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eServices Deployment Guide

ODBC Connection

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ODBC Connection

Important

The information on this page was current at the time of the Interaction Server 8.5.1 release. For Interaction Server 8.5.3, refer to the [Migrating to ODBC from DB Server](#) page.

These directions apply primarily to Linux. Directions on deploying ODBC drivers for Windows are available on [this page](#) in the Integrated Capture Points documentation.

Install unixODBC

Download

For compatibility purposes, the easiest and fastest way to do this is to download a prebuilt RPM or package that is compatible with your current Linux version.

Important

The [Microsoft web page about the Microsoft ODBC Driver 11 for SQL Server on Linux](#) refers to only version 2.3.0 of unixODBC Driver Manager.

You can also

- Download, build and install unixODBX from the source provided at <http://www.unixodbc.org/>. Follow the instructions on the page.
- Build your own rpm. Information is at https://fedoraproject.org/wiki/How_to_create_an_RPM_package

Warning

Genesys has no responsibility or license for unixODBC, which is a third-party package. Any and all of these unixODBC installation options are merely recommendations, and it is your responsibility to choose one that fits your purpose best. There are dependencies for each of these options. Also, environments with alternative third-party drivers, database accelerators and ODBC Managers are not supported on compatibility issues. Genesys recommends that you not use ODBC drivers for different RDBMS (i.e. ORACLE and DB2) on UNIX platforms simultaneously.

Check

Once you have downloaded and installed unixODBC, check the **odbcinst.ini** (under **/etc** in the installation directory) and **odbc.ini** (in **\$HOME/.odbc.ini**) files. This guide will refer to the unixODBC installation directory as the environment variable **\$UNIXODBC**.

Install ODBC drivers

Oracle

Install the ODBC Driver

1. Download the latest version of the ODBC driver from <http://www.oracle.com/technetwork/topics/linuxx86-64soft-092277.html>. You will need these two packages:
 - Instant Client Package - Basic: All files required to run OCI, OCCI, and JDBC-OCI applications
 - Instant Client Package - ODBC: Additional libraries for enabling ODBC applications
2. Unzip both packages to the same directory, which this guide will refer to as environment variable **\$DRIVER**.
3. From the **\$DRIVER** directory, run the following:

```
./odbc_update_ini.sh $UNIXODBC $DRIVER [<Driver_Name>] [<DSN>]
```

For example,

```
./odbc_update_ini.sh $UNIXODBC $DRIVER oracleodbc-12.1 ora
```

4. Set the three environment variables **ORACLE_HOME**, **LD_LIBRARY_PATH**, and **TNS_ADMIN**.
 - **TNS_ADMIN** is the directory containing the **TNSNAMES.ora** file, which describes Oracle connections. If such a file does not exist, you must create it.
 - **ORACLE_HOME** is the directory where the **bin** and **lib** directories are located for the Oracle client.
 - **LD_LIBRARY_PATH** is the load library path.

For example,

```
export ORACLE_HOME=$DRIVER
export LD_LIBRARY_PATH= $UNIXODBC/lib/:$DRIVER/
export TNS_ADMIN=/etc/oracle
```

Sample

This is a sample of **odbc.ini** with a configured DSN:

```
[ora]
Application Attributes = T
Attributes = W
BatchAutocommitMode = IfAllSuccessful
BindAsFLOAT = F
CloseCursor = F
```

```
DisableDPM = F
DisableMTS = T
Driver = OracleODBC-12.1
DSN = ora
EXECSchemaOpt =
EXECSyntax = T
Failover = T
FailoverDelay = 10
FailoverRetryCount = 10
FetchBufferSize = 64000
ForceWCHAR = F
Lobs = F
Longs = T
MaxLargeData = 0
MetadataIdDefault = F
QueryTimeout = T
ResultSets = T
ServerName = GENESYS_INX
SQLGetData extensions = F
Translation DLL =
Translation Option = 0
DisableRULEHint = T
UserID = SYSTEM
Password = system
StatementCache=F
CacheBufferSize=20
UseOCIDescribeAny=F
MaxTokenSize=8192
```

Important

If Interaction Server uses ODBC to connect to the Oracle database in your environment, you must set the option **Lobs** to T in the **odbc.ini** file.

This is a sample of **odbcinst.ini**:

```
[OracleODBC-12.1]
Description=Oracle ODBC driver for Oracle 12g
Driver=/usr/lib/oracle/12.1/client64/lib/libsqora.so.12.1
Setup=
FileUsage=
CPOutput=
CPTimeout=
CPReuse=
Driver Logging=7
```

In this example, the DSN name is ora. ServerName is the corresponding service name in **TNSNAMES.ora**:

```
GENESYS_INX =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = fakehost)(PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = genesys_inx)
  )
)
```

MS SQL

Important

MS SQL officially supports only version 2.3.0 of unixODBC

1. Run

```
export LD_LIBRARY_PATH= $UNIXODBC/lib
```

2. Follow the installation instructions given at <http://www.microsoft.com/en-us/download/details.aspx?id=36437>

If you want to use the MSSQL Driver with unixODBC version 2.3.1 or greater, you must perform the installation with the flag -force, and afterwards you must do the following:

1. Locate the file **libodbcinst.so.2** that was installed by unixODBC.

2. Make a symbolic link to it:

```
sudo ln -s libodbcinst.so.2 usr/lib64/libodbcinst.so.1
```

Odbcinst.ini should now contain the following:

```
[ODBC Driver 11 for SQL Server]
Description=Microsoft ODBC Driver 11 for SQL Server
Driver=/opt/microsoft/msodbcsql/lib64/libmsodbcsql-11.0.so.2270.0
Threading=1
UsageCount=1
```

3. Append a DSN entry name to **odbc.ini**, for example:

```
[sqltest]
Driver = ODBC Driver 11 for SQL Server
DSN = sqltest
Trace = No
ServerName = fakehost
UserID = genesys
Password = genesys
Database = genesys_inx
```

DB2

Install the ODBC Driver

1. Download the IBM Data Server Driver for ODBC and the CLI (64-bit) driver for 64-bit operating systems from <http://www-01.ibm.com/support/docview.wss?uid=swg24029746>
2. Decompress the driver package in the desired location (for example: **/usr/local/db2odbc**). We will refer to this location as \$DRIVER.
3. Add the driver manually by editing the **odbcinst.ini** file to add the following:

```
[DB2]
Description=DB2 ODBC Driver
Driver=$DRIVER /odbc_cli/clidriver/lib/libdb2o.so
```

4. Save the file.

Test the Connection

1. Create a new DSN:
 1. Create a file **db2cli.ini** in **\$DRIVER/odbc_cli/clidriver/cfg**
 2. Add this section to it:

```
[SAMPLE_ODBC_DSN_NAME]
hostname=your_db2_server_host
port=your_db2_server_port
database=name_of_the_DB
protocol=TCPIP
autocommit=0
```

3. Save the file
2. Now you must add an entry to **odbc.ini** so unixODBC will know about that particular DSN: to do this, add the following section to `odbc.ini`:

```
[SAMPLE_ODBC_DSN_NAME]
Driver=DRIVER_NAME_FROM_ODBCINST.INI
```

In our case the driver name is DB2 (see above), and the line will look like

```
Driver=DB2
```

Detailed installation instructions are at <https://www-304.ibm.com/support/docview.wss?uid=swg21418043>

PostgreSQL

Information about PostgreSQL is provided in the [Framework Database Connectivity Reference Guide](#) and at <http://www.postgresql.org/>.

Configure the DAP

This section applies to Interaction Server and [Event Logger](#). Related information about Database Capture Point is in a [separate location](#).

For an ODBC connection, you must configure the Database Access Point (DAP) associated with the Application in question, as follows:

1. Add an option called **dbprotocol** to the **[settings]** section of the Interaction Server DAP and give it the setting `odbc`. For the Event Logger DAP, the equivalent is the **delivery-protocol** option in the **[logger-settings]** section. This forces Interaction server to use ODBC to access the databases.
2. In Genesys Administrator, enter the following in the **[DB Info]** section of the **Configuration** tab (in Configuration Manager, on the **DB Info Tab**):
 - DBMS Name
 - DBMS Type

- Database Name
- User Name
- Password

3. Optionally, specify a non-default driver, as described below.

To make switching to ODBC easier for existing installations, Interaction Server will try to build the ODBC connection strings itself based on the information that is available in the DAP. During this process, Interaction Server uses the following default names for the drivers:

Database Type	Default Driver
MS SQL	{SQL Server Native Client 10.0}
DB2	{IBM DB2 ODBC DRIVER - DB2COPY1}
Oracle	{Oracle in OraClient11g_home1}
PostgreSQL	{PostgreSQL ANSI(x64)}

If your configuration uses a different driver name (as in the examples of Oracle and DB2 above), you must provide the actual driver name:

1. Locate or create the **connection-string** option in the **[settings]** section.
2. The value of **connection-string** is a list of key-value pairs separated by semicolons (;).
 - To specify the actual driver, give it a value of `driver=<driver_name>`.
 - If your database server is not running on the default port (1433 for MSSQL, 1521 for Oracle and 50000 for DB2), you must also provide the port number by adding `port=<actual_port>` to the value of **connection-string**; for example, `driver=DB2 ODBC Driver;port=1234`.

DSN

You can also have Interaction Server use a DSN that has been configured in your system. To do this, locate or create the **connection-string** option in the **[settings]** section of the DAP (the **[logger-settings]** section in the Event Logger DAP), and set it to `DSN=<name_of_the_dsn>`. With this method, the user name and password to connect to the database are taken from the settings on the **DB Info** tab and do not need to be provided in the DSN properties.

Test the Connection

To test the connection, run the command

```
Isql -v [DSN name]
```

If the proper credentials are not configured in the **odbc.ini** file, you may have to add them as parameters of this command; for example,

```
Isql -v [DSN name] [username] [password]
```

Related information can be found on the pages linked to [this page](#) in the Integrated Capture Points

documentation.