

Description: Guide to logging alarms and events to a remote Oracle 9i Database.

OS Requirement: Win 2000 Pro/Server, XP Pro, Server 2003

General Requirement: Installation of Oracle 9i on the server machine. The server and client are in the same workgroup. You should install GENESIS32 version 9.x on the client machine. You should also have an AlarmWorX32 logging configuration, and ICONICS Oracle DB Connector license active.

Introduction

AlarmWorX32 Logger allows you to log your alarms and events into a database, creating a record of what happened. The logger is capable of logging to MS Access, MSDE, MS SQL, and Oracle. This document will only detail the steps to set up the logger logging information to an Oracle database.

- AlarmWorX32 Logger supports the following features for Oracle:
- Logging alarms to an Oracle database
 - Specify table name, max table size, and max logging interval.
 - Configure archive tables, including number of archive tables, table size, and table interval.

Setting up Server Machine

You will need to create an Oracle Database for alarm data logging on your server machine first. For information on how to create an Oracle Database on your server machine, please refer to the application note *AlarmWorX32 Logger – Logging to Local Oracle Database*. The section “Creating a New Database” is all you need to follow.

Setting up Client Machine

Since there are various versions of Oracle database server, the level and type of connectivity may vary depending on the version of the Oracle database server. We recommend that you install Oracle 9 Client tools, which will provide the most flexibility in terms of connection to remote Oracle database servers. The following steps will be using the Oracle 9 client tools.

1. Install Oracle Client tools.

NOTE: if you are using Oracle Client Tools version 8.x, you should only try to connect to your Oracle database server via ODBC or a generic OLEDB provider. Native Oracle connectivity is not supported with 8.x client tools. If you decide to use ODBC, please use the latest ODBC drivers from Oracle for that specific version of the Oracle client tools.

2. Configure a network connection to the remote Oracle server by going to Start → Programs → Oracle – OraHome92 → Configuration and Migration Tools → Net Configuration Assistant

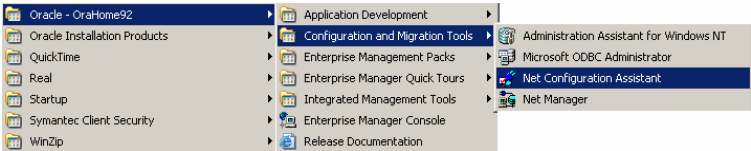


Figure 1 - Net Configuration Assistant

3. In the Oracle Net Configuration Assistant: Welcome window, select Local Net Service Name configuration and click “Next”

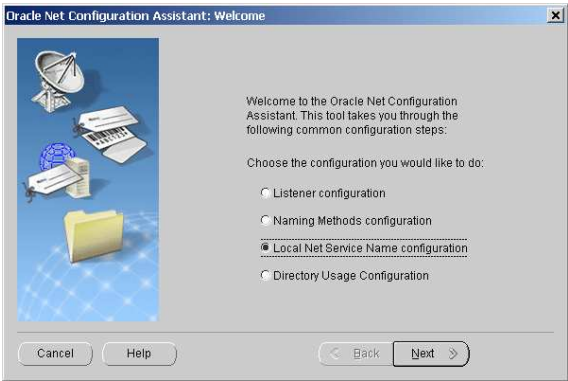


Figure 2 - Oracle Net Configuration Assistant: Welcome

4. In the Listener Configuration, Listener window, choose Add to add a new service to connect to the Oracle Server. Click on “Next”



Figure 3 - Oracle Net Configuration Assistant: Listener Configuration, Listener

5. On the next dialog, select the corresponding version of the remote Oracle database server. Since we are using 9i, we will select Oracle8i or later database or service here. Click on “Next”.

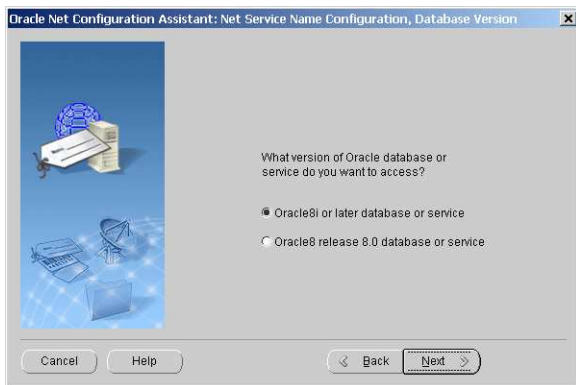


Figure 4 - Oracle Net Configuration Assistant: Net Service Name Configuration, Database Name

6. Give an existing server name in the Net Service Name Configuration. Click on “Next”



Figure 5 - Oracle Net Configuration Assistant: Net Service Name Configuration: Service Name

7. Select the Network communication protocol you would like to use. We will use TCP (TCP/IP). Click on “Next”.

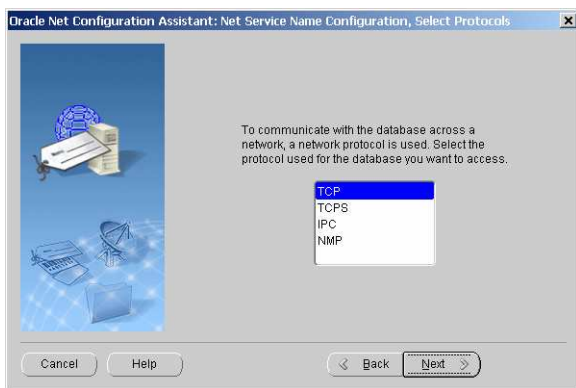


Figure 6 - Oracle Net Configuration Assistant: Net Service Name Configuration, Select Protocols

8. Specify the name of the computer where your Oracle server is installed and click on “Next”

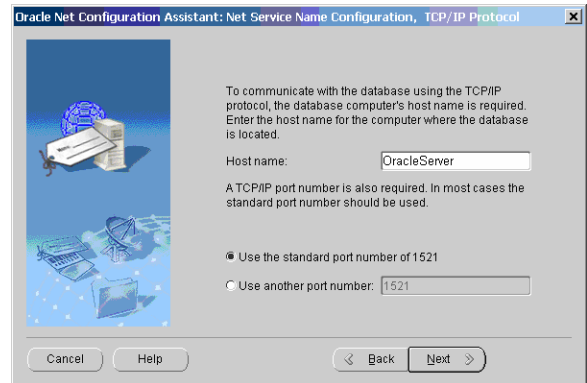


Figure 7 - Oracle Net Configuration Assistant: Net Service Name Configuration, TCP/IP Protocol

NOTE: If you would like to change the communication port, you can do that in this screen.

9. Select the option to perform a test to the server connection you have just made and click on “Next”

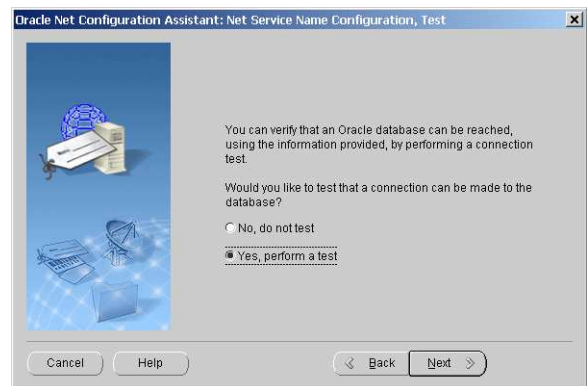


Figure 8 - Oracle Net Configuration Assistant: Net Service Name Configuration, Test

10. If the test failed, you should check to make sure that the appropriate login credentials are supplied. The test must succeed before you can continue.

NOTE: Please consult your Oracle database administrator if you are having problems configuring your connection.

Configuring AlarmWorX32 Logger

1. Launch AlarmWorX32 Logger Configurator by going to Start → Programs → ICONICS GENESIS32 → AlarmWorX32 → Alarm Logger Configurator

2. Click on your configuration in the tree-control on the left-hand pane. In the right-hand pane, click on the  button in the Primary Data Source section.
3. In the Select Data Source window, click on the Machine Data Source tab and click on the “New...” button.
4. In the Create New Data Source window, select System Data Source and click on “Next”.
5. Select the Oracle Driver from the list and click on “Next”.

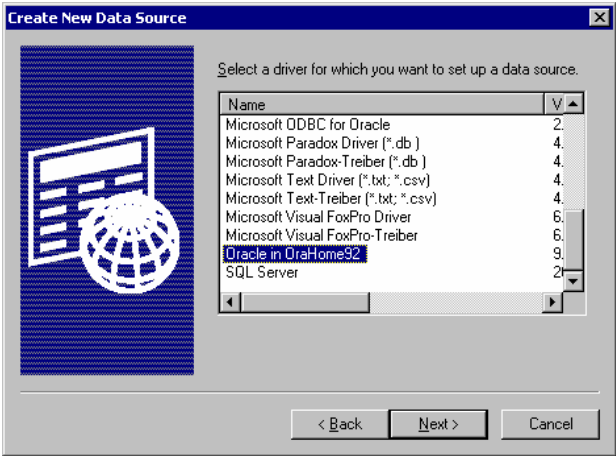


Figure 9 - Create New Data Source: Select Oracle Driver

6. Click on “Finish”, and the Oracle Client Database Configuration window will come up.
7. Give the Data Source a name.
8. Select a TSN service in the dropdown list. This should be the service you have created in the previous section.
9. If you have created a User ID, enter it, other wise you can use the default (please contact your Oracle Database Administrator for the default user ID).

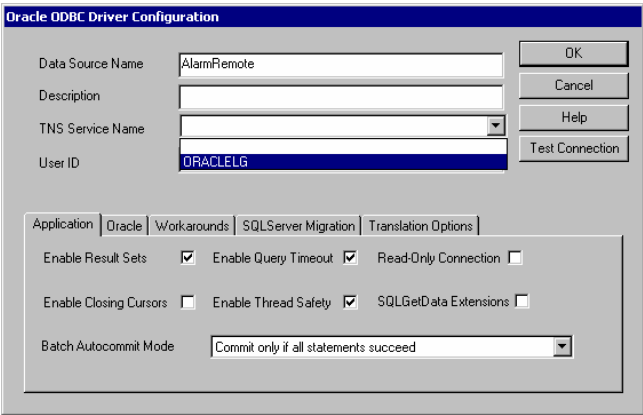


Figure 10 - Oracle ODBC Driver Configuration

10. Click on “OK” when you are done. A login window will appear. You should login with the User Name and Password for the connecting database.

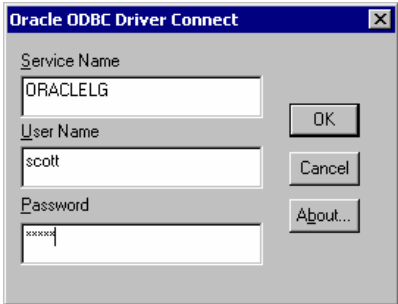


Figure 11 - Oracle ODBC Drive Connect

11. Click on “OK”. You should now return to the Select Data Source window. Make sure that the Data Source you have just created is highlighted, click on “OK”
12. You should now be back in the Alarm Logger Configurator. You will have to enter the password for the user once more.

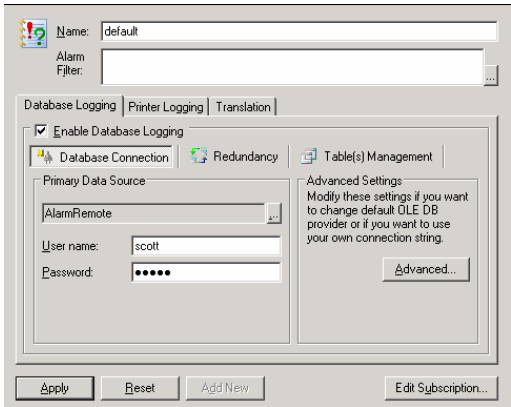


Figure 12 - Alarm Logger Configurator

13. Click on “Apply” when you are done.
14. You are now ready to log alarm or events to the remote Oracle database. Please remember to make your subscription and set up table names before you start logging.

Viewing Logged Alarms or Events

1. You can view your logged data by using the Alarm Report ActiveX. Please refer to the application note entitled *AlarmWorX32 Logger – Report ActiveX Quick Start*.
2. You can also view the data in the database. On your client machine, go to Start → Oracle – OraHome92 → Application Development → SQL Plus.
3. A login window will open; you should enter the same user name, password, and TNS Service name you did for the data source.
4. Select the Select * From tab.
5. Now type in the SQL Command “Select * From TableName”. You should replace TableName with the name of the table in your database.