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# **Banner Translation Service** Installation and Administration Guide

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# Banner Translation Service 8.1.4 Installation and Administration Guide

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# 1 Introduction

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Banner® data is often constrained by lists of valid values. This encoded data is configured by your institution and stored in support tables. As a result, the data is not always appropriate or usable by external systems. Institution-specific data values in Banner must be converted to standard values that external systems can recognize and use. The Banner Translation Service provides this translation capability for Banner web services.

To improve performance, you should use shared Banner codes and industry standard codes (for example, ISO codes) when possible.

## Interfaces

---



The Banner Translation Service is deployed as a separate J2EE application within the application server. The Banner Translation Service provides deployment flexibility with several interfaces at varying levels of granularity:

- Used directly from an XSL transform to perform in-line translations
- Deployed to accept an entire XML document that has particular elements and attributes identified (tokenized) for translation
- Accessed through its EJB interface
- Accessed through its web services SOAP interface, described through WSDL
- Optionally deployed into the Oracle BPEL Process Manager and accessed through a Web Services Invocation Framework (WSIF) binding
- Optionally deployed within a Java application and accessed through local Java method invocation

The Banner Translation Service provides a web-based administration interface to manipulate fields and corresponding application values. This interface also includes an XML import and export capability.

## Database

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The Banner Translation Service uses a relational database to store field value translations. You can use the same Oracle database that is used for Banner, or you can use any other Oracle database. In either case, the schema is created when the Banner Translation Service is installed. SQL scripts are delivered with those Banner web services that require translations. These scripts extract values from Banner validation tables and create XML files that can be imported into the Banner Translation Service.



# 2 Installation

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The Banner® Translation Service is delivered with Banner Web Services. This chapter gives instructions for installing the Banner Translation Service.

## Requirements

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The Banner Translation Service has the following requirements.

- The Banner Translation Service is certified on Oracle WebLogic Server 11g with Java 1.6 and 1.7.
- The Oracle Database 11g is required.

## Recommended configuration

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The Banner Translation Service must be installed in an Oracle WebLogic Basic Domain. It must not be installed using any other Oracle WebLogic template, especially the Oracle WebLogic Classic Domain that supports Oracle Forms and Reports.

The recommended configuration is to establish a separate physical or virtual domain for the Banner Translation Service and other middle-tier components. This domain would run a separate installation of Oracle WebLogic Server, configured using the Basic Domain template (not the Classic Domain template) that is provided by Oracle.

The Oracle WebLogic Server domain should consist of the default Admin Server and at least one Managed Server for the deployment of the Banner Translation Service and the Banner Web Services Adapters. The adapters must be installed on the same Managed Server as the Banner Translation Service.

If a domain based on the Basic Domain template already exists for middle-tier applications, the Banner Translation Service can be installed with the adapters in a separate Managed Server in that domain.

# Installation steps

---

The Banner Translation Service is packaged as a J2EE compatible enterprise archive file (`TranslationService_v8.1.4.ear`). Use the following steps to install the Banner Translation Service on Oracle WebLogic Server 11g:

- [Step 1, “Extract the zip file”](#)
- [Step 2, “Configure the database user”](#)
- [Step 3, “Configure the database tables”](#)
- [Step 4, “Configure logging \(optional\)”](#)
- [Step 5, “Create a Managed Server”](#)
- [Step 6, “Create a JAAS configuration file”](#)
- [Step 7, “Configure the Managed Server to use the authentication provider”](#)
- [Step 8, “Restart the Managed Server”](#)
- [Step 9, “Define the data source”](#)
- [Step 10, “Install the Banner Translation Service”](#)
- [Step 11, “Configure the security group and user”](#)
- [Step 12, “Populate the Banner Translation Service”](#)

## Step 1 Extract the zip file

The Banner Translation Service components are delivered in the `translation_service` folder in `banner_web_services_8.1.4.zip`. Create a new directory (for example, `bws_install`) and extract the zip file to this directory.

The `translation_service` folder has two directories:

- The `ear` directory contains `TranslationService_v8.1.4.ear`.
- The `database` directory contains the scripts used to create the database schema that is required by the Banner Translation Service.

## Step 2 Configure the database user

Use the following steps to create or modify the database user (for example, `transsvc`) that is used for the Banner Translation Service. This user must have Resource and Connect privileges.

1. Run SQL\*Plus and connect to the database as a DBA account.

2. Execute `translation_service/database/create_user_oracle.sql`.

The location of this script depends on where you downloaded the Banner Translation Service.

3. When prompted, enter the name of the datafile for the schema with the complete path.

### Step 3 Configure the database tables

Use the following steps to load the Oracle .sql file that creates the Banner Translation Service tables and schema.

1. Navigate to the `translation_service/database` directory.

The location of this directory depends on where you downloaded the Banner Translation Service.

2. Open `db.properties`.
3. Enter the username and password for the database user (created in step 2), hostname, port, and sid at the required places in `db.properties`. The default values are as follows:

username	transsvc
password	transsvc

4. Save the file.
5. Load the database schema by running the following command in the database directory:

```
java -jar lib/ant-launcher.jar -f db.xml
```



#### Tip

You must manually enter the preceding command. Copying and pasting the command does not work. ■

Existing tables and views are first deleted during the load process. Warning messages are displayed because the deleted tables and views do not exist. These messages can be ignored because the tables and views are then created.

## Step 4 Configure logging (optional)

The Banner Translation Service uses Apache's log4j to log the activities performed by the application at runtime. The log file is located at the following location:

```
Oracle\Middleware\user_projects\domains\\log
```

where `<domain_name>` is the name of the domain where the Banner Translation Service will be installed. This location cannot be changed.

A property in the `log4j.properties` file determines the logging level. The default logging level is *INFO*, resulting in limited information (INFO, WARNING, ERROR, and FATAL level statements) being stored in log files. To provide detailed logging for initial operations, you should change the logging level to *DEBUG*. You should change the logging level for initial operations only.

Use the following steps to modify the logging level if you want more detailed logging.

1. Copy `TranslationService_v8.1.4.ear` to a temporary location. This location is referred to as `<EAR_HOME>`.
2. Navigate to `<EAR_HOME>` and execute the following command.

```
jar xvf TranslationService_v8.1.4.ear
```

3. Open `classes\log4j.properties`.
4. Edit the `log4j.logger.com.sct` property as follows:

Original value:	<i>INFO</i>
New value:	<i>DEBUG</i>

5. Save the change.
6. From `<EAR_HOME>` execute the following command to rebuild the `.ear` file.

```
jar cvf TranslationService_v8.1.4.ear *.war META-INF/*  
legal/* *.jar classes/* lib/*
```

The rebuilt `TranslationService_v8.1.4.ear` is used for installation.

## Step 5 Create a Managed Server

Create a new Managed Server for the Banner Translation Service and the Banner Web Service Adapters so that they can be independently managed. Refer to Oracle WebLogic Server Documentation Library for details.

## Step 6 Create a JAAS configuration file

An authentication provider must be configured in the Oracle WebLogic Server to allow for basic authentication against the Banner Translation Service administration console. The authentication provider is set using a JAAS configuration file. Use the following steps to create the configuration file.

1. Use a text editor to create `jaas.config` with the following content:

```
myrealm {  
    weblogic.security.auth.login.UsernamePasswordLoginModule  
    REQUIRED;  
};
```

2. Save `jaas.config` in the following location:

```
<WebLogic Home>/user_projects/domains/<your domain directory>/  
config/security
```

where `<WebLogic Home>` is the base directory for the Oracle WebLogic software packages and configuration files, and `<your domain directory>` is the domain where the components will be deployed.

## Step 7 Configure the Managed Server to use the authentication provider

The Oracle WebLogic Managed Server where the Banner Translation Service will be deployed must be configured to load `jaas.config` on startup. There are two ways to configure the Managed Server, depending on how you want to start the Managed Server. Use option 1 (page [11](#)) if the Managed Server will be started by using the Oracle WebLogic Server administration console. Use option 2 (page [14](#)) if the Managed Server will be started by running a script.

### *Option 1 - If you are using the administration console to start the Managed Server*

Use this option if the Managed Server will be started from the Oracle WebLogic Server administration console. The location of the JAAS configuration file is set as an argument on the **Server Start** tab of the specific Managed Server. The location of the JAAS configuration file applies only to that specific Managed Server.

Use the following steps to configure the Managed Server.

1. Connect to the Oracle WebLogic Server administration console for the domain where the Banner Translation Service will be deployed:

```
http://<host>:<port>/console
```

The Home Page is displayed.

- In the Change Center pane, click **Lock & Edit**.
- In the Domain Configurations section, click **Servers**.

The screenshot shows the Oracle WebLogic Server Change Center interface. On the left, the 'Change Center' pane has a 'View changes and restarts' section with 'Lock & Edit' and 'Release Configuration' buttons. Below it is the 'Domain Structure' tree, where 'Servers' is highlighted under the 'Environment' folder. The main 'Home Page' displays 'Domain Configurations' with 'Servers' selected, showing a list of services including Messaging, JDBC, and JTA.

The Summary of Servers page is displayed.

The screenshot shows the 'Summary of Servers' page in the Oracle WebLogic Server console. It features a table with the following data:

Name	Cluster	Machine	State	Health	Listen Port
AdminServer(admin)		MyMachine	RUNNING	OK	7001
ManagedServer1		MyMachine	RUNNING	OK	7003

- Click the name of the server where the Banner Translation Service will be deployed. The Settings page is displayed.

Settings for ManagedServer1

Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes

General Cluster Services Keystores SSL Federation Services Deployment Migration Tuning Overload Health Monitoring **Server Start**

Save

Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings that Node Manager will use to start this server on a remote machine.

**Java Home:**  The Java home directory (path on the machine running Node Manager) to use when starting this server. [More Info...](#)

**Java Vendor:**  The Java Vendor value to use when starting this server. For example, BEA, Sun, HP etc. [More Info...](#)

**BEA Home:**  The BEA home directory (path on the machine running Node Manager) to use when starting this server. [More Info...](#)

**Root Directory:**  The directory that this server uses as its root directory. This directory must be on the computer that hosts the Node Manager. If you do not specify a Root Directory value, the domain directory is used by default. [More Info...](#)

**Class Path:**  The classpath (path on the machine running Node Manager) to use when starting this server. [More Info...](#)

**Arguments:**  The arguments to use when starting this server. [More Info...](#)

```
-Djava.security.auth.login.config=/home/oracle/weblogic/Middleware/user_projects/domains/base_domain/config/security/jaas.config
```

**Security Policy File:**  The security policy file (directory and filename on the machine running Node Manager) to use when starting this server. [More Info...](#)

**User Name:**  The user name to use when booting this server. [More Info...](#)

**Password:**  The password of the username used to boot the server and perform server health monitoring. [More Info...](#)

**Confirm Password:**

Save

- Select the **Server Start** tab.
- In the **Arguments** field, enter the full path to `jaas.config`, including the file name:

```
-Djava.security.auth.login.config=<WebLogic Home>/  
user_projects/domains/<your domain directory>/config/security/  
jaas.config
```

where `<WebLogic Home>` is the base directory for all Oracle WebLogic software packages and configuration files, and `<your domain directory>` is the domain where the Banner Translation Service will be deployed.

7. Click **Save**.
8. In the Change Center pane, click **Activate Changes**.

### ***Option 2 - If you are using a script to start the Managed Server***

Use this option if the Managed Server will be started by running `startManagedWebLogic.sh` (or `.cmd`). A `JAVA_OPTIONS` statement must be added to `setDomainEnv.sh` (or `.cmd`). The location of the JAAS configuration file applies to the entire domain, including the Admin Server and all Managed Servers.

Use the following steps to update the script for Windows.

1. Open `setDomainEnv.cmd` located under `<WebLogic Home>/user_projects/domains/<your domain directory>/bin`.

2. Search for the last occurrence of the following text:

```
set JAVA_OPTIONS=%JAVA_OPTIONS%
```

3. Add the following in the line preceding the line identified in step 2.

```
set JAVA_OPTIONS=%JAVA_OPTIONS%  
-Djava.security.auth.login.config=  
<domain home>\config\security\jaas.config
```

Use the following steps to update the script for Linux/Unix.

1. Open `setDomainEnv.sh` located under `<WebLogic Home>/user_projects/domains/<your domain directory>/bin`.

2. Search for the last occurrence of the following text:

```
JAVA_OPTIONS="{JAVA_OPTIONS}"
```

3. Add the following in the line preceding the line identified in step 2.

```
JAVA_OPTIONS="{JAVA_OPTIONS}  
-Djava.security.auth.login.config=  
<domain home>/config/security/jaas.config"
```

#### **Note**

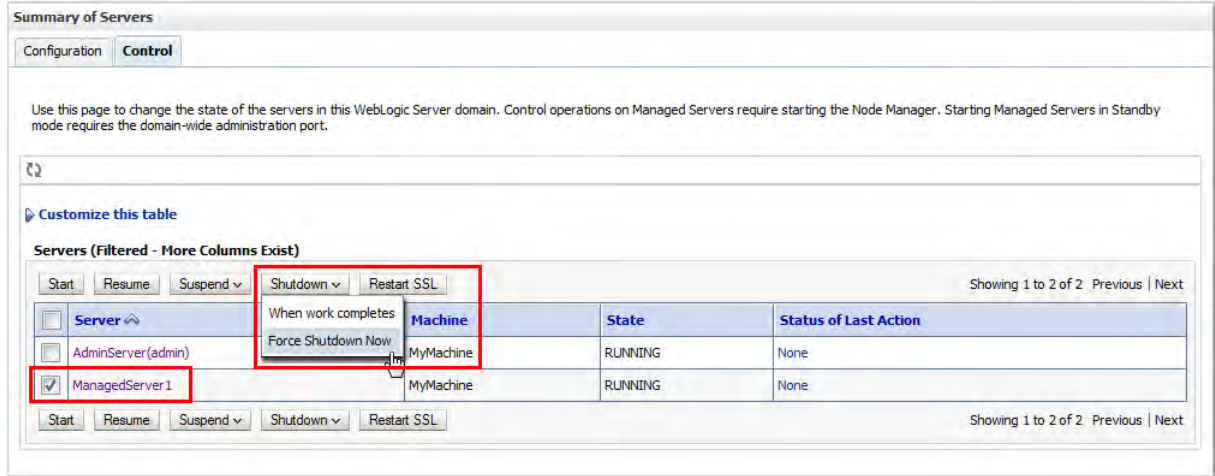
There is a space between the closing brace and the dash (that is, `{JAVA_OPTIONS}[space]-Djava`).

### **Step 8 Restart the Managed Server**

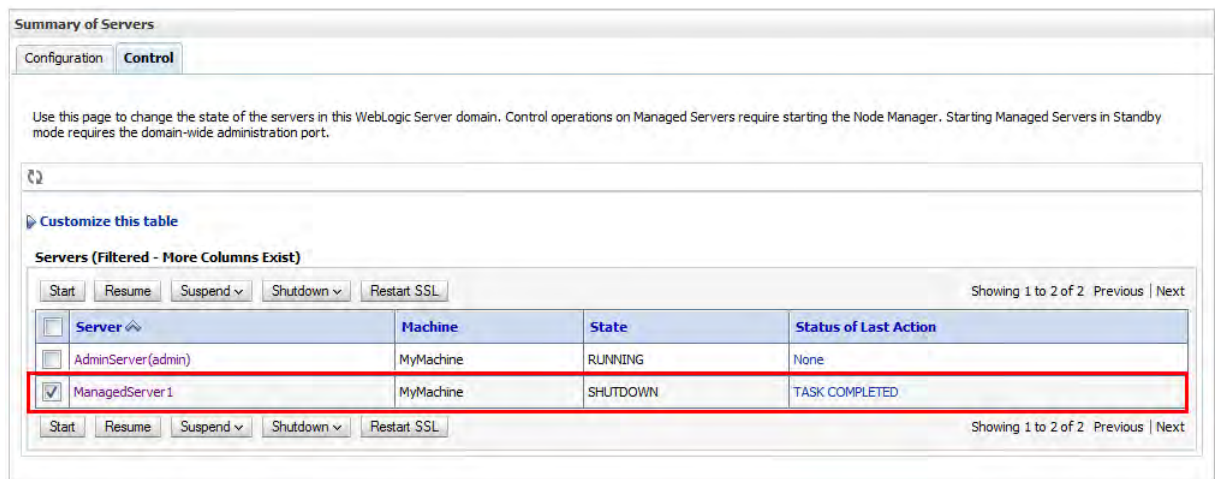
There are two ways to restart the Managed Server. Use option 1 (page [15](#)) if you are using the administration console to start the Managed Server. Use option 2 (page [16](#)) if you are using a script to start the Managed Server.

### Option 1 - If you are using the administration console to start the Managed Server

1. Make sure the Summary of Servers page is displayed.
2. Select the **Control** tab.



3. Select the Managed Server where the configuration changes were made.
4. Click **Shutdown > Force Shutdown Now**.
5. Confirm the selection.
6. Wait for the server to enter a *SHUTDOWN* state.



7. Select the same Managed Server.
8. Click **Start**.

9. Confirm the selection.
10. Wait for the server to enter a *RUNNING* state.

Summary of Servers

Configuration Control

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Customize this table

Servers (Filtered - More Columns Exist)

Start Resume Suspend Shutdown Restart SSL Showing 1 to 2 of 2 Previous Next

Server	Machine	State	Status of Last Action
AdminServer(admin)	MyMachine	RUNNING	None
ManagedServer1	MyMachine	RUNNING	TASK COMPLETED

Start Resume Suspend Shutdown Restart SSL Showing 1 to 2 of 2 Previous Next

### Option 2 - If you are using a script to start the Managed Server

Use the following steps to restart the server for Windows.

1. Navigate to the <WebLogic Home>/user\_projects/domains/<your domain directory>/bin directory.
2. Stop the server by running the following script:

```
stopManagedWebLogic.cmd <server name>
```

#### Note

There is a space between the command and <server name>; that is, stopManagedWeblogic.cmd[space]<server name>.

#### Example:

```
stopManagedWebLogic.cmd ManagedServer1
```

3. Start the server by running the following script:

```
startManagedWebLogic.cmd <server name>
```

Use the following steps to restart the server for Linux/Unix.

1. Navigate to the <WebLogic Home>/user\_projects/domains/<your domain directory>/bin directory.

2. Stop the server by running the following script:

```
./stopManagedWebLogic.sh <server name>
```

 **Note**

There is a space between the command and <server name>; that is, `./stopManagedWeblogic.sh[space]<server name>`. ■

**Example:**

```
./stopManagedWebLogic.sh ManagedServer1
```

3. Start the server by running the following script:

```
./startManagedWebLogic.sh <server name>
```

## Step 9 Define the data source

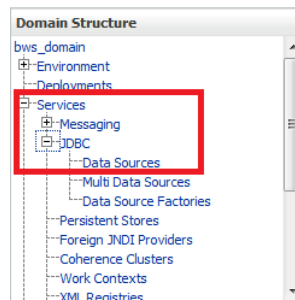
A data source provides the connection properties to the Banner database. By default, the Banner Translation Service needs a data source with lookup name `jdbc/transsvc`. Use the following steps to define the data source.

1. Connect to the Oracle WebLogic Server administration console for the domain where the Banner Translation Service will be deployed:

```
http://<host>:<port>/console
```

The Home page is displayed.

2. In the Change Center pane, click **Lock & Edit**.
3. In the Domain Structure pane, expand and click **Services > JDBC > Data Sources**.



The Summary of JDBC Data Sources page is displayed.

**Summary of JDBC Data Sources**

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

[Customize this table](#)

**Data Sources (Filtered - More Columns Exist)**

Click the **Lock & Edit** button in the Change Center to activate all the buttons on this page.

New Delete Previous | Next

<input type="checkbox"/>	Name ↕	JNDI Name	Targets
<input type="checkbox"/>	bnixmgr	jdbc/bnixmgr	AdminServer
<input type="checkbox"/>	Identmgr	jdbc/identmgr	AdminServer
<input type="checkbox"/>	inbadmin	jdbc/inbadmin	AdminServer
<input type="checkbox"/>	Integmgr_Banner	jdbc/integmgr_banner	AdminServer
<input type="checkbox"/>	streamsadmin	jdbc/streamsadmin	AdminServer

New Delete Previous | Next

4. Click **New**. The Create a New JDBC Data Source page is displayed.

**Create a New JDBC Data Source**

Back Next Finish Cancel

**JDBC Data Source Properties**

The following properties will be used to identify your new JDBC data source.  
\* Indicates required fields

What would you like to name your new JDBC data source?

\* Name: transsvc

What JNDI name would you like to assign to your new JDBC Data Source?

JNDI Name: jdbc/transsvc

What database type would you like to select?

Database Type: Oracle

Back Next Finish Cancel

5. Enter the following data source properties:

**Name** *transsvc*  
**JNDI Name** *jdbc/transsvc*  
**Database Type** *Oracle*

6. Click **Next**. The next page is displayed.

**Create a New JDBC Data Source**

Back Next Finish Cancel

**JDBC Data Source Properties**

The following properties will be used to identify your new JDBC data source.

**Database Type:** Oracle

What database driver would you like to use to create database connections? Note: \* indicates that the driver is explicitly supported by Oracle WebLogic Server.

**Database Driver:** \*Oracle's Driver (Thin) for Instance connections; Versions:9.0.1,9.2.0,10,11

Back Next Finish Cancel

7. Select the appropriate database driver that is used to create database connections:

- If your database is RAC-based, select *\*Oracle's Driver (Thin) for RAC Service-Instance connections; Versions:10,11*.
- Otherwise, select *\*Oracle's Driver (Thin) for Instance connections; Versions:9.0.1,9.2.0,10,11*.

8. Click **Next**. The next page is displayed.

If the Connection Properties page is displayed, go directly to step 9.

If the Transaction Options page is displayed, clear the **Supports Global Transactions** check box and click **Next**. Then go to step 9.

The screenshot shows a dialog box titled "Create a New JDBC Data Source" with a "Transaction Options" section. The dialog has "Back", "Next", "Finish", and "Cancel" buttons at the top and bottom. The "Transaction Options" section contains the following text: "You have selected non-XA JDBC driver to create database connection in your new data source." and "Does this data source support global transactions? If yes, please choose the transaction protocol for this data source." There are three radio button options: "Supports Global Transactions" (which is unchecked and highlighted with a red box), "Logging Last Resource" (which is selected), and "Emulate Two-Phase Commit" (which is unselected). Below these options, there are three paragraphs of explanatory text. The "One-Phase Commit" option is also unselected.

9. Enter the following properties on the Connection Properties page:

<b>Service Name</b>	Service name of the database to which you are connecting. <b>Note:</b> This field is displayed and is required if you selected *Oracle's Driver (Thin) for RAC Service-Instance connections; Versions:10,11 as the database driver.
<b>Database Name</b>	Name of the database to which you are connecting
<b>Host Name</b>	IP address or name of the database server
<b>Port</b>	Port on the database server that is used to connect to the database
<b>Database User Name</b>	<i>transsvc</i>
<b>Password</b>	Password for the <i>transsvc</i> user
<b>Confirm Password</b>	Confirmation of the password

The screenshot shows a window titled "Create a New JDBC Data Source". At the top, there are four buttons: "Back", "Next", "Finish", and "Cancel". Below this is a section titled "Connection Properties" with the instruction "Define Connection Properties." The form contains several questions and input fields:

- Question: "What is the name of the database you would like to connect to?"  
Field: "Database Name:" with the value "smpl".
- Question: "What is the name or IP address of the database server?"  
Field: "Host Name:" with the value "m088042".
- Question: "What is the port on the database server used to connect to the database?"  
Field: "Port:" with the value "1523".
- Question: "What database account user name do you want to use to create database connections?"  
Field: "Database User Name:" with the value "transsvc".
- Question: "What is the database account password to use to create database connections?"  
Field: "Password:" with a masked password (12 dots).
- Field: "Confirm Password:" with a masked password (12 dots).

At the bottom of the form, there are four buttons: "Back", "Next", "Finish", and "Cancel".

10. Click **Next**. The next page is displayed with the properties that you entered.

The screenshot shows the 'Create a New JDBC Data Source' wizard at the 'Test Database Connection' step. The window title is 'Create a New JDBC Data Source'. At the top, there are navigation buttons: 'Test Configuration', 'Back', 'Next', 'Finish', and 'Cancel'. The main content area is titled 'Test Database Connection' and contains the following fields and instructions:

- Test Database Connection:** Test the database availability and the connection properties you provided.
- Driver Class Name:** oracle.jdbc.OracleDriver
- URL:** jdbc:oracle:thin:@m08804
- Database User Name:** transsvc
- Password:** [Redacted]
- Confirm Password:** [Redacted]
- Properties:** user=transsvc
- Test Table Name:** SQL SELECT 1 FROM DUAL

11. Verify the property values.

12. Click **Test Configuration**. The page is redisplayed with a success or failure message.

12.1. If the test succeeds, continue with the next step.

12.2. If the test fails, ensure that the connection URL and credentials are correct. Continue testing until the connection is successful.

- Click **Next**. The Select Targets page is displayed.

**Create a New JDBC Data Source**

Back Next Finish Cancel

**Select Targets**

You can select one or more targets to deploy your new JDBC data source. If you don't select a target, the data source will be created but not deployed. You will need to deploy the data source at a later time.

**Servers**

- AdminServer
- BEISManagedserver
- BWS\_Managed

- Select the server(s) where you want to deploy the new data source. At a minimum, this should be the Managed Server where the Banner Translation Service will be deployed.
- Click **Finish**. The Summary of JDBC Data Sources page is displayed with the new data source.

**Summary of JDBC Data Sources**

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

[Customize this table](#)

**Data Sources(Filtered - More Columns Exist)**

New Delete Previous | Next

<input type="checkbox"/>	Name ↕	JNDI Name	Targets
<input type="checkbox"/>	BannerWS	jdbc/bannerws	AdminServer
<input type="checkbox"/>	bnixmgr	jdbc/bnixmgr	AdminServer
<input type="checkbox"/>	Identmgr	jdbc/identmgr	AdminServer
<input type="checkbox"/>	inbadmin	jdbc/inbadmin	AdminServer
<input type="checkbox"/>	Integmgr_Banner	jdbc/integmgr_banner	AdminServer
<input type="checkbox"/>	streamsadmin	jdbc/streamsadmin	AdminServer
<input type="checkbox"/>	Transsvc	jdbc/transsvc	AdminServer

New Delete Previous | Next

- Verify that the new data source is associated with the server.
- In the Change Center pane, click **Activate Change**.

## Step 10 Install the Banner Translation Service

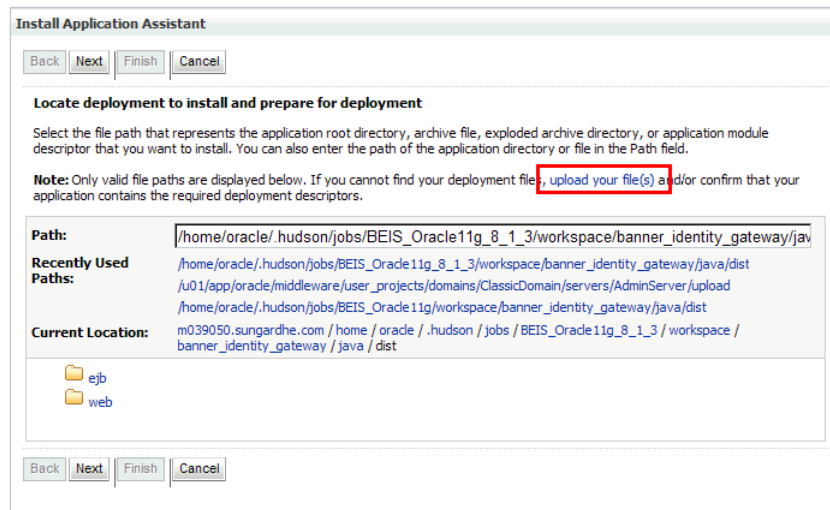
Use the following steps to install the Banner Translation Service to the Oracle WebLogic Server.

1. In the Change Center pane, click **Lock & Edit**.
2. In the Domain Structure pane, click **Deployments**.



The Summary of Deployments page is displayed.

3. Click **Install**. The Install Application Assistant page is displayed.



4. Click **upload your file(s)**. The next installation page is displayed.

**Install Application Assistant**

Back Next Finish Cancel

**Upload a Deployment to the admin server**

Click the Browse button below to select an application or module on the machine from which you are currently browsing. When you have located the file, click the Next button to upload this deployment to the Administration Server.

**Deployment Archive:**  Browse...

**Upload a deployment plan (this step is optional)**

A deployment plan is a configuration which can supplement the descriptors included in the deployment archive. A deployment will work without a deployment plan, but you can also upload a deployment plan archive now. This deployment plan archive will be a directory of configuration information packaged as a .jar file. See related links for additional information about deployment plans.

**Deployment Plan Archive:**  Browse...

Back Next Finish Cancel

5. Select the file to be uploaded:
  - 5.1. In the **Deployment Archive** field, click **Browse** and navigate to `TranslationService_v8.1.4.ear`.
  - 5.1. Select the file and click **Open**.
6. Click **Next**. The next installation page is displayed.
7. Select `TranslationService_v8.1.4.ear` from the list.

**Install Application Assistant**

Back Next Finish Cancel

**Locate deployment to install and prepare for deployment**

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.

**Note:** Only valid file paths are displayed below. If you cannot find your deployment files, upload your file(s) and/or confirm that your application contains the required deployment descriptors.

**Path:** /u01/app/oracle/middleware/user\_projects/domains/BWS\_Java7\_Domain/servers/AdminServer/upload

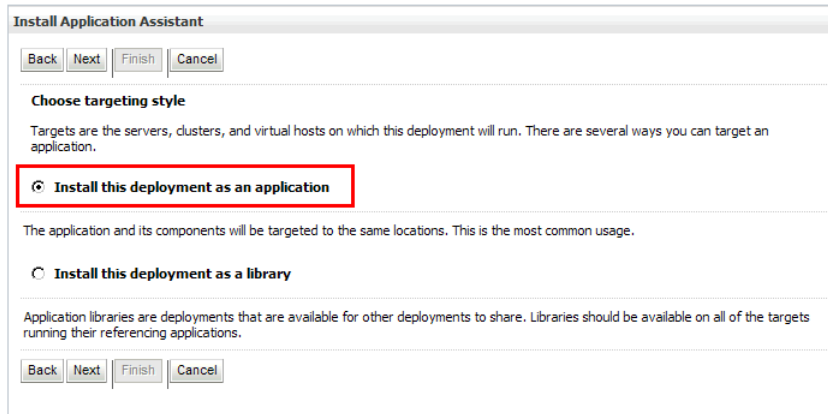
**Recently Used Paths:** /u01/app/oracle/middleware/user\_projects/domains/BWS\_Java7\_Domain/servers/AdminServer/upload  
/home/oracle/Integration\_Team/BWS/cardholder\_event\_publisher/ear  
/home/oracle/Integration\_Team/BWS/housing\_adapter/ear  
/home/oracle/Integration\_Team/BWS/campus\_card\_adapter/ear

**Current Location:** m037014 / u01 / app / orade / middleware / user\_projects / domains / BWS\_Java7\_Domain / servers / AdminServer / upload

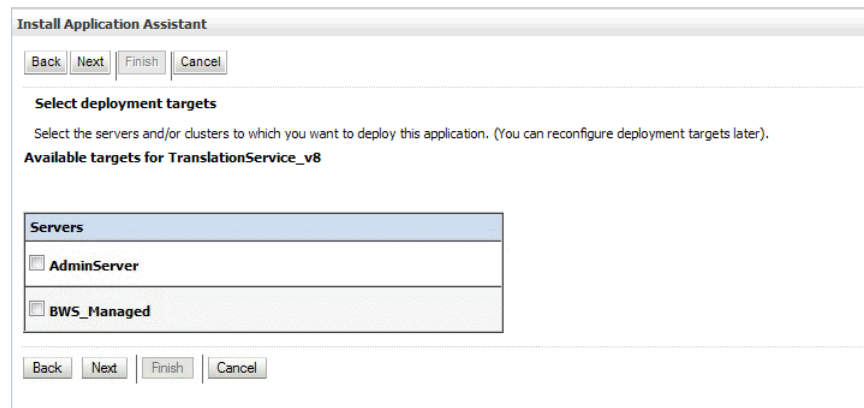
- CampusCardIntegration\_v8.1.4.ear
- CardholderEventPublisher\_v8.1.4.ear
- HousingIntegration\_v8.1.4.ear
- TranslationService\_v8.1.4.ear**

Back Next Finish Cancel

- Click **Next**. The next installation page is displayed.



- Select **Install this deployment as an application**.
- Click **Next**. The Select Deployment Targets page may or may not be displayed, depending on the domain.
  - If the Select Deployment Targets page *is* displayed, select the server where the application should be deployed. The application can be installed to an existing server. The application should be installed to a WebLogic Managed Server, not to the Admin Server. Then click **Next** to display the Optional Settings page.



- If the Select Deployment Targets page *is not* displayed (rather, the Optional Settings page is displayed), check your Oracle WebLogic Server configuration to ensure that a Managed Server is available for deployment of applications. If a Managed Server is not available, the application will be deployed to the Admin Server, which is not a recommended configuration. For more information, consult the Oracle WebLogic Server Documentation Library.

11. Enter the following information on the Optional Settings page:

**Name** Name for the application (for example, *TranslationService*)

**Advanced: Use a custom model that you have configured on the realm's configuration page** Select the radio button.

**Copy this application onto every target for me** Select the radio button.

The screenshot shows the 'Install Application Assistant' dialog box, specifically the 'Optional Settings' page. At the top, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'. Below this, the section is titled 'Optional Settings' with a sub-header 'General'. A message states: 'You can modify these settings or accept the defaults'. The first question is 'What do you want to name this deployment?'. The 'Name' field is a text box containing 'TranslationService'. The second question is 'What security model do you want to use with this application?'. There are three radio button options: 'DD Only: Use only roles and policies that are defined in the deployment descriptors.', 'Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.', and 'Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.'. The third option is selected. The third question is 'How should the source files be made accessible?'. There are two radio button options: 'Use the defaults defined by the deployment's targets' and 'Copy this application onto every target for me'. The second option is selected. Below this, there is a 'Recommended selection' section with the same 'Copy this application onto every target for me' option selected. The final question is 'During deployment, the files will be copied automatically to the managed servers to which the application is targeted. I will make the deployment accessible from the following location'. The 'Location' field is a text box containing '/u01/app/oracle/middleware/user\_projects/domains/Class'. At the bottom, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

12. Click **Next**. The next installation page is displayed.

**Install Application Assistant**

Back Next Finish Cancel

**Review your choices and click Finish**

Click Finish to complete the deployment. This may take a few moments to complete.

— **Additional configuration**

In order to work successfully, this application may require additional configuration. Do you want to review this application's configuration after completing this assistant?

Yes, take me to the deployment's configuration screen.

**No, I will review the configuration later.**

— **Summary**

**Deployment:** C:\Oracle\Middleware\user\_projects\domains\base\_domain\servers\AdminServer\upload\TranslationService\_v8.1.4.ear

**Name:** TranslationService\_v

**Staging mode:** Use the defaults defined by the chosen targets

**Security Model:** DDOnly: Use only roles and policies that are defined in the deployment descriptors.

**Target Summary**

Components	Targets
TranslationService_v8.1.4.ear	BWS_Managed

Back Next Finish Cancel

13. Select **No, I will review the configuration later**.

14. Click **Finish** to start the deployment. When deployment is completed, the Summary of Deployments page is redisplayed with the newly deployed application.

**Summary of Deployments**

Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

**Deployments**

Install Update Delete Start Stop

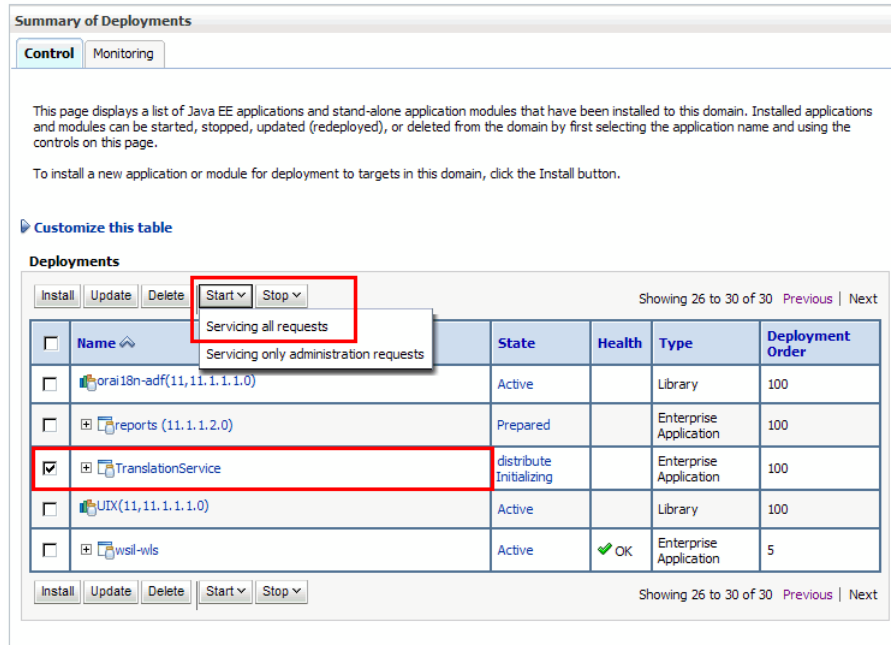
Name	State	Health	Type	Deployment Order
TranslationService_v8	New		Enterprise Application	100

Install Update Delete Start Stop

Showing 1 to 1 of 1 Previous Next

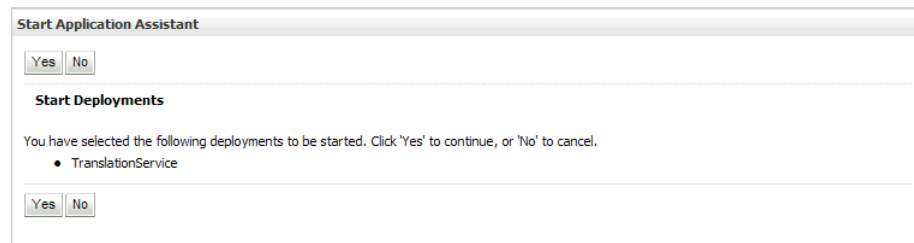
15. In the Change Center pane, click **Activate Changes**.

16. Start the newly deployed application as follows:



16.1. Select the newly deployed application.

16.1. Click **Start** -> **Servicing all requests**. The Start Application Assistant page is displayed.



16.2. Click **Yes**.

### Step 11 Configure the security group and user

Use the following steps to configure the `transsvcAdminGroup` group and an administrative user for the Banner Translation Service. This group and user are required for accessing the Banner Translation Service administrative interface.

1. In the Change Center pane, click **Lock & Edit**.

2. In the Domain Structure pane, click **Security Realms**.



The Summary of Security Realms page is displayed.

The screenshot shows the 'Summary of Security Realms' page. It contains a text block explaining security realms, a 'Customize this table' link, and a table titled 'Realms(Filtered - More Columns Exist)'. The table has two columns: 'Name' and 'Default Realm'. The 'myrealm' entry is highlighted with a red box.

<input type="checkbox"/>	Name ↕	Default Realm
<input type="checkbox"/>	myrealm	true

3. Click **myrealm**. The Settings for myrealm page is displayed.
4. Select the **Users and Groups** tab.

5. Select the **Groups** sub-tab. A table of existing groups is displayed.

The screenshot shows the 'Settings for myrealm' interface. The 'Users and Groups' sub-tab is selected and highlighted with a red box. Below the sub-tab, there is a 'Groups' section with a table of existing groups. The table has columns for 'Name', 'Description', and 'Provider'. The groups listed are: AdminChannelUsers, Administrators, AppTesters, CrossDomainConnectors, DemoGroup, Deployers, idpadmin, and Monitors. Each group has a checkbox in the 'Name' column and a 'Provider' column value of 'DefaultAuthenticator'.

<input type="checkbox"/>	Name ↕	Description	Provider
<input type="checkbox"/>	AdminChannelUsers	AdminChannelUsers can access the admin channel.	DefaultAuthenticator
<input type="checkbox"/>	Administrators	Administrators can view and modify all resource attributes and start and stop servers.	DefaultAuthenticator
<input type="checkbox"/>	AppTesters	AppTesters group.	DefaultAuthenticator
<input type="checkbox"/>	CrossDomainConnectors	CrossDomainConnectors can make inter-domain calls from foreign domains.	DefaultAuthenticator
<input type="checkbox"/>	DemoGroup	Demo group created for demo purpose	DefaultAuthenticator
<input type="checkbox"/>	Deployers	Deployers can view all resource attributes and deploy applications.	DefaultAuthenticator
<input type="checkbox"/>	idpadmin	Enterprise Identity Proxy Services Group	DefaultAuthenticator
<input type="checkbox"/>	Monitors	Monitors can view and modify all resource attributes and perform operations not restricted by roles.	DefaultAuthenticator

6. Click **New**. The Create a New Group page is displayed.

The screenshot shows the 'Create a New Group' form. It has a title bar with 'OK' and 'Cancel' buttons. Below the title bar, there is a 'Group Properties' section. The form contains the following fields:

- What would you like to name your new Group?  
\* Name:
- How would you like to describe the new Group?  
Description:
- Please choose a provider for the group.  
Provider:

At the bottom of the form, there are 'OK' and 'Cancel' buttons.

7. Enter the following information to create a group:

**Name** *transsvcAdminGroup*  
**Description** *Banner Translation Service Administrative Group*  
**Provider** *DefaultAuthenticator*

8. Click **OK**. The table of groups is redisplayed with the new group.

The screenshot shows the 'Settings for myrealm' window with the 'Users and Groups' tab selected. The 'Groups' sub-tab is active, displaying a table of configured groups. The 'transsvcAdminGroup' entry is highlighted with a red border.

<input type="checkbox"/>	Name ↕	Description	Provider
<input type="checkbox"/>	idpAdminGroup	Enterprise Identity Proxy Services Administrative Group	DefaultAuthenticator
<input type="checkbox"/>	Monitors	Monitors can view and modify all resource attributes and perform operations not restricted by roles.	DefaultAuthenticator
<input type="checkbox"/>	Operators	Operators can view and modify all resource attributes and perform server lifecycle operations.	DefaultAuthenticator
<input type="checkbox"/>	OracleSystemGroup	Oracle application software system group.	DefaultAuthenticator
<input type="checkbox"/>	transsvcAdminGroup	Banner Translation Service Administrative Group	DefaultAuthenticator

9. Select the **Users** sub-tab. A table of existing users is displayed.

The screenshot shows the 'Settings for myrealm' window with the 'Users and Groups' tab selected. The 'Users' sub-tab is active and highlighted with a red box. It displays a table of configured users.

<input type="checkbox"/>	Name ↕	Description	Provider
<input type="checkbox"/>	bnix	Banner Identity Gateway Administrator	DefaultAuthenticator
<input type="checkbox"/>	DemoUser	Demo user created for demo purpose	DefaultAuthenticator
<input type="checkbox"/>	idproxy	Enterprise Identity Proxy Services User	DefaultAuthenticator
<input type="checkbox"/>	weblogic		DefaultAuthenticator

10. Click **New**. The Create a New User page is displayed.

**Create a New User**

OK Cancel

**User Properties**

The following properties will be used to identify your new User.  
\* Indicates required fields

What would you like to name your new User?

\* **Name:**

How would you like to describe the new User?

**Description:**

Please choose a provider for the user.

**Provider:**

The password is associated with the login name for the new User.

**Password:**

**Confirm Password:**

OK Cancel

11. Enter the following information to create a user:

<b>Name</b>	<i>transsvcadmin</i> (This is an example. Enter the name of your choice.)
<b>Description</b>	<i>Banner Translation Service Administrator</i>
<b>Provider</b>	<i>DefaultAuthenticator</i>
<b>Password</b>	Password for the user being created
<b>Confirm Password</b>	Confirmation of the password

12. Click **OK**. The table of users is redisplayed with the new user.

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

**Users** Groups

This page displays information about each user that has been configured in this security realm.

[Customize this table](#)

**Users**

New Delete Previous | Next

<input type="checkbox"/>	Name ↕	Description	Provider
<input type="checkbox"/>	bnix	Banner Identity Gateway Administrator	DefaultAuthenticator
<input type="checkbox"/>	DemoUser	Demo user created for demo purpose	DefaultAuthenticator
<input type="checkbox"/>	idproxy	Enterprise Identity Proxy Services User	DefaultAuthenticator
<input type="checkbox"/>	OracleSystemUser	Oracle application software system user.	DefaultAuthenticator
<input type="checkbox"/>	transsvc		DefaultAuthenticator
<input type="checkbox"/>	<b>transsvcadmin</b>	Banner Translation Service Administrator	DefaultAuthenticator
<input type="checkbox"/>	weblogic		DefaultAuthenticator

New Delete Previous | Next

13. Click the name of the user you just created. The Settings page for the user is displayed.

14. Select the **Groups** tab.

Settings for transsvcadmin

General Passwords Attributes **Groups**

Save

Use this page to configure group membership for this user.

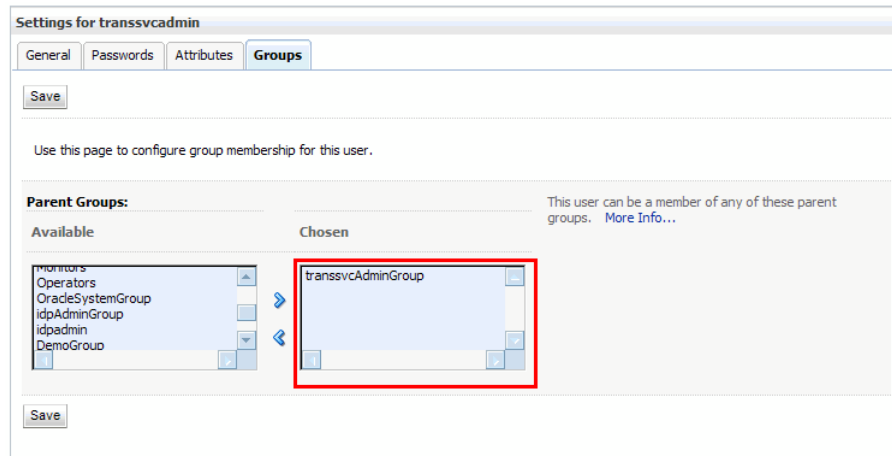
**Parent Groups:** This user can be a member of any of these parent groups. [More Info...](#)

Available Chosen

Monitors  
Operators  
OracleSystemGroup  
idpAdminGroup  
transsvcAdminGroup  
idqadmin

Save

15. In the Parent Groups section, select *transsvcAdminGroup* in the **Available** list and move it to the **Chosen** list.



16. Click **Save**.

17. In the Change Center pane, click **Activate Changes**.

## Step 12 Populate the Banner Translation Service

Populate the Banner Translation Service with the enterprise fields and corresponding field value translations that support integration within your institution. Refer to [Chapter 3, "Administration"](#).



# 3 Administration

---

The Banner® Translation Service provides a web-based administration interface that is used to perform the following functions:

- Manage data translations (import and export bulk translations, add translations, and manage translations).
- Use web services to process translation requests.
- Test data translations.

## Terminology

---

The concept of “enterprise” data definitions is fundamental to the Banner Translation Service. This term characterizes data that is used by multiple applications in the enterprise— data that is not application-specific. Enterprise data structures are universal and can be mapped to any number of applications.

Application-specific data can be mapped to enterprise definitions for exchange with other applications. In this way, enterprise data definitions are used to bridge applications.

The concept of enterprise data definitions is the basis for the following terms used in the Banner Translation Service administration interface:

<b>Term</b>	<b>Description</b>
Enterprise Field	Data element that is part of an enterprise data definition and contains values that require translation. These elements are enterprise definitions (not system-specific). Normally, they equate to an XML tag name and are qualified by a namespace prefix (for example, <i>rco:Gender</i> ).
Enterprise Field Value	Data value assigned to an enterprise field. Enterprise field values are the common values that are used in the enterprise. Applications that cannot accept these enterprise field values must incorporate or use a service that provides translation to application-specific values.
Field Translation	System-specific value for the enterprise field value. Because Banner uses the Banner Translation Service, Banner codes are represented as field translations.

### Example

Enterprise Field	Enterprise Field Value	Field Translation
Gender	Male	M
Gender	Female	F

## Access the Web console

---

Use the following steps to access the Banner Translation Service administration console.

1. Access the following URL:

```
http://<host>:<port>/transsvc
```

2. Click **LOGIN**.
3. Enter the appropriate username and password.
4. Click **OK**.

## Manage data translations

---

The following sections provide instructions for managing data translations.

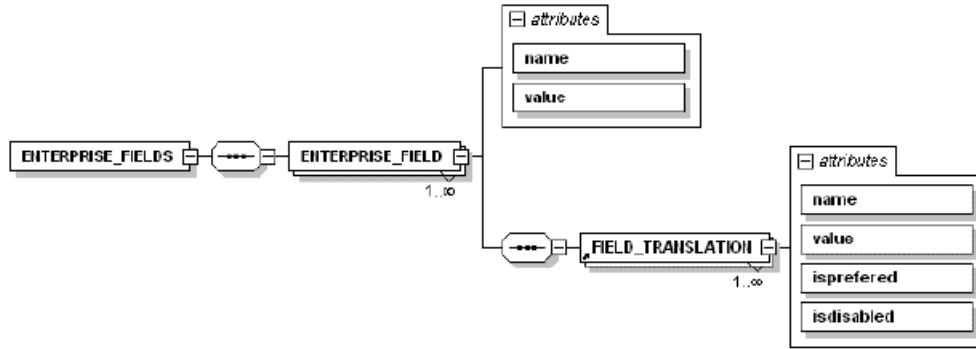
### Import enterprise fields

You can import multiple enterprise fields to the Banner Translation Service in one operation. This feature is particularly useful when a pre-production or test instance contains required data that must be loaded to the production instance.

#### **Note**

For Banner web services to work properly, you must import translations that are delivered with Banner Web Services. Refer to the *Banner Web Services Installation Guide* for details on importing these translations to the Banner Translation Service. ■

The data to be loaded must be in the following XML format, which mirrors the Banner Translation Service data structure:

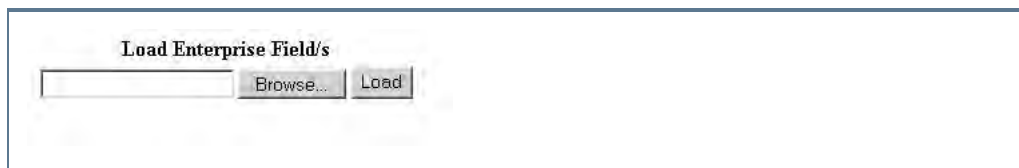


A sample XML file follows:

```
<ENTERPRISE_FIELDS>
  <ENTERPRISE_FIELD name="sghe:EnterpriseFieldName"
value="AnEnterpriseFieldValue">
    <FIELD_TRANSLATION name="Application B" value="AppBValue"
ispreferred="false" isdisabled="false"/>
    <FIELD_TRANSLATION name="Application A" value="AppAValue"
ispreferred="false" isdisabled="false"/>
  </ENTERPRISE_FIELD>
</ENTERPRISE_FIELDS>
```

Use the following steps to import enterprise fields.

1. Click **List** under the **Enterprise Field** menu.
2. Click **Import** in the **Enterprise Fields** section. The Load Enterprise Field/s page is displayed:



3. Click **Browse**.
4. Navigate to the file to be imported and select it.
5. Click **Open**. The Load Enterprise Field/s page is redisplayed.
6. Click **Load**. The Import Completed page is displayed.
7. Click **Continue**. An updated list of enterprise field names is displayed.

## Export enterprise fields

You can export a single enterprise field or all enterprise fields from the Banner Translation Service.

### Export one enterprise field

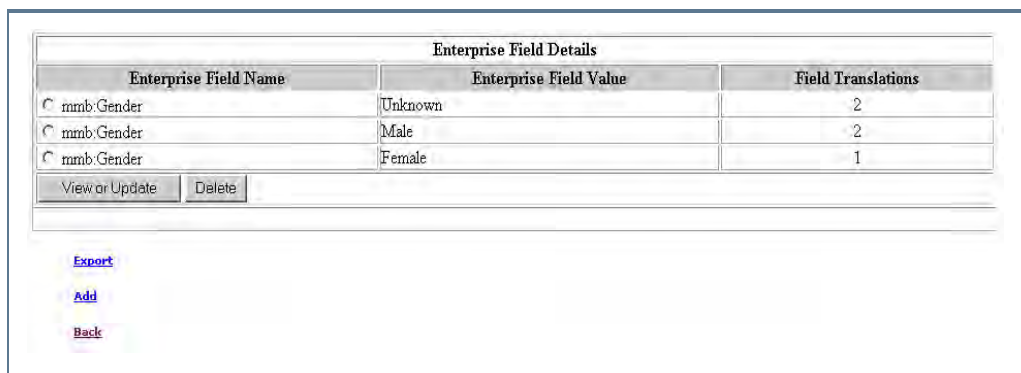
Use the following steps to export a single enterprise field.

1. Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).



2. Click the enterprise field that you want to export. The Enterprise Field Details page is displayed:



3. Click **Export** (at the bottom of the page).
4. Click **Save**.
5. Navigate to the location where you want to save the file.

6. Enter a file name.

 **Note**

The default file name is `xmlexport`. You should use a more descriptive file name. ■

7. Click **Save**.

## Export all enterprise fields

Use the following steps to export all enterprise fields. This feature is particularly useful when a pre-production or test instance contains all the required data that must be moved to the production instance.

1. Click **List** under the **Enterprise Field** menu.
2. Click **Export** in the **Enterprise Fields** section.
3. Click **Save**.
4. Navigate to the location where you want to save the file.
5. Enter a file name.

 **Note**

The default file name is `xmlexport`. You should use a more descriptive file name. ■

6. Click **Save**.

## List enterprise fields

Use the following steps to list all enterprise fields defined in the system. You can select an enterprise field from the list and display the enterprise field values associated with the selected field. Only enterprise fields such as `rco:Gender` and `rco:CountryCode` are displayed.

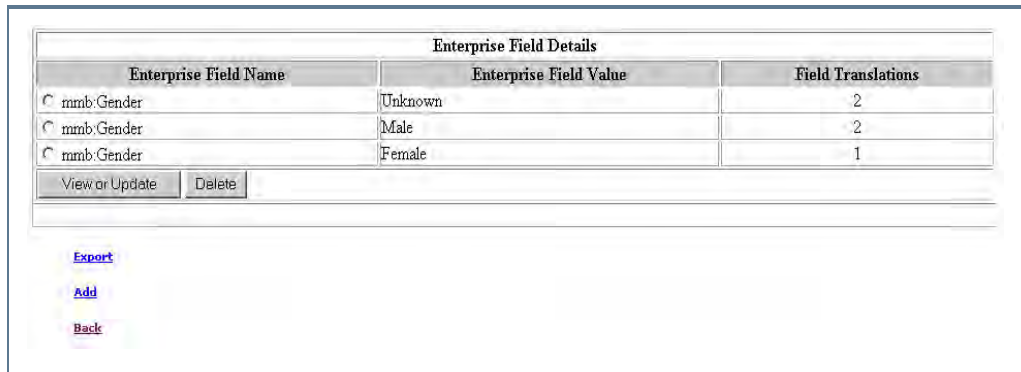
1. Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).



2. Click an enterprise field name. The Enterprise Field Details page displays the following information:

<b>Enterprise Field Name</b>	Name of the selected enterprise field
<b>Enterprise Field Value</b>	Each enterprise field value for the selected enterprise field
<b>Field Translations</b>	Number of field translations defined for each enterprise field value



## Add an enterprise field

When the Banner Translation Service is installed, the translation tables do not have any data in them. Enterprise fields are normally imported as a group. However, you can add an

enterprise field manually, if necessary. Use the following steps to manually add an enterprise field.

1. Click **List** under the **Enterprise Field** menu.
2. Click **Add** in the **Enterprise Fields** section. The Create Enterprise Field page is displayed.

3. Enter the following information:

**Enterprise Field**                      Name of the new enterprise field (for example, *rco:state*)

**Value**                                      First enterprise field value (for example, *Oregon*)

4. Click **Create**. The Field Translations page displays the new enterprise field name and enterprise field value.

5. Enter the following information to define a field translation:

**Application Name**                      System for which the field translation is valid

**Application Value**                      System-specific value for the enterprise field value

- Click **Add**. The Field Translations page displays the new field translation.

- Repeat steps 5 and 6 to add each field translation.
- When all field translations are entered for the enterprise field value, click **Back**. The Enterprise Field Details page displays the new enterprise field.

## Add an enterprise field value

Use the following steps to add an enterprise field value to an existing enterprise field.

- Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).

- Click the name of the enterprise field to which you want to add an enterprise field value. The Enterprise Field Details page displays existing enterprise field values for the selected enterprise field.

Enterprise Field Details		
Enterprise Field Name	Enterprise Field Value	Field Translations
<a href="#">mmb:Gender</a>	Unknown	2
<a href="#">mmb:Gender</a>	Male	2
<a href="#">mmb:Gender</a>	Female	1

View or Update    Delete

[Export](#)

[Add](#)

[Back](#)

- Click **Add**. The Create Enterprise Field page is displayed with the name of the selected enterprise field.

Create Enterprise Field

Enterprise Field     Value

- Enter the new enterprise field value in the **Value** field.
- Click **Create**. The Field Translations page is displayed with the enterprise field name and the new enterprise field value.

Field Translations for mmb:Gender - Miscellaneous

Application Name	Application Value	Disable	Default
<input type="button" value="Delete"/>	<input type="button" value="Disable"/>	<input type="button" value="Enable"/>	<input type="button" value="Set Default"/>
<input type="button" value="Clear Default"/>			

Add Field Translations

Application Name	Application Value	Disable	Default
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Enter the following information to define a field translation:

**Application Name**                      System for which the field translation is valid

**Application Value**                      System-specific value for the enterprise field value

- Click **Add**. The Field Translations page displays the new field translation.

The screenshot shows a web interface for managing field translations. The main section is titled "Field Translations for mmb:Gender - Miscellaneous". It features a table with the following columns: "Application Name", "Application Value", "Disable", and "Default". The first row of the table contains the values "Banner" and "MISC". Below the table, there are five buttons: "Delete", "Disable", "Enable", "Set Default", and "Clear Default". Below this section is a form titled "Add Field Translations" which includes two input fields for "Application Name" and "Application Value", and two checkboxes for "Disable" and "Default". There are also "Add" and "Cancel" buttons at the bottom of the form.

- Repeat steps 6 and 7 to add each field translation for the enterprise field value.
- When all field translations are entered for the enterprise field value, click **Back**. The Enterprise Field Details page displays the new enterprise field value.

## Add a field translation

An enterprise field value can have multiple field translations. These field translations allow the Banner Translation Service to assign the appropriate value to a data stream that requests translation from system A to system B. System A might represent Banner, and system B might represent any external system that exchanges data with Banner. Use the following steps to add a field translation.

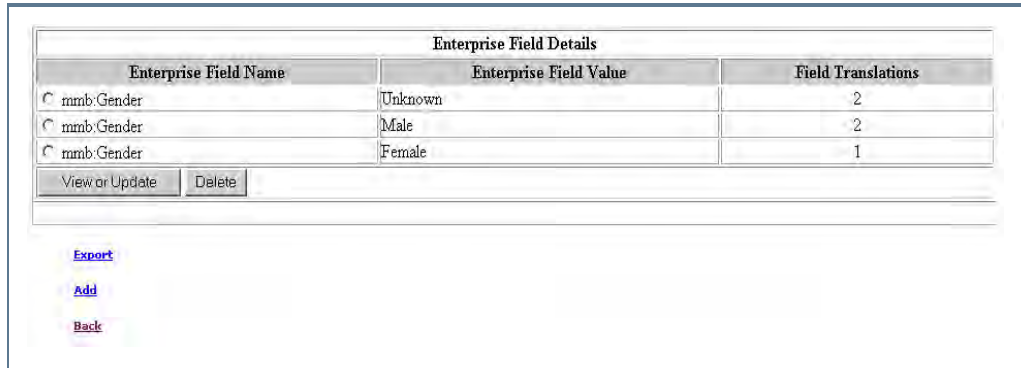
- Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).

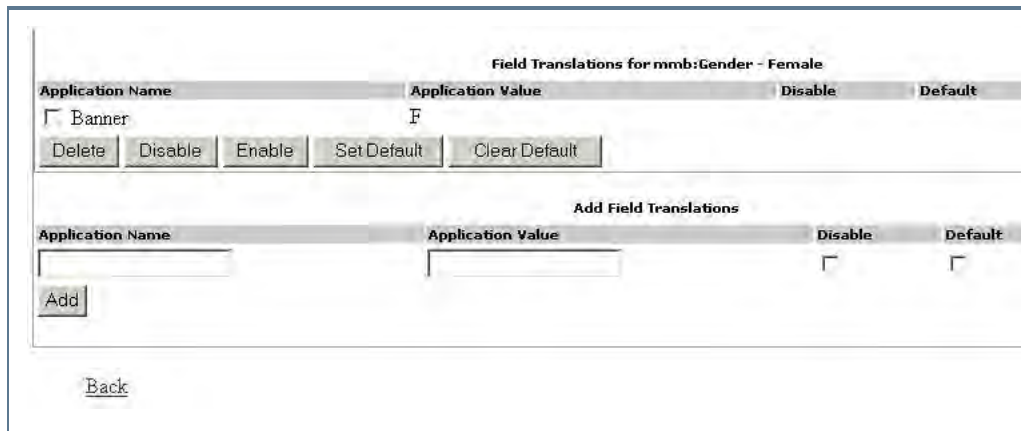
The screenshot shows a list of enterprise field names under the heading "Enterprise Fields -> Names". The list includes the following items, each with a blue hyperlink:

- [aaa:Site](#)
- [dar:DepositAmount/@currency](#)
- [dar:TransactionAmount/@currency](#)
- [dpa:CountryCode](#)
- [mmb:Gender](#)
- [rar:CardType](#)
- [rco:CardholderGender](#)
- [rco:Category](#)

- Click the name of the enterprise field to which you want to add field translations. The Enterprise Field Details page displays existing enterprise field values for the selected enterprise field.



- Select the enterprise field name/value pair to which you want to add field translations.
- Click **View or Update**. The Field Translations page displays existing field translations.



- Enter the following information for the new field translation:

**Application Name**                      System for which the field translation is valid

**Application Value**                    System-specific value for the enterprise field value

- (optional) Select the **Disable** check box if the field translation is disabled initially.

- Click **Add**. The Field Translations page displays the new translation value.

Application Name	Application Value	Disable	Default
<input type="checkbox"/> Banner	F		
<input type="checkbox"/> hr-XML	Female		

Buttons: Delete, Disable, Enable, Set Default, Clear Default

**Add Field Translations**

Application Name	Application Value	Disable	Default
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Buttons: Add

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- (optional) To identify the default field translation, select the field translation and click **Set Default**.

## Delete an enterprise field value

Use the following steps to delete an enterprise field value associated with an enterprise field.

- Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).

- Enterprise Fields -> Names
  - [aaa:Site](#)
  - [dar:DepositAmount/@currency](#)
  - [dar:TransactionAmount/@currency](#)
  - [dpa:CountryCode](#)
  - [mmb:Gender](#)
  - [rar:CardType](#)
  - [rco:CardholderGender](#)
  - [rco:Category](#)

- Click the name of the enterprise field for which you want to delete an enterprise field value. The Enterprise Field Details page displays existing enterprise field values for the selected enterprise field.

Enterprise Field Details		
Enterprise Field Name	Enterprise Field Value	Field Translations
<a href="#">mmb:Gender</a>	Unknown	2
<a href="#">mmb:Gender</a>	Male	2
<a href="#">mmb:Gender</a>	Female	1

View or Update   Delete

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- Select the enterprise field name/value pair you want to delete.
- Click **Delete**. The Enterprise Field Details page is redisplayed with the enterprise field value deleted.

## Delete a field translation

Use the following steps to delete field translations associated with an enterprise field value.

- Click **List** under the Enterprise Field menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).

<ul style="list-style-type: none"> <li>Enterprise Fields -&gt; Names <ul style="list-style-type: none"> <li><a href="#">aaa:Site</a></li> <li><a href="#">dar:DepositAmount/@currency</a></li> <li><a href="#">dar:TransactionAmount/@currency</a></li> <li><a href="#">dpa:CountryCode</a></li> <li><a href="#">mmb:Gender</a></li> <li><a href="#">rar:CardType</a></li> <li><a href="#">rco:CardholderGender</a></li> <li><a href="#">rco:Category</a></li> </ul> </li> </ul>
--

- Click the name of the enterprise field for which you want to delete field translations. The Enterprise Field Details page displays existing enterprise field values for the selected enterprise field.

Enterprise Field Details		
Enterprise Field Name	Enterprise Field Value	Field Translations
mmb:Gender	Unknown	2
mmb:Gender	Male	2
mmb:Gender	Female	1

View or Update    Delete

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- Select the enterprise field name/value pair for which you want to delete field translations.
- Click **View or Update**. The Field Translations page displays existing field translations.

Field Translations for mmb:Gender - Female

Application Name	Application Value	Disable	Default
<input type="checkbox"/> Banner	F	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Delete    Disable    Enable    Set Default    Clear Default

Add Field Translations

Application Name	Application Value	Disable	Default
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add

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- Select the field translations you want to delete.
- Click **Delete**. The Field Translations page is redisplayed with the enterprise field value deleted.

## Disable and enable a field translation

A disabled field translation is ignored when the Banner Translation Service processes a translation request. An enabled field translation is associated with the enterprise field

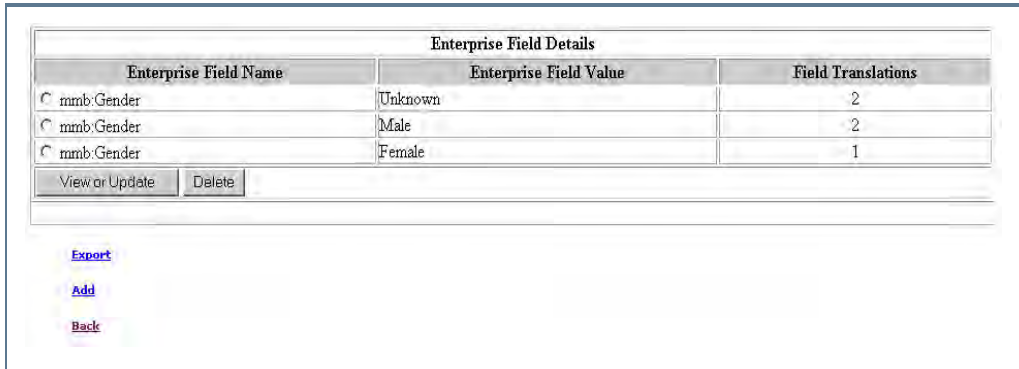
value when the Banner Translation Service processes a translation request. Use the following steps to disable or enable field translations.

1. Click **List** under the **Enterprise Field** menu.

The **Enterprise Fields > Names** section displays hyperlinks for existing enterprise fields. Each enterprise field name includes a namespace prefix (for example, *mmb*) and an XML tag name (for example, *Gender*).



2. Click the name of the enterprise field for which you want to disable or enable field translations. The Enterprise Field Value page displays existing enterprise field values for the selected enterprise field.



3. Select the enterprise field name/value pair for which you want to disable or enable field translations.

4. Click **View or Update**. The Field Translations page displays existing field translations.

Field Translations for mmb:Gender - Female

Application Name	Application Value	Disable	Default
<input type="checkbox"/> Banner	F		

Delete Disable Enable Set Default Clear Default

Add Field Translations

Application Name	Application Value	Disable	Default
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add

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5. Select the field translations you want to disable or enable.
6. Click **Disable** or **Enable**. The Field Translations page is redisplayed with the enterprise field value disabled or enabled.

## Process translation requests via a Web service

The Banner Translation Service provides a web service that processes translation requests. This web service can be accessed via the Web Service menu, but is intended for Ellucian internal use only. It is used by the Banner Web Services Adapters and the Banner Cardholder Event Publisher. When this Web service is ready for general availability, additional information about its use will be provided.

## Test data translations

The Banner Translation Service provides a translation web tool that can be used to test your Banner Translation Service data setup and diagnose any issues. This tool tests the following scenarios:

<b>Translation Scenario</b>	<b>Example</b>
Enterprise to application value	Enterprise to Banner Nation translation
Application to enterprise value	Banner to enterprise Nation translation
Application to application value	Banner to AnyOtherApplication Nation translation

## Steps to test data translations

Use the following steps to test your data translations.

1. Click **Translator** under the **Tools** menu. The following page is displayed.



The image shows a dialog box titled "Translator". It contains the following elements:

- A "Delimiter" dropdown menu.
- A large "Payload" text area for entering data.
- A "Reg\_ex" text input field.
- "Translate" and "Cancel" buttons at the bottom right.

2. Enter the following information:

- Delimiter** String of characters used to separate parameters inside the tokens that are provided by the regular expression (Reg\_ex)
- Payload** Data that needs to be translated
- Reg\_ex** Regular expression that defines the dataset (the tokens that need translation). Each dataset/token has a well-defined set of parameters that determine the operation being requested. Each token is defined using the following parameters:
- entFieldName - enterprise field name
  - entFieldValue - enterprise field value
  - srcApplicationName - name of source application
  - srcApplicationValue - value of UDC field in source application
  - destApplicationName - name of destination application
  - destApplicationValue - value of UDC field in destination application

3. Click **Translate**.

## Required parameters

The following parameters are required for the corresponding translation requests:

Enterprise to application value translation	entFieldName entFieldValue srcApplicationName
Application to enterprise value translation	entFieldName srcApplicationName srcApplicationValue
Application to application value translation	entFieldName srcApplicationName srcApplicationValue destApplicationName

The Banner Translation Service also supports a `defaultValue` parameter. This parameter provides a way to return a default value when no translation data is found. You can specify this parameter in any of the preceding three operations.

## Example

Enterprise field name: *rco:CardholderGender*  
Enterprise field value: *Male*  
Source application: *Banner*

Use the following payload to convert the enterprise field value to a Banner value:



The screenshot shows a dialog box with the following fields and controls:

- Delimiter:** A text box containing a semicolon (;).
- Payload:** A large text area containing the payload: `@#;entFieldName=rco:CardholderGender;srcApplicationName=Banner;entFieldValue=Male;@#`
- Reg\_ex:** A text box containing the regular expression: `@#(.*?)@#`
- Buttons:** "Translate" and "Cancel" buttons.

The `entFieldName`, `entFieldValue`, and `srcApplicationName` parameters are specified in the request.

**Reg\_ex** represents the regular expression that the Banner Translation Service uses to identify the token in its entirety. Its value here is `'@#(.*?)@#'`. The token obtained by the Banner Translation Service from the payload would be the following:

```
@#;entFieldName=rco:CardholderGender;srcApplicationName=Banner;entFieldValue=Male;@#
```

Once the regular expression successfully extracts the token, the Banner Translation Service extracts the `entFieldName`, `entFieldValue`, and `srcApplicationName` parameters that are needed to process this request. It does this by breaking up the token based on the delimiter. In this example the delimiter is `' ; '`.

The Banner Translation Service processes the translation with the following result:



The screenshot shows a dialog box titled "New Request" with a text box containing the letter "M".

