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Banner Advancement
Web Services Handbook

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December 2013	New version that supports Banner Advancement 8.7 software.

Banner Advancement 8.7
Web Services Handbook

Contents

1 Introduction

This chapter introduces Web services, describes the GetGivingHistory Web service, and describes the Banner® Advancement Web Services Adapter.

What is a Web service?

A Web service exposes an application's processing logic to support a service-oriented architecture and to facilitate integration with external systems. A Web service allows an external system or business process to invoke the application's logic without having to understand the application's internal structure.

Web services can be thought of as application programming interfaces (APIs). What distinguishes Web services, however, is their foundation in open, Internet-based standards. This makes them relevant to application integration both within and between organizations. Standards such as XML, SOAP, WSDL, and UDDI provide cross-platform compatibility that does not depend on a single programming language or network transport.

What is the GetGivingHistory Web service?

The GetGivingHistory Web service allows external systems to request giving history information for a donor who is set up in Banner. The Web service returns summary giving information and a list of gifts for the donor.

What is the Banner Advancement Web Services Adapter?

The Banner Advancement Web Services Adapter is a Java-based application that exposes the GetGivingHistory Web service. This exposure makes the Banner Advancement functions available to external systems using the SOAP protocol over HTTP/HTTPS. External systems interact with the Web service, which in turn is supported by Banner APIs. This layered approach provides an insulating buffer between external systems and Banner. External systems do not interact with Banner directly, but rather exchange XML messages with the exposed Web service.

The Banner Advancement Web Services Adapter supports the synchronous, request/reply message exchange pattern as follows:

1. The external system requests a service of Banner by sending an XML message to the Web service endpoint exposed by the adapter. The message contains the information required for Banner to service the request.

2. The Banner Advancement Web Services Adapter invokes the appropriate Banner API.

3. The Banner API performs the necessary Banner processing logic.

4. One of the following occurs:

   4.1. If the action is completed successfully, the API provides a response message, which the adapter forwards to the external system.

   4.2. If the action is not completed successfully, the adapter sends an error message (called a SOAP fault) to the external system.

Contents of this handbook

This handbook provides the steps that systems administrators use to install the Banner Advancement Web Services Adapter.

This handbook also includes the following information that integration analysts and business analysts use to understand the GetGivingHistory Web service:

- General description
- Message exchange pattern and specific messages used
- Mapping between message elements/attributes and Banner columns
- Intended usage
- Setup requirements
- Test cases

2 Install Banner Advancement Web Services Adapter

The Banner® Advancement Web Services Adapter exposes the GetGivingHistory Web service. This chapter gives instructions for installing the adapter on Oracle Application Server 10.1.2.x.

Requirements

The Banner Advancement Web Services Adapter requires the following:

- Oracle Application Server (OAS) 10.1.2.x and Java 1.4
- Banner Translation Service data source

Note

The adapter does *not* require the Banner Translation Service. The adapter, however, does require the definition of a Translation Service data source. This chapter includes a step for creating the Translation Service data source. If you are deploying the adapter into the same OC4J container with other Banner Web service adapters, then the data source should already be defined.

- Patch `p1-5j4fyo_alu80100` or Banner 8.2 (contains objects that create an API in Banner Advancement and expose it as a Web service)

Installation steps

The Banner Advancement Web Services Adapter is packaged as a J2EE compatible enterprise archive file named `advancement_services.ear`.

Use the following steps to install the adapter:

- Step 5, “Configure the security role and user”
- Step 6, “Enable schema validation (optional)”
- Step 7, “Configure logging”
- Step 8, “Update the WSDL endpoint URL (optional)”
- Step 9, “Test the Banner Advancement Web services (optional)”

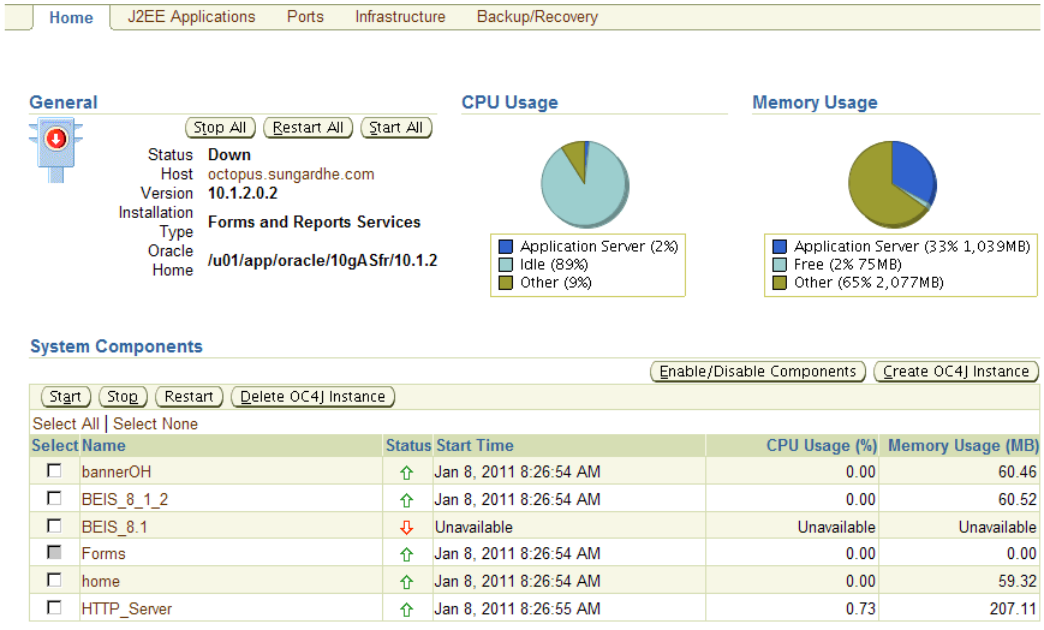
Important notes:

- The installation steps in this chapter are based on Oracle Application Server 10.1.2.x and Java 1.4. If you are using another version, refer to your application server documentation for instructions specific to that application server.
- You should dedicate one OC4J instance to the Banner Web Services Adapters so that you can separately administer the Web services environment. You can install the Banner Advancement Web Services Adapter in this instance with other adapters, or you can install the Banner Advancement Web Services Adapter in a separate instance. Consult with your database administrator to determine which method is preferable for your institution.

Step 1 Create an OC4J instance (optional)

If you are deploying the Banner Advancement Web Services Adapter to an existing OC4J instance used for Banner Web services, you can skip this step. Otherwise, use the following steps to create a new OC4J instance for the adapter.

1. Connect to the Oracle Enterprise Manager. The Home page is displayed.



2. Click **Create OC4J Instance**. The Create OC4J Instance page is displayed.

3. Enter the name of the new instance in the **OC4J Instance Name** field. You can enter any meaningful name for the new instance.

4. Click **Create**. The instance is created, and a confirmation message is displayed.

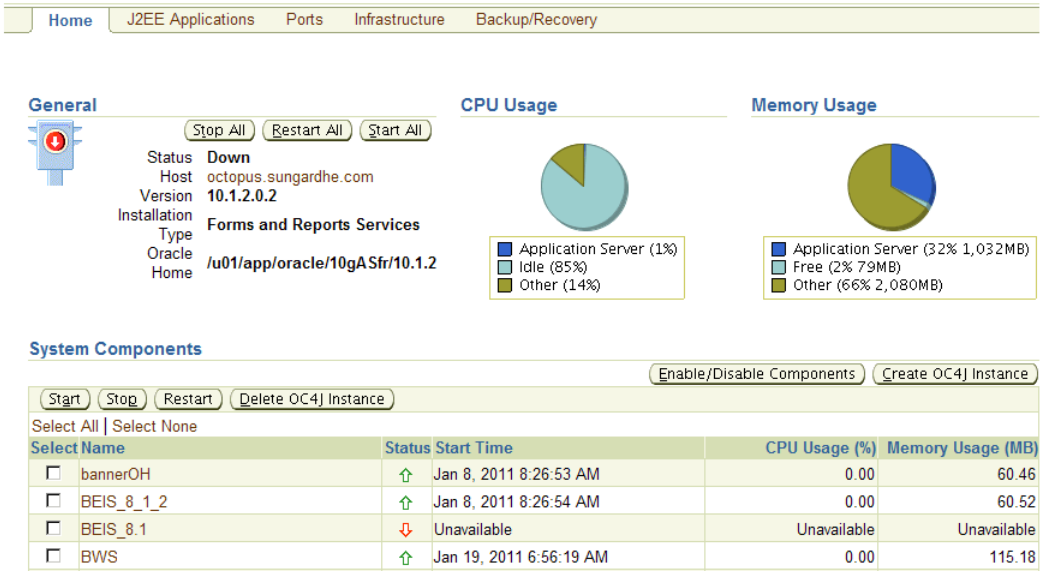
5. Click **OK**. The Home page is redisplayed with the new instance in the System Components list.

Step 2 Install the adapter

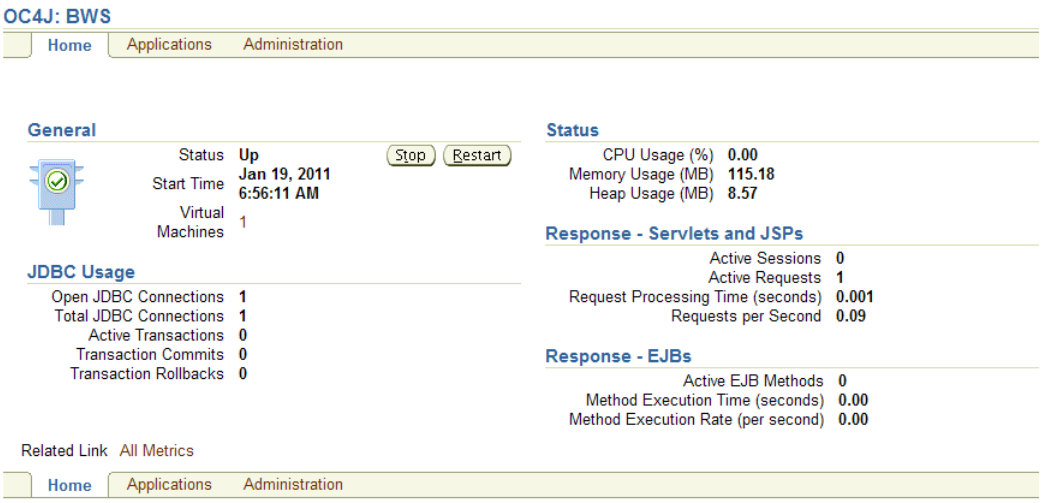
Before beginning this step, you must understand the concepts published by Oracle regarding the deployment of ear files.

Use the following steps to deploy the adapter to the Oracle Application Server.

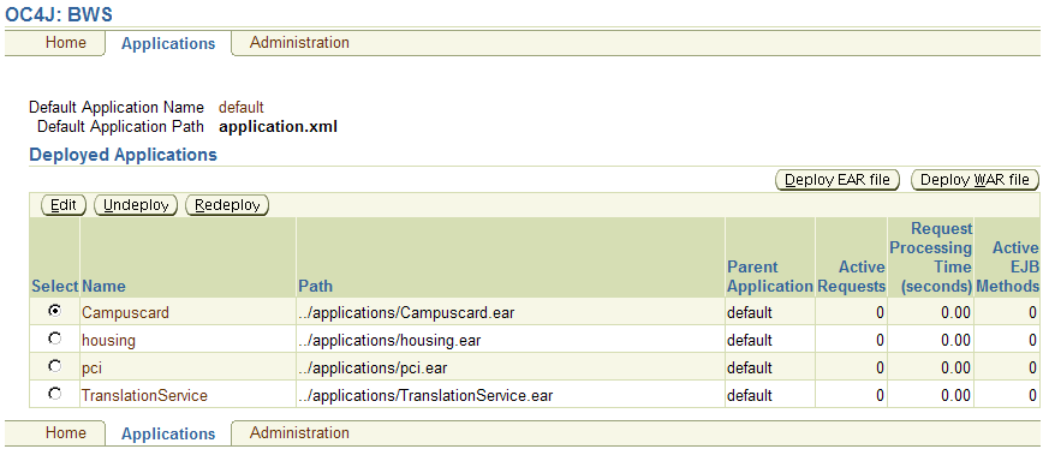
1. Connect to the Oracle Enterprise Manager. The Home page is displayed.



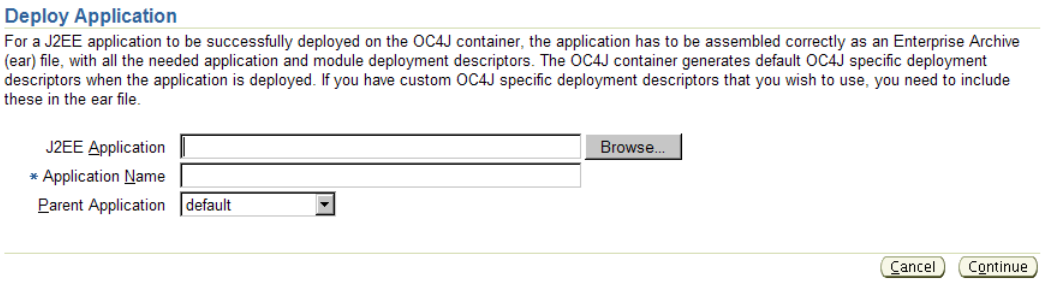
2. Click the name of the OC4J instance that will host the adapter. The **Home** tab for the selected instance is displayed.



3. Select the **Applications** tab. A list of deployed applications is displayed.



4. Click **Deploy EAR File**. The Deploy Application page is displayed.



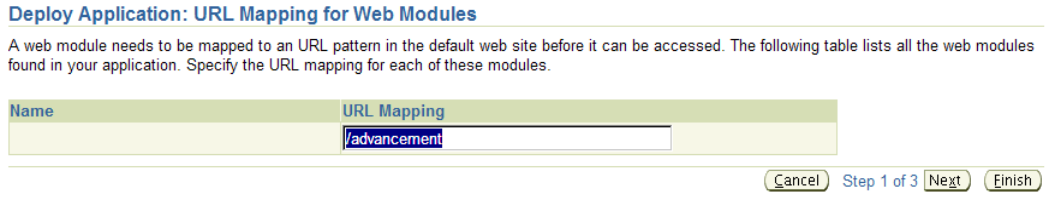
5. Select the file to be uploaded:

   5.1. In the **J2EE Application** field, click **Browse** and navigate to the `advancement_services.ear` file.

5.2. Select the file and click **Open**.

6. Enter the **Application Name** (for example, *Advancement_Services*).

7. Click **Continue**. The Deploy Application: URL Mapping for Web Modules page is displayed, showing the configurable part of the default URL mapping that is defined in the ear file.



8. (Optional) If multiple adapters will be deployed on the same server in different OC4J instances, use the following steps to change the URL mapping for the adapter that you are currently installing. This provides a unique URL for the instance and helps differentiate the various adapters.

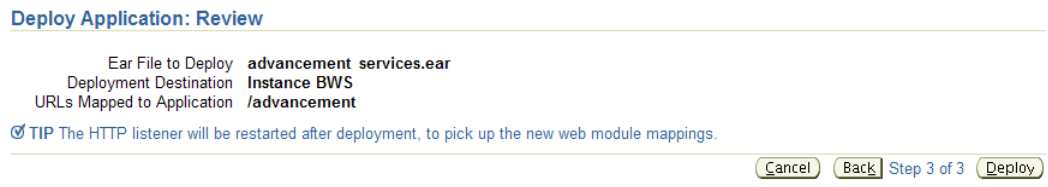
   8.1. Change the entry in the **URL Mapping** field by adding descriptive text to the default string (for example, `/advancement/test` or `/advancement/prod`). Adding descriptive text to the default string, rather than changing the entire default string, is preferable.

   8.2. Note the new context root:

   _____

   8.3. Make sure this new context root is used in any subsequent steps that refer to the default URL.

9. Click **Finish**. The Deploy Application: Review page is displayed.



10. Click **Deploy**. The file is uploaded and a confirmation page is displayed.

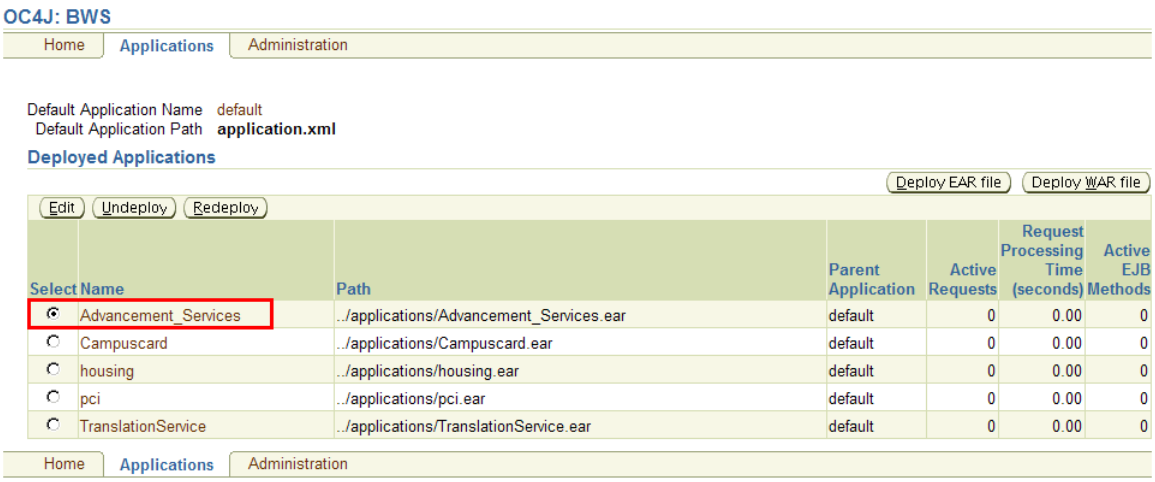
11. Click **OK**. The **Applications** tab is displayed with the deployed application.

Step 3 Define the adapter data source

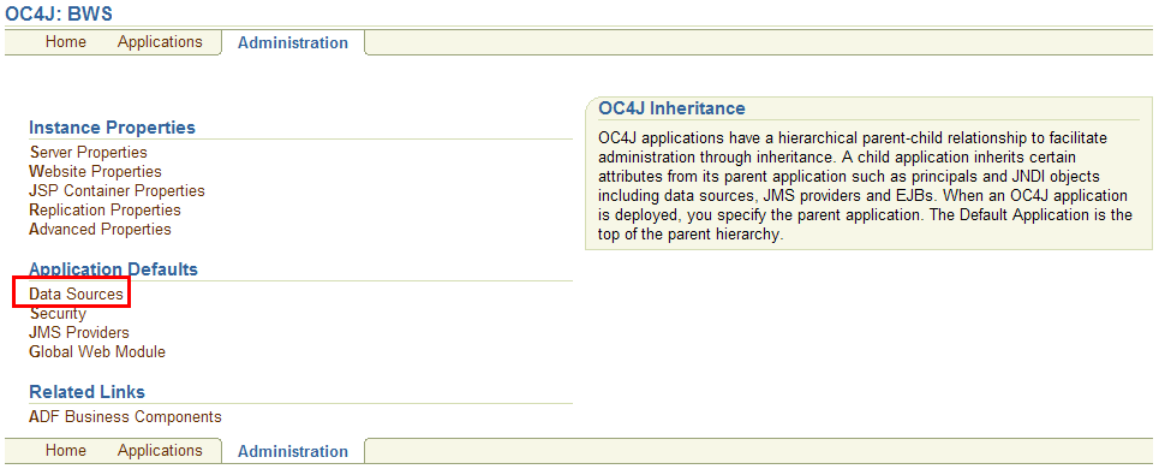
A data source provides the connection properties to the Banner database. By default, the adapter needs a data source with lookup name `jdbc/bannerws`. If you previously

installed a Banner Web Services Adapter in the OC4J instance, then the data source should already exist and you can skip this step. Otherwise, use the following steps to define the data source.

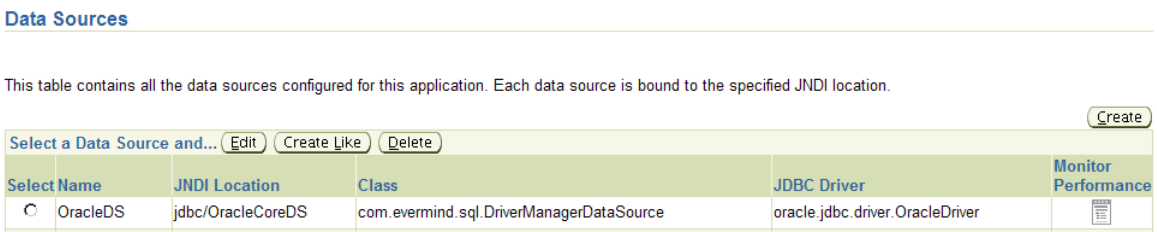
1. On the **Applications** tab, select the Banner Advancement Web Services Adapter.



2. Select the **Administration** tab. A list of options is displayed.

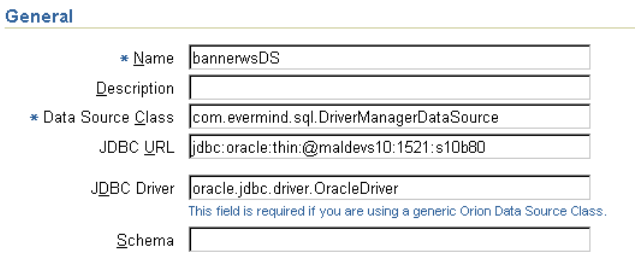


3. Select **Data Sources** from the Application Defaults section. The Data Sources page is displayed showing the current data sources for the instance.



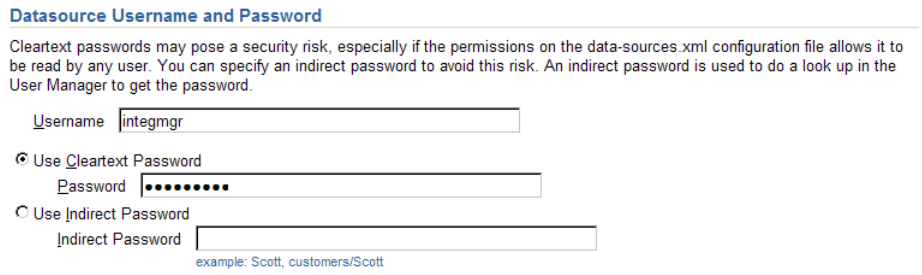
4. Click **Create**. The Create Data Source page is displayed with the following sections:
    - General
    - Datasource Username and Password
    - JNDI Locations
    - Connection Attributes
    - Properties - not needed.

5. Enter the following information in the General section:



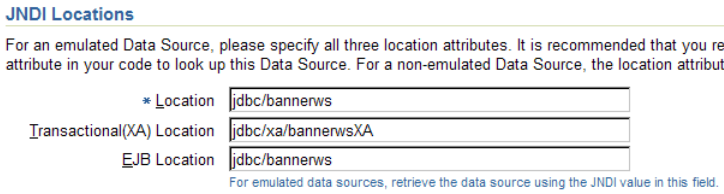
Name	*bannerwsDS* (This is an example. Enter the name of your choice.)
Data Source Class	*com.evermind.sql.DriverManagerDataSource*
JDBC URL	*jdbc:oracle:thin:@host:port:SID* where *host* = database host *port* = database listener port (usually *1521* or *1549)* *SID* = database instance
JDBC Driver	*oracle.jdbc.driver.OracleDriver*

6. Enter the following information in the Datasource Username and Password section:



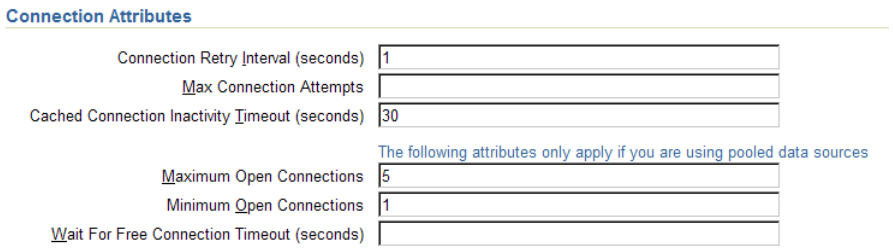
Username	*integmgr*
Use Cleartext Password	Select the **Use Cleartext Password** button and provide a password for the `integmgr` Oracle user.

7. Enter the following information in the JNDI Locations section:



Location	*jdbc/bannerws*
Transactional(XA) Location	*jdbc/xa/bannerwsXA*
EJB Location	*jdbc/bannerws*

8. Enter the following information in the Connection Attributes section:



Connection Retry Interval (seconds)	*1*
Cached Connection Inactivity Timeout (seconds)	*30*
Maximum Open Connections	Recommended value is *5*. Depending on the usage, this value can be tuned.
Minimum Open Connections	Recommended value is *1*.

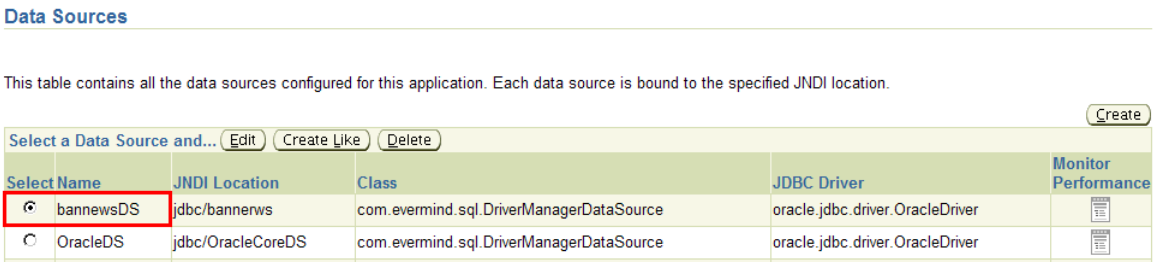
9. Click **Create**. The required data source is created in `data-sources.xml` in the `<IAS_HOME>/j2ee/<OC4J instance>/config` directory. A message confirms the action and asks if you want to restart the server.

10. Click **No**. The Data Sources page is redisplayed with the new data source.

Step 4 Define the Translation Service data source

By default, the adapter needs a data source with lookup name `jdbc/transsvc.` If you previously installed the data source in the OC4J instance, then you can skip this step. Otherwise, use the following steps to define the data source.

1. On the Data Sources page, select the data source that you just created.



2. Click **Create Like**.

3. Enter the following information in the General section, keeping the default values in all other fields:

Name	*Transsvc* (This is an example. Enter the name of your choice.)

4. Enter the following information in the JNDI Locations section:

Location	*jdbc/transsvc*
Transactional(XA) Location	*jdbc/xa/transsvc*
EJB Location	*jdbc/transsvc*

5. Click **Create**. The required data source is created in `data-sources.xml` in the `<IAS_HOME>/j2ee/<OC4J instance>/config` directory. A message confirms the action and asks if you want to restart the server.

6. Click **Yes**. The server is restarted, and a confirmation message is displayed.

7. Click **OK**. The Data Sources page is redisplayed with the new data source.

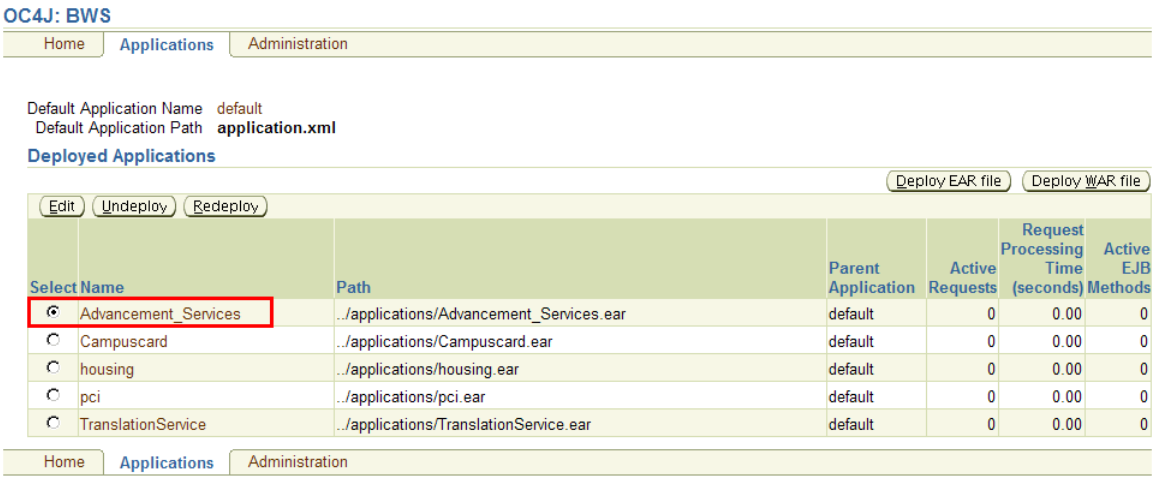
Step 5 Configure the security role and user

Before beginning this step, refer to the security configuration for your version of the Oracle Application Server.

Use the following steps to add the `bannerws` role and an administrative user to the adapter. This role and user protect the defined endpoint.

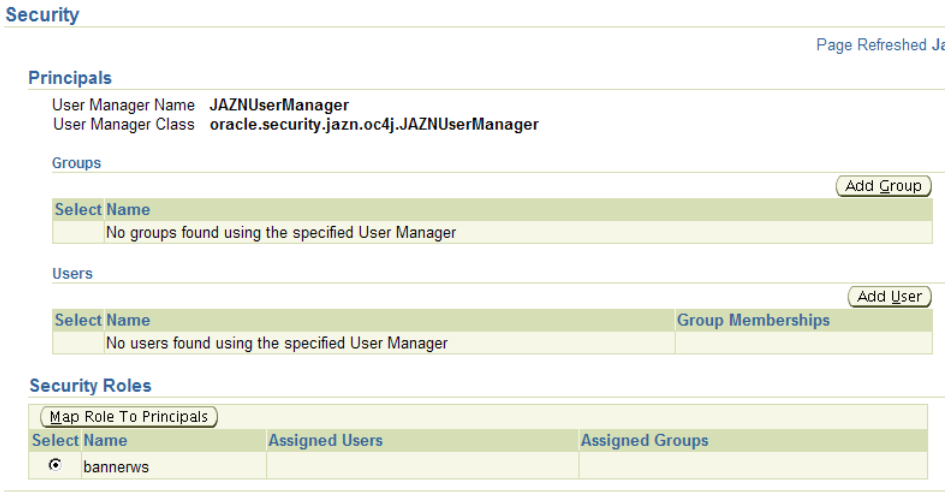
1. Navigate to the **Applications** tab for the instance where the adapter is installed.

2. Select the adapter for which security roles and users are to be defined.



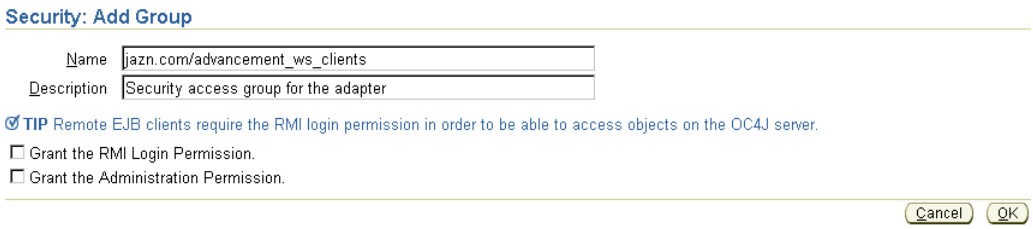
3. Click **Edit**. The Application configuration page is displayed.

4. Select **Security** from the Administration section. The Security page is displayed.



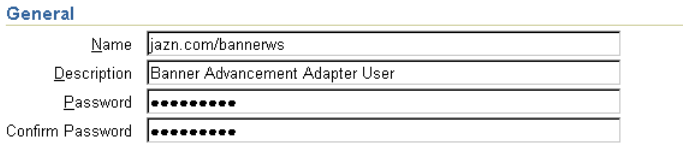
5. Click **Add Group** in the Groups section. The Security: Add Group page is displayed.

6. Enter the following information:



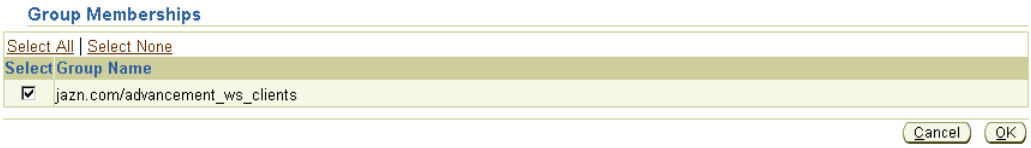
Name	*jazn.com/advancement_ws_clients*
Description	Security access group for the adapter

7. Click **OK**. The Security page is redisplayed with the new group.
8. Click **Add User** in the Users section. The Security: Add User page is displayed.
9. Enter the following information in the General section:

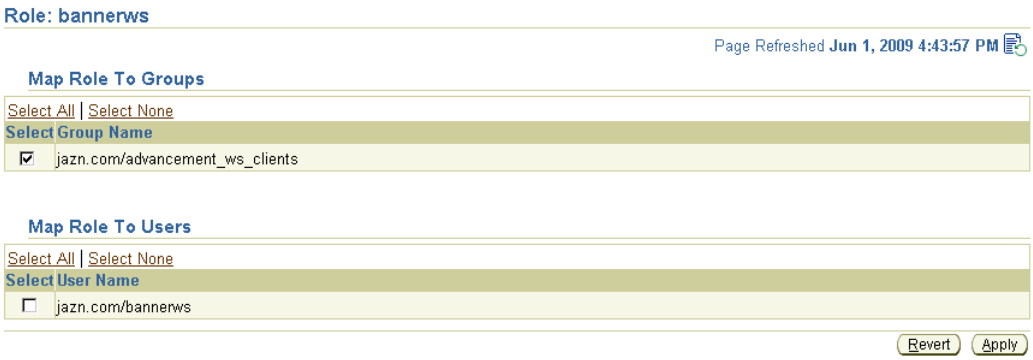


Name	*jazn.com/bannerws* (This is an example. Enter the name of your choice.)
Description	*Banner Advancement Adapter User*
Password	Password for the user being created.
Confirm Password	Confirmation of the password for the user being created.

10. Assign this new user to the `jazn.com/advancement_ws_clients` group by checking the corresponding check box in the Group Memberships section.



11. Click **OK**. The Security page is redisplayed with the new user.
12. Verify that the new user is assigned to the `jazn.com/ advancement_ws_clients` group.
13. Click **Map Role to Principals** in the Security Roles section. The Role page is displayed.



14. Select the `jazn.com/advancement_ws_clients` group name.

15. Click **Apply**. A confirmation page is displayed.

16. Click **OK**. The Role page is redisplayed.

17. Navigate to the Security page and verify that the group is mapped to the role.

18. Navigate to the Home page.

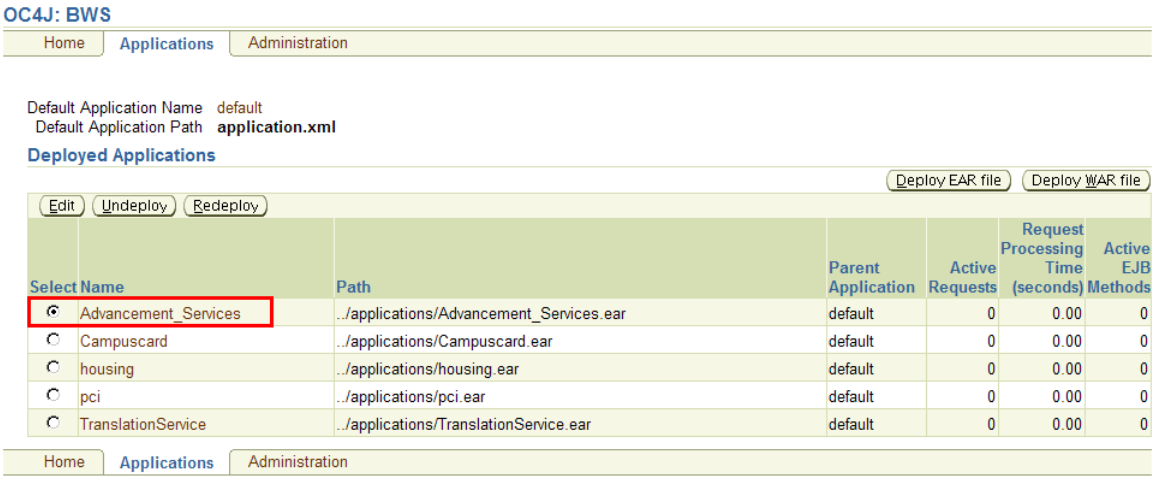
19. Click **Restart** to restart the server.

Step 6 Enable schema validation (optional)

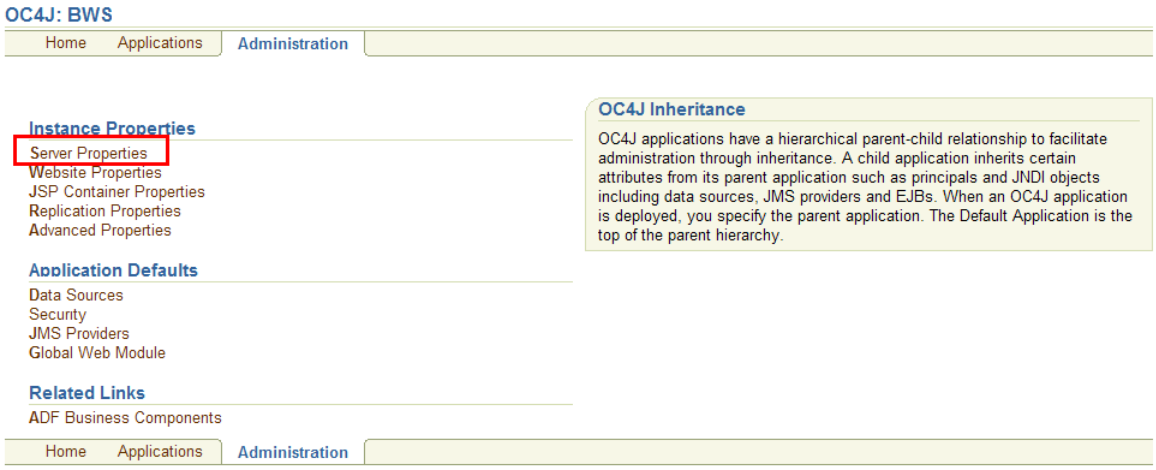
Validating XML request and response messages for each Web service invocation degrades system performance. For this reason, schema validation is disabled by default. To enable schema validation, you must set system property `BANNERWS_SCHEMA_VALIDATION` with a value of *true* for the OC4J instance where the adapter is installed. Use the following steps to enable schema validation.

1. Navigate to the **Applications** tab for the instance where the adapter is installed.

2. Select the Banner Advancement Web Services Adapter.



3. Select the **Administration** tab. A list of options is displayed.



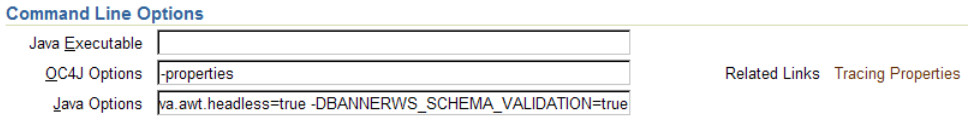
4. Select **Server Properties** from the Instance Properties section. The Server Properties page is displayed.

5. Scroll to the Command Line Options section.The corresponding value for **Java Options** might look similar to this:

```
-Xrs -server -Djava.security.policy=$ORACLE_HOME/j2ee/
home/config/java2.policy -Djava.awt.headless=true
```

6. Add the following system property at the end of **Java Options**:

```
-DBANNERWS_SCHEMA_VALIDATION=true
```



7. Click **Apply**. A message confirms the action and asks if you want to restart the server.

8. Click **Yes** to restart the server.

Step 7 Configure logging

The Banner Advancement Web Services Adapter uses Apache's log4j to log the activities performed by the application at runtime. Log4j uses a properties file to establish specific runtime options. The following options should be reviewed and modified as appropriate:

- Location of the log files - The default location is `<IAS_HOME>/j2ee/home/log`. This location should be changed to the OC4J instance where the Banner Advancement Web Services Adapter is installed.
- Logging level - The default level is *INFO*, resulting in limited information (INFO, WARNING, and ERROR level statements) being stored in log files. To provide detailed logging for initial operation, you should change the logging level to *DEBUG*.

Note

To prevent the log file from getting too big, you should change the logging level back to *INFO* after initial operation is completed. ■

Use the following steps to modify the logging options as appropriate:

1. Navigate to `<IAS_HOME>/j2ee/<OC4J instance>/applications/<Web services adapter name>/advancement_web/WEB-INF/classes`.

2. Edit `log4j.properties` as follows:

Property	Original Value	New Value
`log4j.appender.out.File`	`log/advancement_ws.log`	`../<OC4J instance>/log/advancement_ws.log`
`log4j.category.com.sungardsct`	`INFO`	`DEBUG`

3. Restart the OC4J instance for the changes to take effect.

Step 8 Update the WSDL endpoint URL (optional)

SOAP-based Web services are described via a WSDL (Web Services Definition Language) document. WSDL is an XML format for describing network services as endpoints. A WSDL document contains information about the messages that can be exchanged with the Web service, the network protocol supported, and the location of the service expressed as a URL.

The WSDL for the Banner Advancement Web Services Adapter (`banner_giving_history_service.wsdl`) is provided in patch `p1-5j4fyo_alu80100`. This file can be used to generate client-side code for accessing the Web service. Third-party testing tools, such as soapUI (www.soapui.org), can also use this file to generate XML-based test cases and test suites for testing the Web service.

If you plan to use the WSDL document for development or testing, you must update the document to reflect the actual location of the Web service (that is, the service endpoint). Once updated, the file can be transferred to a local computer or shared network location to be used, as needed, by development and test tools that require the WSDL document. The WSDL document should *not* be deployed to the application server.

Use the following steps to configure the WSDL document so it references the proper endpoint URL.

1. Locate the `banner_giving_history_service.wsdl` file provided in the `p1-5j4fyo_alu80100` patch download.
2. Open the file with a text editor or XML editor.
3. Locate the `<service>` tag in the WSDL document. The `<soap:address location>` attribute under this tag contains the following tokenized dummy URL string:

   ```
   http://@@@hostname@@@:@@@port@@@/advancement/v8_2
   ```

4. Modify the dummy URL to reflect the correct host name and port for your installation.
5. If you changed the default URL string (`/advancement`) during installation, make the corresponding change in the dummy URL.
6. Save the file.

Example

Updating the dummy URL to reflect a deployment to a server named OAS_Test that listens on port 443 would have the following result:

```
http://oas_test.somewhere.edu:443/advancement/v8_2
```

If the default URL string was changed from `/advancement` to `/advancement/bws_test`, the URL would also need to be updated as follows:

```
http://oas_test.somewhere.edu:443/advancement/bws_test/v8_2
```

With these modifications in place, testing and development tools can use the WSDL document to generate code for accessing the specific URL.

Step 9 Test the Banner Advancement Web services (optional)

Once the adapter is installed and the appropriate WSDL file is modified, you should test the exposed Banner Advancement Web service. This step is optional, but highly recommended. The degree of testing depends on the data and tools that your institution uses. For this reason, this document provides testing guidelines rather than specific steps.

Ellucian highly recommends the use of an interactive testing tool that provides visibility into Web service request and response messages. Such a tool helps functional and technical users understand the options that are available for a Banner Web service and their effect on the content of response messages. You can create schema-compliant XML messages for your specific environment, quickly inspect the results, modify Web service settings in Banner (if necessary), and execute the same request to see the resulting differences.

Several commercial and open source Web service testing tools provide these capabilities. One open source tool is eviware soapUI (www.soapui.org). This tool uses a WSDL document and associated XML schema as input to generate compliant request message stubs to which data can be added for calling the associated service. Response messages are displayed in an adjacent window for easy visibility. The tool also allows individual service requests to be tied together to form larger test suites.

Manually creating Web service requests and visually inspecting responses provide practical insight into the data returned by a Web service under specific conditions. In addition, issues with the underlying Banner configuration for a Web service are noticed more readily.

Refer to “Test cases” on page 28 for sample test cases for the GetGivingHistory Web service.

3 GetGivingHistory Web Service

The GetGivingHistory Web service allows external systems to request giving history information for a donor who is set up in Banner®. The Web service returns summary giving information and a list of individual gifts for the donor. The results are filtered as follows:

- The Outstanding Pledges total includes those pledges that are allowed to be displayed on the Web. The **Web Indicator** defined for each pledge type on the Pledge Type Validation Form (ATVPLDG) determines which pledges are allowed to be displayed on the Web.
- Details are displayed for those gifts that are allowed to be displayed on the Web. The **Web Indicator** defined for each gift type on the Gift/Payment Type Validation Form (ATVGIFT) determines which gifts are allowed to be displayed on the Web.

This Web service supports integration with iModules Encompass, but can be used for other purposes.

Message exchange

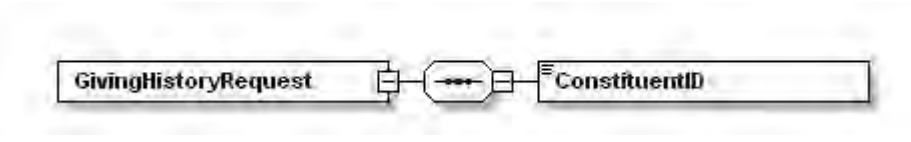
The GetGivingHistory Web service is a request/reply Web service that exchanges the following messages using the SOAP protocol over HTTP:

- GivingHistoryRequest
- GivingHistoryResponse

GivingHistoryRequest

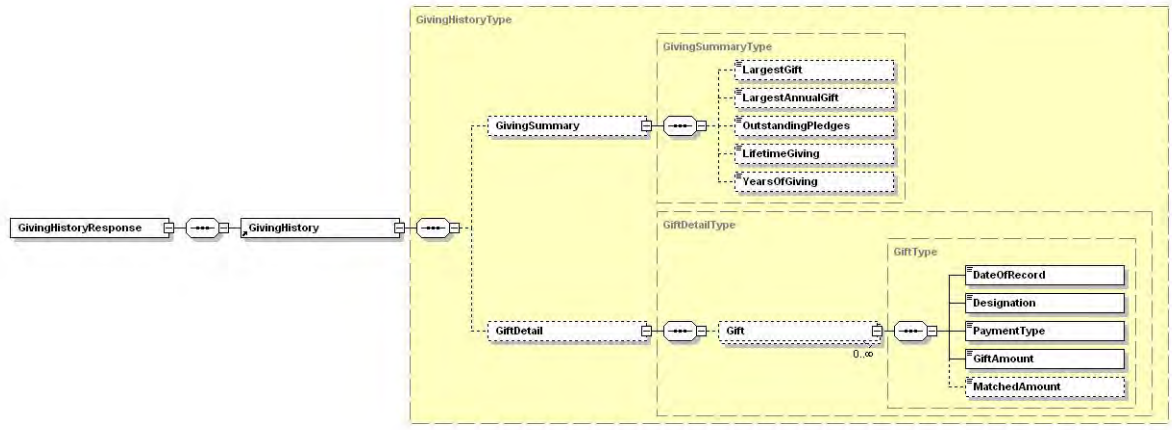
An external system uses the GivingHistoryRequest message to request giving history information from Banner. The only input parameter is the `ConstituentID`.

The following diagram shows the structure of the GivingHistoryRequest message schema.



GivingHistoryResponse

If the `ConstituentID` is found, the GetGivingHistory Web service returns giving history in the GivingHistoryResponse message. This message contains both summary and detailed information. The following diagram shows the structure of the GivingHistoryResponse message schema.



If the `ConstituentID` is found but no giving history exists, the Web service returns an empty `GivingHistory` element.

SOAP fault messages

If a valid response cannot be created as a GivingHistoryResponse message, a SOAP fault message is returned. The following situations might cause a SOAP fault message:

- The `ConstituentID` provided in the GivingHistoryRequest message is not a valid Banner PIDM (`SPRIDEN_PIDM`).
- A `ConstituentID` is not supplied in the GivingHistoryRequest message.
- A network, database, or other technical issue occurs.

Message mapping to Banner

The following tables provide a mapping between the message elements/attributes and Banner columns. The left vertical lines represent the nesting of the attributes inside the elements. Elements can nest inside other elements as well.

GivingHistoryRequest

Element/Attribute	Database Mapping
GivingHistoryRequest	
ConstituentID	SPRIDEN_PIDM

GivingHistoryResponse

Element/Attribute	Database Mapping
GivingHistoryResponse	
GivingHistory	
GivingSummary	
LargestGift	APBGHIS_HIGH_GIFT_AMT
LargestAnnualGift	Calculated
OutstandingPledges	Calculated
LifetimeGiving	Calculated
YearsOfGiving	Calculated
GiftDetail	
Gift	
DateOfRecord	AGBGIFT_GIFT_DATE
Designation	AGRGDES_DESG
PaymentType	ATVGIFT_DESC (AGBGIFT_GIFT_CODE)
GiftAmount	AGRGDES_AMT
MatchedAmount	SUM(AGRMDES_AMT)

Intended usage

Partner applications such as iModules Encompass use the GetGivingHistory Web service to display giving history to donors in a portal-based environment.

Setup requirements

The following setups determine which pledge and gift information is displayed to a donor:

- The **Web Indicator** flag defined for each pledge type on the Pledge Type Validation Form (ATVPLDG) determines which pledges are included in the Outstanding Pledges total that is displayed to a donor. If the indicator is selected for a type code, the Web service includes pledges with that type code in the total. If the indicator is not selected for a type code, the Web service excludes pledges with that type code from the total.
- The **Web Indicator** flag defined for each gift type on the Gift/Payment Type Validation Form (ATVGIFT) determines which gift details are displayed to a donor. If the indicator is selected for a type code, the Web service displays details for gifts with that type code. If the indicator is not selected for a type code, the Web service hides details for gifts with that type code.

Test cases

After the Banner Advancement Web Services Adapter is installed, you should test the exposed GetGivingHistory Web service. Testing is optional but highly recommended. The degree of testing depends on the data and tools that your institution uses.

The GetGivingHistory Web service has one input parameter, the `SPRIDEN_PIDM` of the advancement individual or advancement organization. In the Web service request, the XML tag is titled `ConstituentID`.

The following tests can help you understand the Web service. These tests are examples only. They do not reflect actual data in your database.

Advancement individual with giving history

Test GetGivingHistory using the `SPRIDEN_PIDM` of an advancement individual with known giving history.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/
soap/envelope/"
xmlns:urn="urn:sungardhe:enterprise:advancement:messages">
   <soapenv:Header/>
   <soapenv:Body><urn:GivingHistoryRequest>
         <urn:ConstituentID>301</urn:ConstituentID>
      </urn:GivingHistoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

The response message should look similar to the following:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/
soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
   <SOAP-ENV:Body>
      <GivingHistoryResponse
xmlns="urn:sungardhe:enterprise:advancement:messages">
         <GivingHistory>
            <GivingSummary>
               <LargestGift>0</LargestGift>
               <LargestAnnualGift>0</LargestAnnualGift>
               <OutstandingPledges>937.5</OutstandingPledges>
               <LifetimeGiving>1250</LifetimeGiving>
               <YearsOfGiving>1</YearsOfGiving>
            </GivingSummary>
            <GiftDetail>
               <Gift>
                  <DateOfRecord>2005-10-10</DateOfRecord>
                  <Designation>Allen Family Scholarship</
Designation>
                  <PaymentType>Check</PaymentType>
                  <GiftAmount>312.5</GiftAmount>
                  <MatchedAmount>0</MatchedAmount>
               </Gift>
               <Gift>
                  <DateOfRecord>2005-10-10</DateOfRecord>
                  <Designation>University Campaign Fund</
Designation>
                  <PaymentType>Check</PaymentType>
                  <GiftAmount>312.5</GiftAmount>
                  <MatchedAmount>0</MatchedAmount>
               </Gift>
```

```
            </GiftDetail>
         </GivingHistory>
      </GivingHistoryResponse>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Advancement individual without giving history

Test GetGivingHistory using the `SPRIDEN_PIDM` of an advancement individual without giving history.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/
soap/envelope/"
xmlns:urn="urn:sungardhe:enterprise:advancement:messages">
   <soapenv:Header/>
   <soapenv:Body><urn:GivingHistoryRequest>
         <urn:ConstituentID>50005</urn:ConstituentID>
      </urn:GivingHistoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

The response message should look similar to the following:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/
soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
   <SOAP-ENV:Body>
      <GivingHistoryResponse
xmlns="urn:sungardhe:enterprise:advancement:messages">
         <GivingHistory/>
      </GivingHistoryResponse>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Invalid advancement individual ID

Test GetGivingHistory using an invalid `SPRIDEN_PIDM`.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/
soap/envelope/"
xmlns:urn="urn:sungardhe:enterprise:advancement:messages">
   <soapenv:Header/>
   <soapenv:Body><urn:GivingHistoryRequest>
```

```
            <urn:ConstituentID>303</urn:ConstituentID>
         </urn:GivingHistoryRequest>
      </soapenv:Body>
   </soapenv:Envelope>
```

The response message should look similar to the following:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/
soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
   <SOAP-ENV:Body>
      <SOAP-ENV:Fault>
         <faultcode>Client</faultcode>
         <faultstring>*ERROR* Invalid Constituent ID.
ORA-06512</faultstring>
         <faultactor>/advancement/v8_2</faultactor>
      </SOAP-ENV:Fault>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```