTP request, refer to *TIBCO ActiveMatrix Runtime UDDI Server User's Guide*.

Hibernate

Expand the tree and click **Hibernate** under the General Configuration node to open the Hibernate Configuration page in the right pane. You can view the configuration on the page.

- **SQLDialect**
For example: `org.hibernate.dialect.MySQLDialect`
- **cacheProvider**

For example: `org.hibernate.cache.OSCacheProvider`

- `connectionDatasource`

For example: `java:comp/env/jdbc/UddiDatabase`



You must not modify the configuration here.

Authorization

Expand the tree and click **Authorization** under the General Configuration node to open the Authorization Configuration page in the right pane. Configure the following items on the page.

- `inquiryAuthInfo`

To enable anonymous inquiry, select **Ignored** in the `inquiryAuthInfo` drop-down list. Click the **Apply** button next to the `inquiryAuthInfo` drop-down list, or click the **Apply all** button at the bottom to complete the operation. This option is the default option.

To disable anonymous inquiry, select **Required** in the `inquiryAuthInfo` drop-down list. Click the **Apply** button next to the `inquiryAuthInfo` drop-down list, or click the **Apply all** button at the bottom to complete the operation.

- `authInfoTimeout`

This indicates how long authorization tokens are valid in milliseconds. The value can be set to 0 or greater than 60000 (1min) and the default value is 1800000 (30min). If the value is 0, tokens do not expire. Tokens are not persistent, so they will be lost when the server restarts.

Journal

Expand the tree and click **Journal** under the General Configuration node to open the Journal Configuration page in the right pane. Configure the following items in the page.

- `journalRecordLimit`

The maximum number of modification records held by an object. Set the value to 0 to keep all records.

- `modificationJournalEnabled`

Set to **true** to enable the journal, **false** to disable it. The journal is necessary to support subscriptions.

Monitor

The Monitor node in the tree presents runtime statistics and logs for TIBCO ActiveMatrix Runtime UDDI Server. You can modify the log-levels at runtime.



While setting the properties in the Monitor section through Administration Console, you cannot permanently save the configuration changes. After TIBCO ActiveMatrix Runtime UDDI Server restarts, those changes will be lost.

To permanently save the configuration changes, provide the customized configuration files or entries (for example, the log folder or the customized message file) and make the changes by using the `srvconfig` command.

Monitor

Expand the tree and click **Monitor** under the Monitor node to open the Server Statistics page in the right pane. Configure the following items in the page.

- Number of Binding Templates: The number of BindingTemplate objects in the storage.
- Number of tModels: The number of tModel objects in the storage.
- Number of Business Services: The number of BusinessService objects in the storage.
- Number of Business Entities: The number of BusinessEntity objects in the storage.
- Start time: The server startup time or time of the last clear.
- Performance statistics: The performance statistics, such as the invocation amount of APIs.
- Name: The operation name.
- Invocation count: The number of times the operation has been called.
- Avg. duration: The average time per call in milliseconds.

Journal Log

Expand the tree and click **Journal Log** under the Monitor node to open the Journal Log page in the right pane. Configure the following item in the page.

- Timestamp

The current time that is recorded by your computer. The journal log begins to record events at this time.

Runtime Log File

Expand the tree and click **Runtime Log File** under the Monitor node to open the Runtime Log File page in the right pane. Configure the following items on the page.

- **Log Buffer Size:** Set the buffer size for the log file. .
- **Start Line:** The start line of the log file.

Log Levels

Expand the tree and click **Log Levels** under the Monitor node to open the Log Levels page in the right pane. A number of different loggers are used.

There are two types of Log Levels recorded in TIBCO ActiveMatrix Runtime UDDI Server.

Type 1

This log level type records the behavior of clients who have access to TIBCO ActiveMatrix Runtime UDDI Server. The log information will be written in the `uddi-access.log` file.

- **AccessLevel:** Logs the INFO level of each SOAP access.



The default size of the `uddi-access.log` file is 1M.

Type 2

This log level type records the behavior of TIBCO ActiveMatrix Runtime UDDI Server. The log information will be written in the `uddi.log` file.

- **BindingLevel:** Logs the information of the INFO level for the SOAP entry classes.
- **StorageLevel:** Logs the information of the INFO level for storage access.
- **RepositoryLevel:** Logs the information of the INFO level for generic data access.
- **UtilityLevel:** Logs the information of the INFO level for generic logging.



Log levels can be changed during runtime.

These changes will be lost after restarting the web container.

The default size of the `uddi.log` file is 1M.

Subscribers

The Subscribers node in the tree lists the UDDI servers which presently subscribe to the server.

Subscribers

Expand the tree and click **Subscribers** under the Subscribers node to open the Subscribers Configuration page in the right pane. Configure the following items. Refer to *UDDI Spec V3.0* for detailed information.

- **Items**
List subscriptions that the current subscriber has subscribed to.
- **subscriptionKey**
The allocated subscription key.
- **bindingKey**
The subscription's bindingKey.
- **notificationInterval**
`notificationInterval` is an attribute used in Subscription API. Its data type is `duration`.
- **maxEntities**
`maxEntities` is an attribute used in Subscription API. Its data type is `integer`.
- **expiresAfter**
`expiresAfter` is an attribute used in Subscription API. Its data type is `dateTime`.
- **brief**
`brief` is an attribute used in Subscription API. Its data type is `boolean`.

Subscription

The Subscription node in the tree allows you to configure which other UDDI servers this server should subscribe to using UDDI v3 subscription. You can also inspect the subscription log.

For more information about using the subscription function in TIBCO ActiveMatrix Runtime UDDI Server, refer to Polling Subscription API as described in *TIBCO ActiveMatrix Runtime UDDI Server User's Guide*.

Subscription

Expand the tree and click **Subscription** under the Subscription node to open the Subscription Configuration page in the right pane. Configure the following items. Refer to *UDDI Spec V3.0* for detailed information.

- **period**
How often the master is polled for changes (in seconds).
- **Items**
List subscriptions that the current node subscribes from other nodes.
- **name**
The name of the subscription. Only used for displaying the subscription.
- **username**
The username used to log in to the master server.
- **password**
The password used to log in to the master server.
- **subscriptionKey**
The subscription key for the newly created subscription in the master server.
- **inquiryUrl**
The URL for the master server's inquiry interface.
- **subscriptionUrl**
The URL for the master server's subscription interface.
- **securityUrl**
The URL for the master server's security interface.
- **disabled**
Set to true to disable the subscription.

Subscription Log

Expand the tree and click **Subscription Log** under the Subscription node to open the Subscription Replication Log page in the right pane. Configure the following items.

- **Log Buffer Size**: The buffer size for the log.
- **Start Line**: The start line of the log file.

Userprofiles

Userprofiles lets you manage and create user profiles for TIBCO ActiveMatrix Runtime UDDI Server, such as login, password, and so on.

Userprofiles

Expand the tree and click **Userprofiles** under the Userprofiles node to open the Userprofiles Configuration page in the right pane. Configure the following items. Refer to *UDDI Spec V3.0* for detailed information.

- Items
The User list. Click the **Create new** button to add a user.
- fullName
The full name of the item, such as **Server Admin**.
- description
The description of the item, such as **Server administrator**.
- title
The title of the item, such as **Manager**.
- login
The login name. You will use this name to log in to Administration Console.
- password
The password to log in to Administration Console.
- role
The user's role. Select a role in the role drop-down list. This role will be assigned to the selected user in the Items list, such as **administrators**.

There are four predefined roles for using TIBCO ActiveMatrix Runtime UDDI Server. For detailed explanation about these four roles, refer to [User Roles on page 67](#).

XML UDDI Loader

XML UDDI Loader presents a raw interface to the UDDI server. You can send UDDI SOAP bodies directly to the server. This feature should be used with caution because it bypasses validity-checks and could cause inconsistencies.

XML UDDI Loader

Expand the tree and click **XML UDDI Loader** under the XML UDDI Loader node to open the XML UDDI Loader page in the right pane.

- Enter UDDI SOAP Body
Enter the UDDI SOAP body.

Load Bootstrap UDDI XML from a URL

This function can be used to initialize the entities such as tModel.

XML UDDI Bootstrap Loader

Expand the tree and click **XML UDDI Bootstrap Loader** under the Load Bootstrap UDDI XML from URL node to open the Load UDDI XML from URL page in the right pane.

Type in the URL that points to the bootstrap XML path on the host server or http address. For example, `file:///c:/path_to_xml.xml` or `http://Host:Port/boot.xml`

User Management

User Management enables you to manage users while running TIBCO ActiveMatrix Runtime UDDI Server.

User Roles

There are four roles predefined in TIBCO ActiveMatrix Runtime UDDI Server. They are readonly, subscribers, publishers, and administrators.

- **readonly**: has the inquiry permission which means you can invoke the inquiry API that the UDDI 3.0.2 spec defined.
- **subscribers**: has the inquiry and subscription permissions. This role also can invoke the subscription API.
- **publishers**: has the inquiry and publication permissions. This role also can invoke the publication API.
- **administrators**: has all permissions that the above roles have and also includes the permission to log in to Administration Console.



If you have the *subscribers* role and need to publish subscriptions with the asynchronous notification, you also need to have the *publishers* role.

If you have the *publishers* role and need to perform subscribing operations, you also need to have the *subscribers* role.

Through Administration Console

In the Administration Console, you can add users to TIBCO ActiveMatrix Runtime UDDI Server and then assign a role to the user.

1. Log in to Administration Console.
2. Expand the tree and click **Userprofiles** under the Userprofiles node to open the Userprofiles Configuration page in the right pane.
3. Click the **Create new** button to add a user in the Item list.
4. Type the required information in the corresponding fields. The fullName, login, and password are required.
5. Select a role in the role drop-down list.

Click the **Apply all** button to complete the operation.

Through Command Line

It is simple to import user profiles and delete users from the command line window.

save_user

You can create a file to save the user profile information before running the Ant-based command `save_user` from the command line window.



Login name, password, and role names are required for each user profile.

Run: `uddiant save_user`

The following prompt appears in the command line window.

Enter the data from the data file? ([y], n)

Input **y** to provide data from the data file, otherwise input **n**.

If you input **y**, the following prompt appears in the command line window.

- Enter the data file..(required)

Enter the full path of the valid data file.

If you do not want to provide data from the data file, the following prompts appear in the command line window.

- Enter the User's Login Name (required)

Enter the login name of the user.

- Enter the User's Password (required)

Enter the password of the user.

- Enter the User's Role Names (required, separated by commas)

Enter the role names of the user, such as "readonly, publishers, subscribers".

- Enter the User's Full Name (Optional)

Enter the full name of the user.

- Enter the User's Title (Optional)

Enter the title of the user.

- Enter the User's Description (Optional)

Enter the description of the user.

The following is the sample data file.

```
<UserProfileList>
  <User login="user1"
    password="#!L69SJy6w6n3Z8AHeN7hMVrD6yQI1lcc+TEuQPEf7iBI="
    fullName="User 1" description="User1's description"
    title="manager" roleNames="administrators" />
  <User login="user2" password="11" fullName="User 2"
    description="User2's description" title="admin"
    roleNames="publishers,subscribers" />
</UserProfileList>
```



The password in the data file can also use the encrypted value. For information about encrypting a password, refer to [Encrypting a Password for the UDDI Server on page 23](#). Once the password is encrypted, the encrypted value can be copied to the data file.

To avoid user interaction, enter the following parameters as the command line arguments.

```
uddiant save_user -Dlogin=yourLoginName -DloginPassword=yourPassword
-DroleNames=readonly,publishers,XXX -DfullName=yourFullName
-Dtitle=yourTitle -Ddescription=yourDescription -Ddatafromfile=[y|n]
```

delete_user

You can delete users by running the Ant-based command `delete_user` from the command line window.

```
Run:uddiant delete_user
```

The following prompt appears in the command line window.

```
Enter the User's Login Name (required)
```

Enter the login name of the user you want to delete.

To avoid user interaction, enter the following parameters as the command line arguments.

```
uddiant delete_user -Dlogin=yourLoginName
```


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