



Description: Guide to logging OPC data to an Oracle 8.1 or 9i database.

OS Requirement: The operating system required is Windows XP/2000/NT/Windows Server 2003.

General Requirement: The Oracle Server and TWX Logger will be present on the same machine.

Database Creation and Security

1. Install GENESIS32 8.0 on the computer.
2. Install Oracle 8.1 or 9i on the computer. While installing make sure you choose, the server Installation.
3. After you have installed Oracle 8.1 or 9i, go to the **Database Configuration Assistant** as shown in **Fig. 1**.

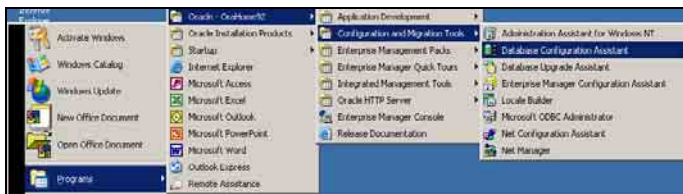


Fig 1

4. The wizard will help you to create a new database. Click **Next**, and choose **Create New Database**. On the next screen select **New Database**. On the third screen of the wizard choose a **Global Database Name**. Here we have selected **Trends**. For the remaining screens of the wizard, leave the settings at default. Click **Finish** on the final screen to create the database.
5. After the database is created, go to **Start -> Programs -> Oracle -> OraHome92 -> Enterprise Manager Console**. Select **Standalone**. Here you can see the database you created. Double-click on the **Trends** database and the window in **Fig. 2** will open. Login as **SYSDBA**.



Fig 2

6. Expand the database. Go to **Security -> Users**. Right-click to create a new user. Give a username and password. Here we have given **twx** as both the username and password.

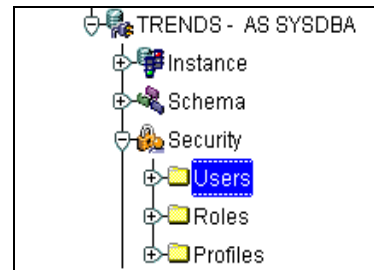


Fig 3

7. Set the properties for the new user as shown in **Fig. 4**. Close the Manager when finished.

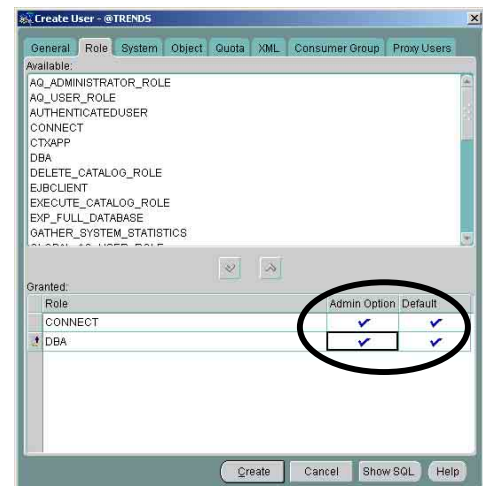


Fig 4

8. Open the **TrendWorX32 Configurator**, from **Start -> Programs -> ICONICS GENESIS-32 -> TrendWorX32 -> TrendWorX32 Configurator**.
9. Create your **Configuration** and a **Database Group**.
10. Now we will create a DSN to log to Oracle. Type a name for the database group and click on the **Browse** button in the TrendWorX32 Configurator, as shown in **Fig. 5**.

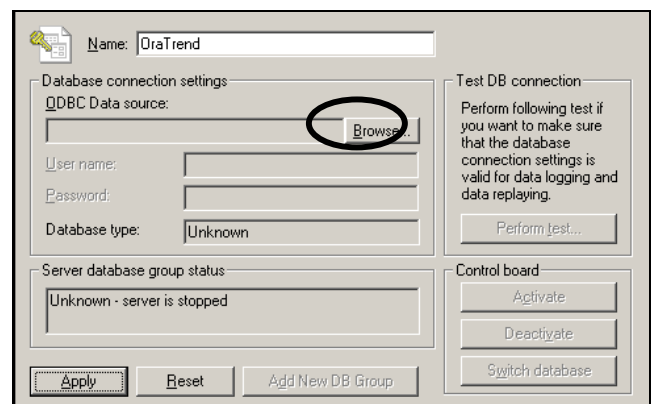


Fig 5



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11. The **Select Data Source** window will open up as shown in **Fig. 6**. Select **Machine Data source**, and click **New**.

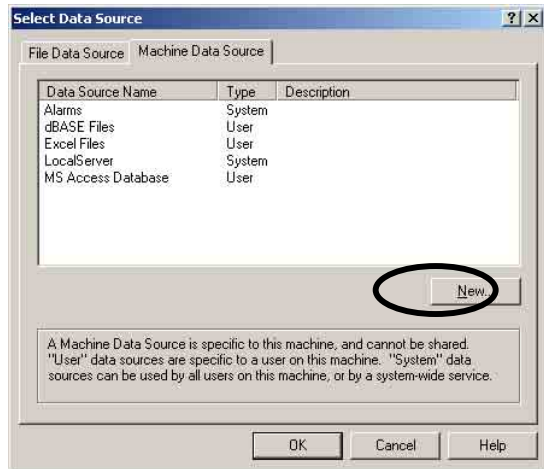


Fig 6

12. The **Create New Data source** window will, as shown in **Fig. 7**. Select **System Data Source** and click **Next**.

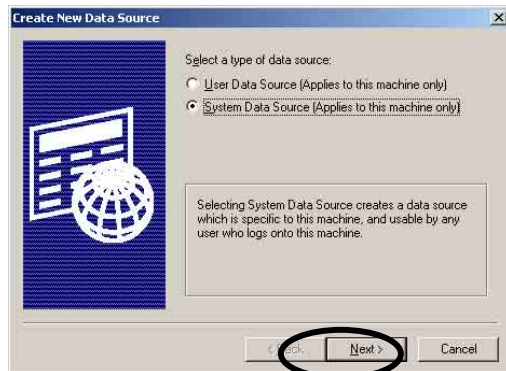


Fig 7

13. Select the **Oracle Driver** from the list of drivers as shown in **Fig. 8**. Click **Next** to continue.

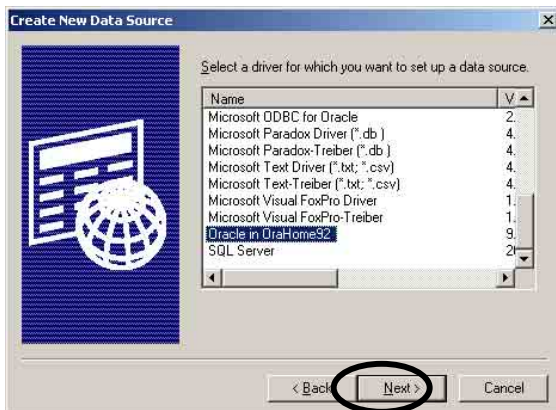


Fig 8

14. The selected driver will be shown. If you want to make any changes click **Back**, otherwise click on **Finish** to create the new DSN and connect to the database.



Fig 9

15. Now you can connect to Oracle database. Give your DSN a name. From the dropdown list, select the **Trends** database you have created. Oracle also requires you specify a user-id. Give the user-id you have just created (the new user). Click on **OK** to continue. You can also click on the **Test Connection** button, to test the connection.

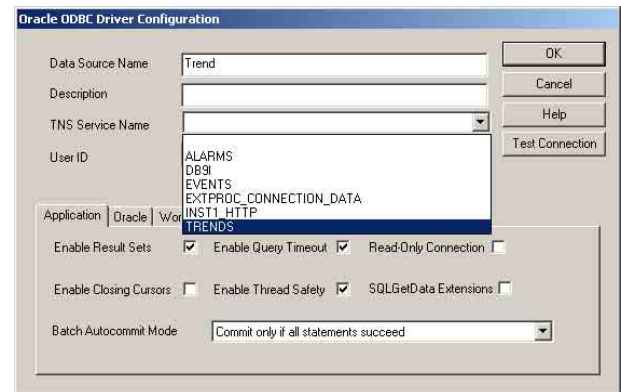


Fig 9

16. A **Login** window will open. If you have a password corresponding to the user id type the password and click **OK**. See **Fig. 10**.

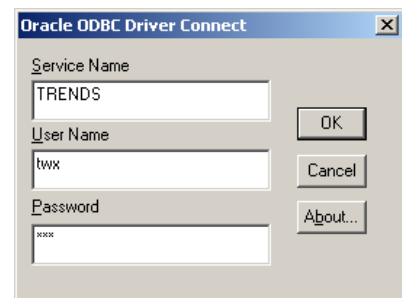


Fig 10



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17. The login window will be closed, and you will be returned to the **Machine Data Source** window. The new DSN should be selected in the list. Click **OK** to return to the TrendWorX32 Configurator. For security purposes, you have to type in the password again, in the space provided. Click on **Apply** to save the changes.

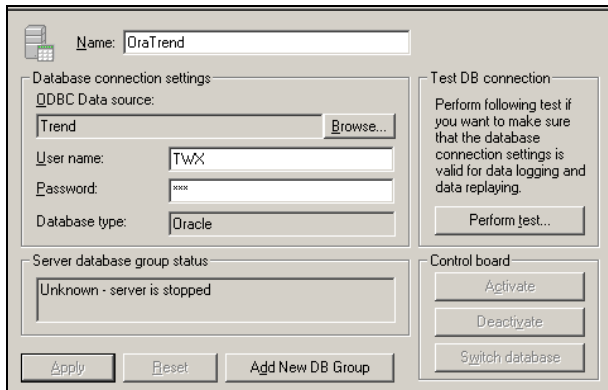


Fig 11

18. Create your logging groups and your tags, as shown in Fig. 12.

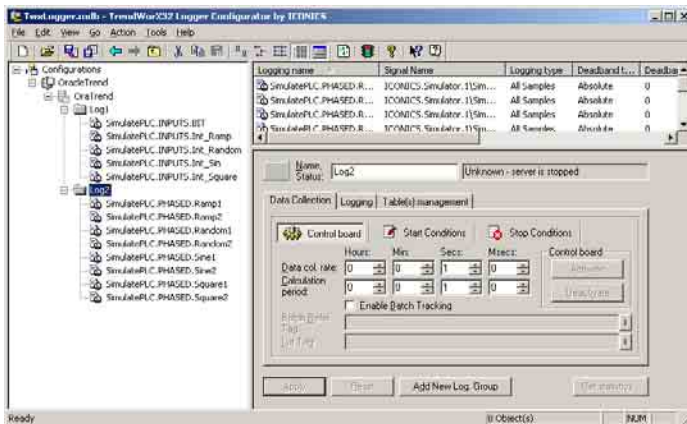


Fig 12

19. Make the configuration **Active** and **Start** the TrendWorX32 SQL Logger. Now data is logged to the Oracle database. To see the trend data open **Enterprise Manager Console** again. Open the Trends database. Expand **Trends** → **Schema** → **TWX** → **Tables** (TWX in this path is the user you created). You should see your tables here.

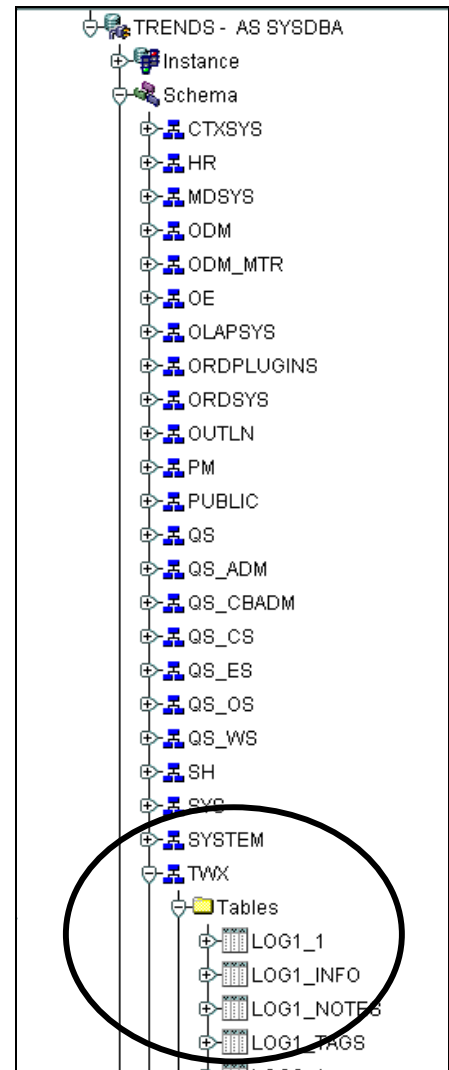


Fig 13

20. Right-click on the table name, and click on **View/Edit Contents** from the popup menu. This will show the data present in the database, as shown in Fig. 14.

SIGNAL_INDEX	EARLIEST_TIMESTAMP	LATEST_TIMESTAMP	REC_TIMESTAMP	FILE_INDEX	SAMPLE_TIMESTAMP
1	25-Mar-2004 04:03:49 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:03:49 PM
2	25-Mar-2004 04:04:09 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:04:09 PM
3	25-Mar-2004 04:04:29 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:04:29 PM
4	25-Mar-2004 04:04:49 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:04:49 PM
5	25-Mar-2004 04:05:09 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:05:09 PM
6	25-Mar-2004 04:05:29 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:05:29 PM
7	25-Mar-2004 04:05:49 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:05:49 PM
8	25-Mar-2004 04:06:09 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:06:09 PM
9	25-Mar-2004 04:06:29 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:06:29 PM
10	25-Mar-2004 04:06:49 PM	25-Mar-2004 04:05:19 PM	0	36	25-Mar-2004 04:06:49 PM

Fig 14