

# Connecting to Oracle databases

If you need to connect to an Oracle database from Coldfusion 9 the following are some recommendations on how to configure your connection.

1. Use Oracle JDBC with OID
2. Use Macromedia without OID
3. Using Macromedia with JDBC connection string - to allow failover if your databases are in a RAC configuration

## 1. Using Oracle JDBC with OID

If you choose to use the Oracle JDBC driver you will need to specify the "Other" Data Source when configuring Coldfusion via CFADMIN

The screenshot shows the 'Data & Services > Datasources > Other' configuration page in ColdFusion Administrator. The 'inhouse' data source is selected. The 'CF Data Source Name' is 'oracle\_db'. The 'JDBC URL' is 'jdbc:oracle:thin:@ldap://oidmaster1.cit.cornell.edu:389/ou=org,ou=oracle,ou=example.com'. The 'Driver Class' is 'oracle.jdbc.driver.OracleDriver'. The 'Driver Name' is 'Oracle JDBC'. The 'User name' is 'username'. The 'Password' is masked with asterisks and has a '(16-character limit)' note. There is a 'Description' field and a 'Show Advanced Settings' button at the bottom.

It is not possible to specify more than one OID ldap server.

You'll also need to disable "Sandbox Security" (it is unknown why this is a problem, this does not always "fix" the problem).

The screenshot shows the 'Security > Sandbox Security' page. It has a checkbox labeled 'Enable ColdFusion Security' which is currently unchecked. Below it, text explains that ColdFusion's sandbox security uses the sandbox settings of the directory one level up. A 'Note' states: 'You can configure these settings per instance in the ColdFusion Administrator online Help.' At the bottom, it says 'To use sandbox security in the multiserver environment, see the ColdFusion Administrator online Help.'

## 2. Using Macromedia with OID

If you choose to use the built-in Oracle driver you will need to use the [Oid Lookup](#) tool to retrieve the servername of the backend database. Please note that if the backend database moves you will need to update your connection information!

The screenshot shows the 'Oid Lookup' tool interface. It has a 'Search' tab selected. The 'Search' section has a text input for 'Instance Name' with 'inhousep' entered, and a 'Database Host' input field. There are 'Reset' and 'Search' buttons at the bottom.

The screenshot shows the 'Search Results' section of the Oid Lookup tool. It states 'The results of your search are listed below. Click the edit link to update a value.' and 'One item found. 1'. A table lists the results:

Instance Name	Oracle Connection String
inhousep	(DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP)HOST = oidm18.ait.cit.cornell.edu)PORT = 1521)) (CONNECT_DATA = (SERVICE_NAME = inhousep.ait.cit.cornell.edu)))

The screenshot shows the 'Data & Services > Datasources > Oracle' configuration page. The data source is named 'inhoused\_macromedia'. The 'CF Data Source Name' is 'inhoused\_macromedia'. The 'SID Name' is 'inhousdb'. The 'Server' is 'odson16.serverfarm.cornell.edu' and the 'Port' is '1521'. The 'User name' is 'username' and the 'Password' is masked with asterisks, with a note '(16-character limit)'. There is a 'Description' field which is empty. A 'Show Advanced Settings' button is at the bottom left.

### 3. Using Macromedia with JDBC connection string - to allow failover if your databases are in a RAC configuration

If you have your databases in a RAC setup with CIT DBA's and OID is not working for you, here is an example of a jdbc connection string to use. You'll need to use the above OID lookup tool to find the hostnames and service name.

```
jdbc:macromedia:oracle://host1-vip.serverfarm.cornell.edu:1521;SERVICE_NAME=mydb11g.cit.cornell.edu;
sendStringParametersAsUnicode=false;MaxPooledStatements=1000;AlternateServers=(host1-vip.serverfarm.cornell.edu,
host2-vip.serverfarm.cornell.edu)
```

To enter the above, in CFAdmin, Create a new DSN and you'll need to choose "Other" in the DSN Driver. In the new window, enter your DSN name, the jdbc URL/connection string (however it looks from above), Driver Class should be "macromedia.jdbc.MacromediaDriver", Driver Name can be whatever you choose, and then the appropriate username and password to access.

## Installing updated Oracle JDBC Drivers

If you need to install an updated Oracle JDBC driver (i.e. Oracle 12g), you'll need to upload a "jar" file that contains the updated driver to your hosting environment.

This can be done by downloading the driver from Oracle's website (odbc6.jar for Java 1.6 or odbc7.jar for Java 1.7) and uploading the file into your "jars" directory (next to your htdocs directory). Once the file is uploaded you'll need to restart your Coldfusion instance using the Hosting Dashboard.