ODBC CONNECTIVITY BETWEEN SQL AND COGNOS BI SERVERS

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IBM recommends Progress® DataDirect® for ODBC drivers for connecting IBM Cognos BI Server to data located in Microsoft SQL Server. IBM Cognos customers can experience superior data access performance and greatly simplified setup via the drivers' streamlined wire protocol architecture. The following tutorial will help you get connected to SQL Server as quickly as possible so that you can start using Cognos to access SQL Server data today.

The Preliminary Steps Are

1. Install IBM Cognos 8 Business Intelligence Server on Linux.

2. Setup The Great Outdoors Company Sample with SQL Server as the reporting database.

3. Install Progress DataDirect for ODBC using the instructions in the Progress DataDirect for ODBC Installation Guide. You can download a free, 15-day trial of the IBM-certified Progress DataDirect drivers from http://forms.progress.com/forms/cognos53

The Following Sections Describe the Next Steps Needed to Use your ODBC Driver with the IBM Cognos BI Server

1. Configure the ODBC Data Source to SQL Server reporting database

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Configure ODBC Data Source to SQL Server Reporting Database

Set up the ODBC environment, configure the SQL Server data source, and test connect by following the instructions from the document "Quick Start: Progress DataDirect Connect Series for ODBC Drivers on UNIX and Linux."

A Linux-based example of the odbc.ini configuration file with data sources for GOSALES and GOSALESDW sample databases is below:

```
[ODBC Data Sources]
SQLServer Wire Protocol=Progress DataDirect 5.3 SQL
Server Wire Protocol

[ODBC]
IANAAppCodePage=4
InstallDir=/opt/odbc32v53
Trace=0
TraceFile=odbctrace.out
TraceDll=/opt/odbc32v53/lib/odbctrac.so

[GOSALES]
Driver=/opt/odbc32v53/lib/ivmsss23.so
Description=Progress DataDirect 5.3 SQL Server Wire Protocol
Address=ntsl2003a,1433
Database=gosales

[GOSALESDW]
Driver=/opt/odbc32v53/lib/ivmsss23.so
Description=Progress DataDirect 5.3 SQL Server Wire Protocol
Address=ntsl2003a,1433
Database=gosalesdw
```

A sample Linux-based environment is below that assumes the Cognos BI Server has been installed to `/opt/Cognos/c8,` and the connect for ODBC drivers have been installed into `/opt/odbc32v53`:

```
[root@lxslrhel4a c8]# echo $LD _ LIBRARY _ PATH
/opt/cognos/c8/bin:/opt/odbc32v53/lib
[root@lxslrhel4a c8]# echo $ODBCINI
/opt/odbc32v53/odbc32v53.ini
```

Restart the IBM Cognos 8 Service from the IBM Cognos Configuration Console

Setup Cognos 8 BI environment shared library path such that c8_ location/bin is listed before the ODBC shared library path. Shared library paths are listed below by platform.

AIX: LIBPATH
HP-UX: SHLIB_PATH
Solaris: LD_LIBRARY_PATH
Linux: LD_LIBRARY_PATH

For example, on Linux, the shared library path looks like

```
[root@lxslrhel4a c8]# echo $LD _ LIBRARY _ PATH/opt/
cognos/ c8/bin:/opt/odbc32v53/lib
```

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Configure ODBC Connection to SQL Server in IBM Cognos Administration

1. Open the IBM Cognos Connection by connecting to the IBM Cognos 8 portal and clicking IBM Cognos Content on the Welcome page.
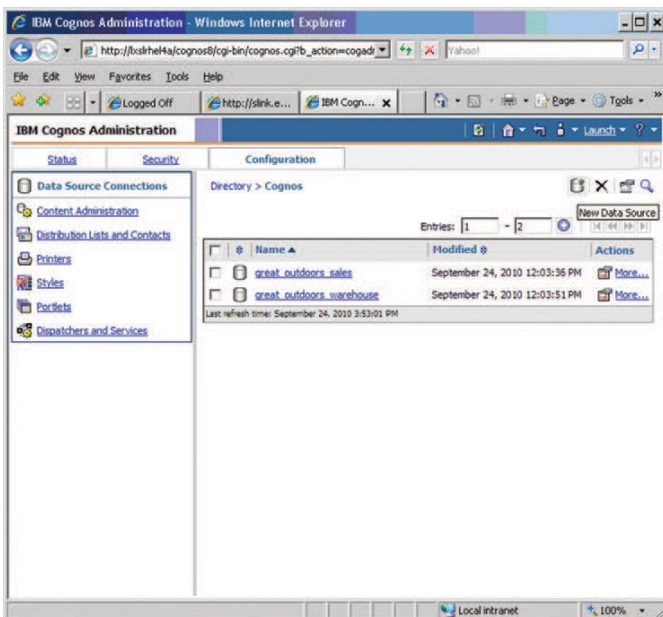

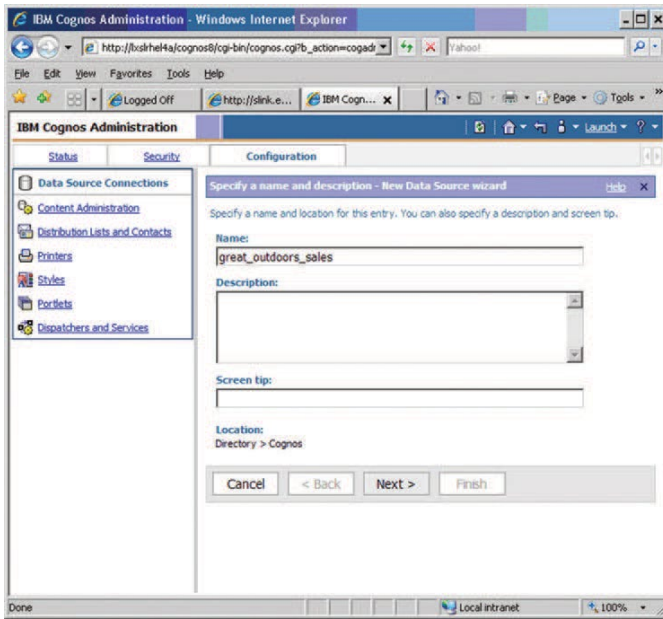**2.** In the upper-right corner, click Launch, IBM Cognos Administration.
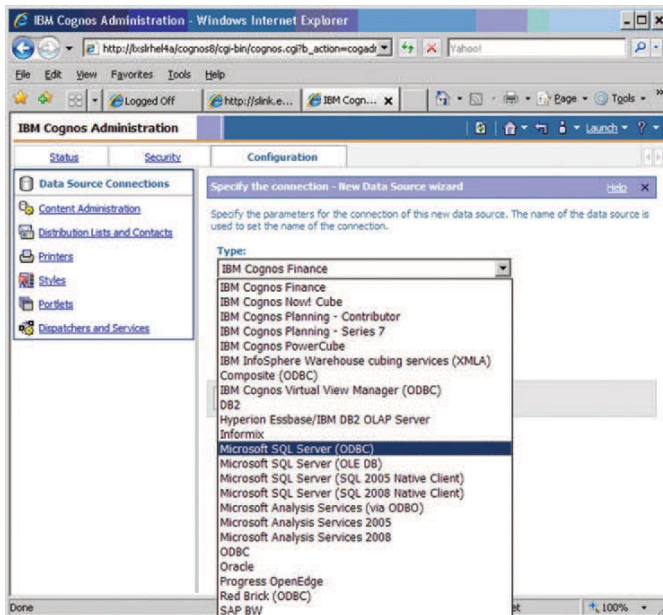
![Progress]
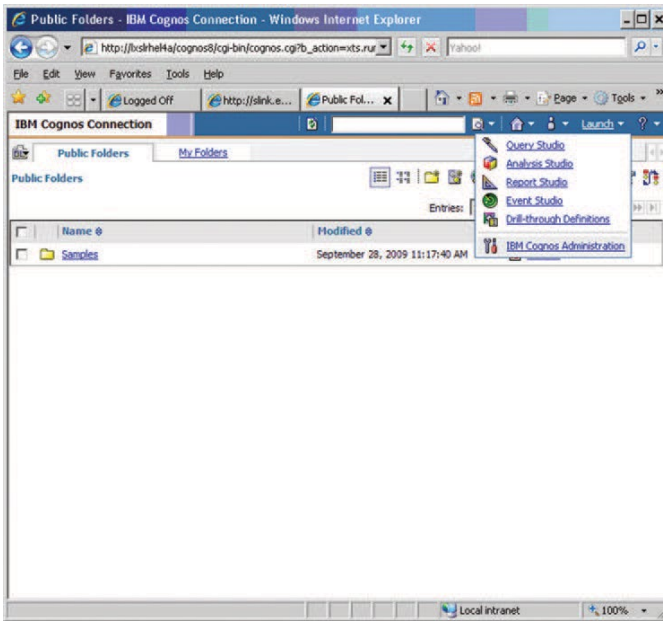
3. Click the Configuration tab.

4. Click the new data source button.

**5.** In the Name box, type great_outdoors_sales and then click Next.

6. In the connection page, choose Microsoft SQL Server (ODBC), select an isolation level, and then click Next.


7. The connection string page for the selected database appears. In the Database name box, type the ODBC Data Source name configured in the odbc.ini file, GOSALES.

IBM Cognos 8 samples require TCP/IP connectivity with SQL Server. Ensure the SQL Server Security is set to SQL Server and Windows, instead of Windows Only. The samples use SQL Server security for authentication.
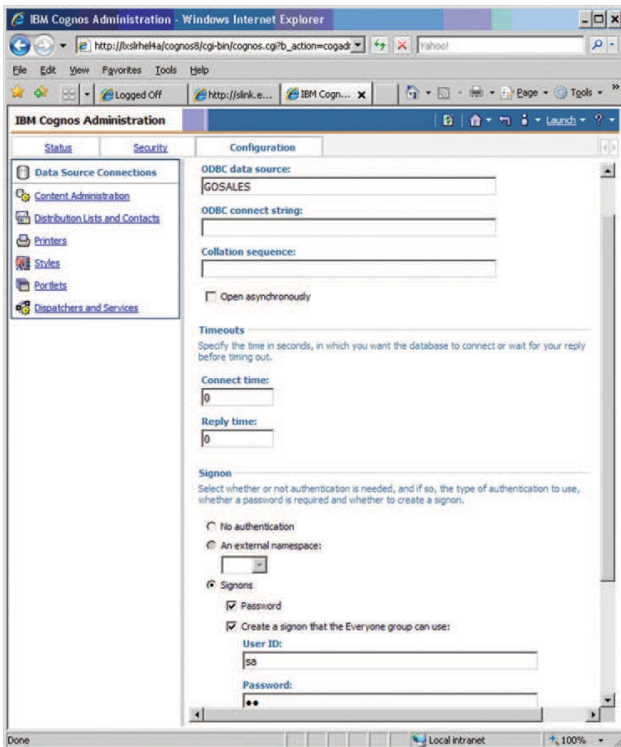
8. Under Signons, select the check boxes of both Password and the Create a signon that the Everyone group can use, type the user ID and password for the user that you created when you restored the databases, and then click Finish.
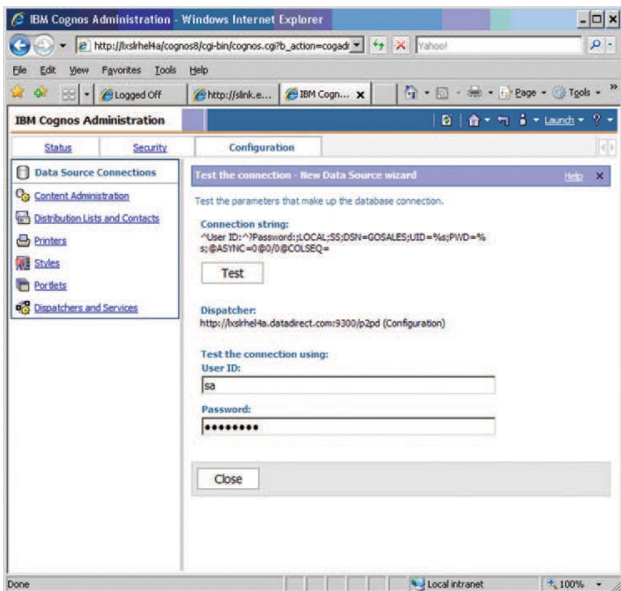
Tip: To test whether the parameters are correct, click Test the connection….Click Finish.

Note: The connection string must contain SS for SQL Server connectivity using the Progress DataDirect for ODBC driver:

```
^User ID:^?Password:;LOCAL;SS;DSN=GOSALES;UID=%s;PWD= %s;@ASYNC=0@0/0@COLSEQ=
```

9. Repeat steps 4 to 9 for the GOSALESDW samples database or schema, and type great_outdoors_warehouse in step 5.

![Progress]

Run Sample Report, "Gross Profit for Bella Eyewear Brand"

1. From Cognos Home, navigate to Public Folders > Samples > Models > GO Sales (query).

2. Run the report to fetch data back from the SQL Server Reporting Database, Gross Profit for Bella Eyewear Brand.

Summary

The sample data in the report has been successfully retrieved from SQL Server using the Progress DataDirect ODBC driver. You can now follow these steps to configure ODBC connectivity to your business' reporting data in SQL Server for use in IBM Cognos BI Server.

Progress DataDirect offers 32-bit and 64-bit wire protocol drivers for data sources in addition to SQL Server, including Oracle, DB2, Sybase, MySQL, PostgreSQL, and Informix for all platforms supported by the IBM Cognos BI Server including Windows. Progress DataDirect can meet your IBM Cognos connectivity needs for any data source including mainframe integration with flat files such as VSAM, hierarchical databases such as IMS DB and Adabas, or relational databases such as DB2; or by building a custom driver with the Progress® DataDirect® OpenAccess™ SDK. Please visit web. datadirect.com for more information.

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Worldwide Headquarters

Progress, 14 Oak Park, Bedford, MA 01730 USA Tel: +1 781 280-4000 Fax: +1 781 280-4095

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