

# ***Configuring Warehouse Builder Data Sources: Microsoft SQL Server on NT***

## ***Overview***

*Note:* If you have STRATEGY™ 4.0 or 4.1, you can also view information about configuring Warehouse Builder data sources for SQL in the STRATEGY 4.0 or 4.1 *Administrator's Guide*.

Warehouse Builder can pull data from Microsoft® SQL Server™ databases on the NT® platform. Here are the general setup steps:

- 1. Verify your STRATEGY installation.** Install the Enterprise Server on your SQL Server NT PC.
- 2. Modify the showcase.cfg file.** The file contains a Global Properties section and a Driver Definition Properties section.
- 3. Enter license information.** Add your new password.
- 4. Start the Enterprise Server.** The Enterprise Server links your control server and your database.
- 5. Create a data source mapping.** Map an ODBC connection used at definition time to the Enterprise Server connection used at run time.
- 6. Connect to your new data source.** Open your SQL data with Warehouse Builder.

## ***Prerequisites***

Before you begin configuration, make sure your environment is ready:

- STRATEGY.** Requires these components:
  - **Warehouse Manager Server.** Control server on your iSeries (AS/400).
  - **Warehouse Builder Client.** Specifies SQL Server data source and target table.
  - **Warehouse Manager Client.** Configures Data Source Mapping.
  - **Enterprise Server.** Provides the connection between the Warehouse Builder control server on the iSeries and the database. Install on NT. The **showcase.cfg** file is installed with Enterprise Server.
- Microsoft SQL Server.**
- SQL database.** Must run on NT.
- License Password.** Contact your account executive if you don't already have a password.

- ❑ When you are configuring data sources from non-DB2 systems, the user profile CCSID for the Warehouse Builder running distributions *cannot* be 65535 (\*HEX). On Japanese systems, the CCSID *cannot* be 290, or 5026.

## Configuring Your Environment

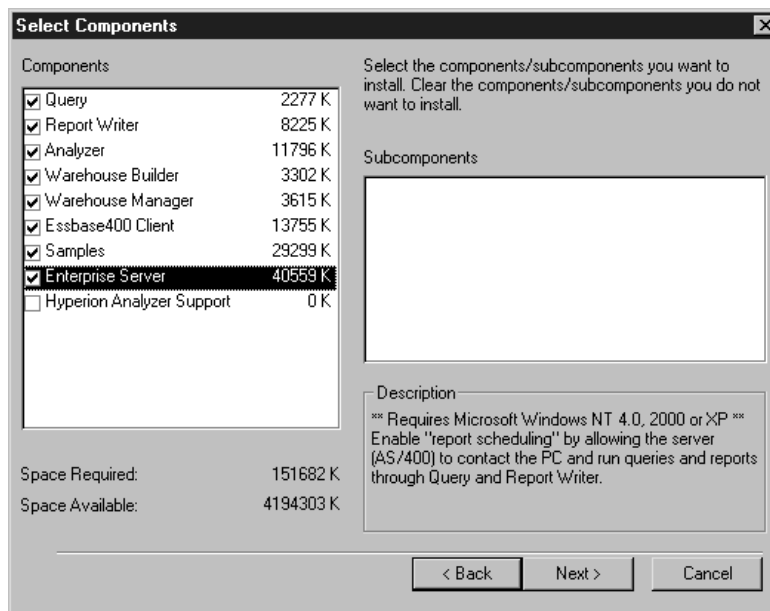
The next sections lead you through the steps to configure your STRATEGY environment to pull data from your SQL database with Warehouse Builder.

### Step 1: Verify Your STRATEGY Installation

- ▶ Verify that you have installed Warehouse Manager Server on the iSeries.
- ▶ Verify that you have installed STRATEGY client components, including Warehouse Builder Client, Warehouse Manager Client, and the Enterprise Server on your SQL Server NT PC. To install the Enterprise Server on NT, select it in the Select Components dialog box (see Figure 1). The Enterprise Server performs scheduling tasks and controls Warehouse Builder pulls from Non-DB2 data sources.

Figure 1

Selecting STRATEGY Installation Components



- ▶ Once the Enterprise Server is installed on the SQL Server NT PC, proceed to Step 2 to update configuration settings in the showcase.cfg file.

### Step 2: Modify showcase.cfg File

The showcase.cfg file was installed with the Enterprise Server component. If you cannot find the file on your system, make sure you installed the Enterprise Server.

- Use a text editor to open your showcase.cfg file. It is located in the folder where you installed STRATEGY.

**Example:** C:\Program Files\ShowCase STRATEGY\proddata\config\showcase.cfg

*Note:* You can copy the configuration file to the userdata directory. For example: C:\Program Files\ShowCase STRATEGY\userdata\config\showcase.cfg

When the Enterprise Server starts, it reads the configuration files from the proddata and userdata directories. Configuration file properties in the userdata directory will override those in the proddata directory.

STRATEGY installations will never overwrite the userdata directory. Therefore, you won't lose userdata directory settings when you install new software.

- First, update the JDBC driver configuration in the showcase.cfg file.

The showcase.cfg file contains several comments for both SQL and Oracle. It is broken up into a Global Properties section and a Driver Definition Properties section:

### **Global Properties**

The Global Properties section contains a classpath entry and a port entry:

- For SQL Server you do not need to specify a classpath. On NT, a JDBC driver (i-net SPRINTA driver) is loaded which is already specified in the classpath.
- The default port is 43419. If there is no entry specified, 43419 will be used.

### **Driver Definition Properties**

In the Driver Definition Properties section, locate the [SQLServerDataSource1] entry.

- You need a class name for the JDBC driver. One will be created at install time to point to the driver installed with STRATEGY. For example, an entry looks like this:  
showcasecorp.driverClassName=com.inet.tds.TdsDriver
- You also need to specify the URL to use when using the i-net SPRINTA driver to connect to SQL Server. The general format is:

```
jdbc:inetdae7:<sql-server-IP address>:<sql-server-port>?database=<database>
```

You can use either an IP address or a specified name for the <sql-server-IP address>.

For example, to configure a URL to connect to SQL Server database MASTER which is located on NT server DEPNT900 and is listening on the default port, the entry would look like this:

```
showcasecorp.driverURL=jdbc:inetdae7:DEPNT900:1433?database=MASTER
```

*Note:* There is also a description and example in the showcase.cfg file.

Once you have made all necessary changes, save and close the showcase.cfg file.

### **Step 3: Enter License Information**

Now you need to enter the license for the Enterprise Server on the NT PC. You should have received a password for this along with the passwords for your other products. It is based on the PC name and will fail to update if the name is not correct.

- ▶ Open the MS-DOS command prompt.
- ▶ At the DOS prompt, change the directory to the bin directory where you installed STRATEGY.  
**Example:** C:\Program Files>ShowCase STRATEGY\bin
- ▶ To update your license information, run the chgscaut.bat file with three parameters, EXPDATE, the password expiration date  
HOSTNAME, the name of the NT PC  
PASSWORD, the password sent by ShowCase, a division of SPSS

Type the following:

```
chgscaut EXPDATE=YOUREXPDATE HOSTNAME=YOURPCNAME  
PASSWORD=YOURPASSWORD
```

**Example:**

```
chgscaut EXPDATE=12312002 HOSTNAME=SQLSERVER1 PASSWORD=SCC123456DE
```

*Note:* These entries are case sensitive and must be in capital letters. The command is lower case.

- ▶ When you have updated your file, exit the DOS window.
- ▶ You can verify your password information by looking at the license.cfg file in the same path as the showcase.cfg file. The license.cfg file will not exist until the CHGSCAUT command has been run.

### **Step 4: Start the Enterprise Server**

- ▶ On the Windows Start menu, choose:
  - Programs
  - ShowCase STRATEGY
  - Enterprise Server

When the Enterprise Server starts, you will see a message that config files were loaded and a final message indicating that the server is listening on port 43419.

You can minimize this window, but do not close it.

### **Step 5: Create a Data Source Mapping**

Here you will save your data source information on Warehouse Manager Server and specify the Enterprise Server information to use at run time.

- ▶ Open Warehouse Manager Client and connect to your iSeries data source.
- ▶ On the Manage menu, choose Data Source Mapping.  
This opens the Data Source Mapping dialog box.
- ▶ Click Add.  
This opens the Add an ODBC to JDBC Data Source Mapping dialog box.
- ▶ In the Data Source Name drop-down box, choose the data source you want to map.

Figure 2  
Choosing your ODBC Data Source

The screenshot shows a dialog box titled "Add an ODBC to JDBC Data Source Mapping". It has two main sections:

- ODBC Connection:**
  - Data Source Name:** A dropdown menu showing "dep sql server master" and a "Retrieve" button.
  - SQL Server Name:** A text box containing "RO-DPEPERSON1".
  - SQL Database Name:** A text box containing "MASTER".
- Remote JDBC Connection:**
  - DNS Name or IP Address:** An empty text box.
  - Port Number:** A text box containing "43419" and a "Retrieve" button.
  - Driver Definition Name:** An empty text box.
  - Driver Definition Properties:** A table with two columns: "Property Name" and "Property Value". The table is currently empty.

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

- ▶ Click Retrieve.
- ▶ At the prompt, connect to your SQL ODBC driver
- ▶ In the DNS Name or IP Address section, type the name or IP address of the PC running Enterprise Server.
- ▶ Type your Enterprise Server port number. Typically, the port number is 43419.

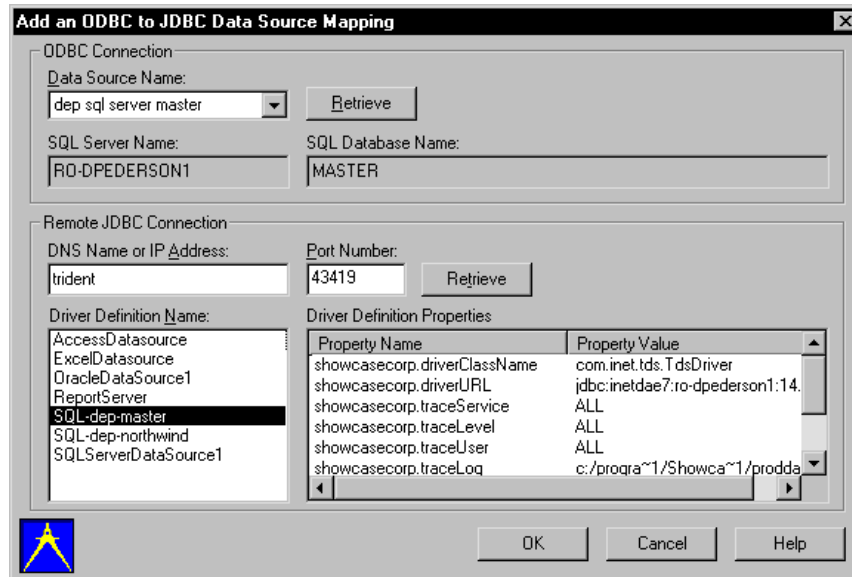
*Note:* This port number is the default port on the Enterprise Server PC. It is not the same port as your iSeries server port.

- ▶ Click Retrieve. If the parameters you entered are incorrect, you will receive a message similar to the following:

A severe error has occurred in SCSPGetStanzaNames.

- ▶ In the Driver Definition Name section list, select the data source driver definition you want your data source to map to when definitions are running. The name matches the bracketed heading for the section in the showcase.cfg file (for example, [SQLServerDataSource1]).

Figure 3  
Choosing your Driver Definition



- ▶ In the Driver Definition Properties section, verify that you've chosen the correct driver definition (for example, SQLServerDataSource1).

*Note:* The combination of the DNS Name/IP Address, Port Number, and Driver Definition Name must be unique. That is, no two mappings can have the same combination of these values.

- ▶ Click OK to update the iSeries control table with your mapping.

## Step 6: Connect to Your New Data Source

- ▶ Open Warehouse Builder and sign on to your control server.
- ▶ In the Warehouse Builder Assistant dialog box, click OK to create a new definition. (If the Warehouse Builder Assistant dialog box is not already displayed, select File | New | New.)
- ▶ In the Source and Target Servers dialog box, choose your new source server data source.
- ▶ At the prompt, connect to your NT JDBC driver. Make sure the Service Name is correct for your SQL database.
- ▶ Continue to create your definition.
- ▶ When you run your definition, make sure the Enterprise Server is running. To start it, see "Step 4: Start the Enterprise Server" on p. 4.

## **Hints and Troubleshooting**

### **General Hints**

- Each time you modify the showcase.cfg file, stop (Ctrl+C) and restart the Enterprise Server to allow the updates to take effect.
- If you cannot find the showcase.cfg file on your system, make sure you installed the Enterprise Server. The .cfg file is installed with the Enterprise Server.

### **Warehouse Builder Run-Time Hints**

- If you receive errors running your SELECT statement in Warehouse Builder, test the SELECT statement in Query or another query application.
- If you cannot run your definition after you create it, make sure your Enterprise Server is licensed and running.
- If you receive a connection error during run time or in Data Source Mapping, make sure your Enterprise Server and Warehouse Manager Server library are at the same STRATEGY release and patch levels.
- If you are using Enterprise Reporting and have the QUTCOFFSET set on your system, your start and end time statistics for scheduled queries will be off by that amount unless you also set a time zone. To set the correct time:

1. Change the QUTCOFFSET system value to -0.00

OR

Create an IFS file called /Qibm/UserData/Java400/SystemDefault.properties.

In this file, enter one line specifying the user time zone. **Example:** user.timezone=CST

2. Restart the Warehouse Manager Server. Then restart any Java applications by stopping and restarting the HTTP server using the commands ENDTCPSVR \*HTTP and STRTCPSVR \*HTTP. You may also need to adjust the QUTCOFFSET system value for Daylight Savings time.

For more information, see your IBM documentation.