



BEA WebLogic Server™

WebLogic Tuxedo Connector Quick Start Guide

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WebLogic Tuxedo Connector Quick Start Guide

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Contents

1. WebLogic Tuxedo Connector Quick Start Guide

Configuring the WebLogic Tuxedo Connector	1-1
Set the TraceLevel.....	1-2
Build the Simpapp Example.....	1-3
Create a WTCServer MBean.....	1-3
Create a Local Tuxedo Domain	1-4
Create a Remote Tuxedo Domain	1-4
Create Exported Services	1-5
Create Imported Services	1-5
Deploy the WTCServer MBean	1-6
Register TDOM1 as a WebLogic Server User.....	1-6
Configuring Tuxedo	1-7
Run the Example	1-8
WebLogic Server to Tuxedo Interoperability	1-9
Tuxedo to WebLogic Server Interoperability	1-9



1 WebLogic Tuxedo Connector Quick Start Guide

Note: For more detailed information on how to configure the WebLogic Tuxedo Connector for this WebLogic Server Release, see the [WebLogic Tuxedo Connector Programmer's Guide](#) at {docroot}/wtc_admin/index.html.

The following sections describe how to configure WebLogic Tuxedo Connector to allow WebLogic Server to interoperate with Tuxedo Releases 6.5 and higher:

- [Configuring the WebLogic Tuxedo Connector](#)
- [Configuring Tuxedo](#)
- [Run the Example](#)

Configuring the WebLogic Tuxedo Connector

Note: This section summarizes how to configure the WebLogic Tuxedo Connector on a Windows platform. UNIX users can adapt the instructions by making appropriate substitutions such as replacing the “\” with “/” and “.cmd” with “.sh”.

This example extends the Tuxedo `simpapp` application to run over TDomains. This allows clients of the `TOUPPER` service to run on either Tuxedo or the WebLogic Server `examplesServer`. The example provides the following services:

- `TOUPPER`: A Tuxedo service that converts a string to upper case. A WebLogic Server client invokes the `TOUPPER` EJB and connects to the Tuxedo `TOUPPER` service.
- `ToLower`: A service implemented by an EJB in WebLogic Server. The client for the `ToLower` service runs on Tuxedo.

The following sections describe how to configure WebLogic Tuxedo Connector using the Administration Console:

- [Set the TraceLevel](#)
- [Build the Simpapp Example](#)
- [Create a WTCServer MBean](#)
- [Create a Local Tuxedo Domain](#)
- [Create a Remote Tuxedo Domain](#)
- [Create Exported Services](#)
- [Create Imported Services](#)
- [Deploy the WTCServer MBean](#)
- [Register TDOM1 as a WebLogic Server User](#)

Set the TraceLevel

Note: For more information on `TraceLevel`, see [Monitoring the WebLogic Tuxedo Connector](#) located at http://e-docs.bea.com/wls/docs70/wtc_admin/Install.html.

`TraceLevel` is a WebLogic Server Property. Update the `JAVA_OPTIONS` variable in the `SAMPLES_HOME\server\config\examples\startExamplesServer.cmd` file.

Example:

```
JAVA_OPTIONS=-Dweblogic.wtc.TraceLevel=100000
```

where 100,000 specifies the maximum level of WebLogic Tuxedo Connector tracing.

Build the Simpapp Example

Use the following steps to build the `simpapp` example:

1. Boot your WebLogic `examplesServer`.
2. Open a new shell window and change directories to your `SAMPLES_HOME\server\src\examples\wtc\atmi\simpapp` directory.
3. Set environment variables using the `SAMPLES_HOME\server\config\examples\setExamplesEnv.cmd` file.
4. Build the `wtc_toupper.jar` file using ant. Enter the following command: `ant`
5. Change directories to the `SAMPLES_HOME\server\src\examples\wtc\atmi\simpserver` directory.
6. Build the `wtc_tolower.jar` file. Enter the following command: `ant`
7. Click Deployment→EJB and check to see that the `wtc_tolower.jar` and `wtc_toupper.jar` are deployed.

Create a WTCServer MBean

Use the following steps to create and configure a WTCServer MBean using the WebLogic Server Console:

1. Click the Services Node.
2. Right-click the WebLogic Tuxedo Connector Node.
3. Select Configure a New WTCServer.
4. Enter the Name of your WTCServer in the Name field. Example: `mySimpapp`
5. Click Create.

Create a Local Tuxedo Domain

Use the following steps to configure a local Tuxedo domain:

1. Right-click Local WLS Domains.
2. Select Configure a New WTCLocalTuxDom.
3. Enter the following values for the following fields on the General tab:
Access Point: TDOM2
AccessPoint ID: TDOM2
Network Address: *<the network address and port of your WebLogic Server>*
Example: //123.123.123.123:5678
4. Click Create.
5. If you are connecting to a Tuxedo 6.5 domain, do the following:
 - a. Click the Connections tab.
 - b. Set the Interoperate field to Yes.
 - c. Click Apply.

Create a Remote Tuxedo Domain

Use the following steps to configure a remote Tuxedo domain:

1. Right-click Remote Tuxedo Domains.
2. Select Configure a New WTCRemoteTuxDom.
3. Enter the following values for the following fields on the General tab:
Access Point: TDOM1
AccessPoint ID: TDOM1
Local Access Point: TDOM2
Listen Address: *<the network address and port of Tuxedo>* Example:
//123.123.123.123:1234

4. Click Create.

Create Exported Services

Use the following steps to configure an exported service:

1. Right-click Exported Services.
2. Select Configure a New WTCEXport.
3. Enter the following values for the following fields on the General tab:
Resource Name: `TOLOWER`
Local Access Point: `TDOM2`
EJB Name: `tuxedo.services.TOLOWERHome`
4. Click Create.

Create Imported Services

Use the following steps to configure an imported service:

1. Right-click Imported Services.
2. Select Configure a New WTCImport.
3. Enter the following values for the following fields on the General tab:
Resource Name: `TOUPPER`
Local Access Point: `TDOM2`
Remote Access Point List: `TDOM1`
4. Click Create.

Deploy the WTCServer MBean

Use the following steps to deploy the WTCServer Mbean to examplesServer:

1. Click `mySimpapp`.
2. Click Targets.
3. Select `examplesServer`.
4. Click the right-arrow button.
5. Click Apply

Register TDOM1 as a WebLogic Server User

Use the following steps to register TDOM1 as a WebLogic Server user:

1. Click on the Security node.
2. Click on Realms.
3. Select your default security Realm.
4. Click on Users.
5. Click the Configure a new User text link.
6. Click DefaultAuthenticator
7. In the General tab, do the following:
 - a. Add TDOM1 in the Name field.
 - b. Enter and validate a password.
 - c. Click apply.

Configuring Tuxedo

Use the following steps to configure your Tuxedo domain:

1. Your PATH environment variable needs to include the path of your C compiler. Use set PATH to check the status and add the path if necessary.
2. Copy the `simpapp` example from your Tuxedo installation and create a working Tuxedo `simpapp` directory.
3. Change directories to your working Tuxedo `simpapp` directory.
4. Set environment variables using the `setEnv.cmd` located at TUXDIR. Update the following parameters:

TUXDIR - base directory of the TUXEDO Software
APPDIR - base directory of the sample program

5. Build the clients:

```
buildclient -o simpcl -f simpcl.c  
buildserver -o simpserv -f simpserv.c -s TOUPPER
```

6. Copy the `ubbdomain` and `domlconfig` files from the `SAMPLES_HOME\src\examples\wtc\atmi\simpapp` directory to your Tuxedo `simpapp` directory.
7. Copy the `tolower.c` file from the `SAMPLES_HOME\src\examples\wtc\atmi\simpserv` directory to your Tuxedo `simpapp` directory.
8. Modify the `ubbdomain` for your Tuxedo environment. This includes setting the pathnames for `APPDIR`, `TUXCONFIG`, and `TUXDIR` and setting the machine name. Replace all `<braced>` items with information for your environment.

Example:

```
APPDIR=" \home\me\simpapp"  
TUXCONFIG=" \home\me\simpapp\tuxconfig"  
TUXDIR=" \usr\tuxedo"
```

9. Load the `ubbdomain` file: `tmloadcf -y ubbdomain`

10. Modify the `dom1config` for your Tuxedo environment. This includes creating log devices and updating the network addresses.

Example:

```
DMTLOGDEV="d:\my_apps\tlog"  
AUDITLOG="d:\my_apps\aud"  
DMTLOGNAME="DMTLOG_TDOM1"  
TDOM1 NWADDR="//TuxedoMachine:1234"  
TDOM2 NWADDR="//WTCMachine:5678"
```

11. Load the `dom1config` file.

```
set BDMCONFIG=d:\mydomain\simpapp\bdmconfig  
dmloadcf -y dom1config
```

12. Build the `tolower` client

```
buildclient -v -f tolower.c -o tolower
```

13. Boot the Tuxedo domain

```
tmboot -y
```

14. Verify all processes have started using the `tmadmin psc` command. The following domain processes should have booted:

- `DMADM`, `GWADM`, and `GWTDOMAIN`
- The `TOUPPER` service offered by the `simpapp` server
- The `TOLOWER` service is offered by the `GWTDOMAIN` server

Run the Example

Run each client to demonstrate interoperability between Tuxedo and WebLogic Server.

WebLogic Server to Tuxedo Interoperability

Start a WebLogic Server client from the `SAMPLES_HOME\server\src\examples\wtc\atmi\simpapp` directory to invoke the `TOUPPER` EJB and connect to the Tuxedo `TOUPPER` service. Use the following command:

```
run.cmd allcaps
```

The Tuxedo service replies to your WebLogic Server application with:

```
Returned string is: ALLCAPS
```

Tuxedo to WebLogic Server Interoperability

Run the `tolower` client from the Tuxedo `simpapp` directory to invoke the `Tolower` EJB and return the results to the client. Use the following command:

```
tolower ALLSMALL
```

The WebLogic Server service replies to your Tuxedo client with:

```
Returned string is: allsmall
```

