

**Description:** Guide to set up Alarm Report ActiveX Security Settings for SQL or MSDE databases for WebHMI

**OS Requirement:** Win 2000 Pro/Server, XP Pro, Server 2003 with IIS

**General Requirement:** This applications note requires knowledge of how to use and configure WebHMI, and requires basic knowledge of the Alarm Report ActiveX.

## Introduction

When accessing alarm reports from SQL or MSDE databases, you are always required to provide security authentication information either in the form of Windows integrated security or by providing an SQL username and password. When accessing the same alarm reports via WebHMI, there can be extra steps involved in authenticating users.

## SQL Authentication Method

The easiest way to configure access to an SQL or MSDE database is to create one or more user accounts in the SQL Enterprise Manager and give permission for each user to access the database. By default, MSDE comes configured with an account that has access to all databases. This account is:

User Name: sa  
Password: <blank>

Since MSDE does not come with an Enterprise Manager, you will have to use the **sa** account to access the database. However, you can connect to your MSDE database through SQL Enterprise Manager if you have a copy of SQL on the same network. Note that the copy of SQL and MSDE must be the same release version (for example, SQL 2000 and MSDE 2000).

1. Open the Alarm Report ActiveX Properties by double-clicking on the Report ActiveX.
2. Go to the **General** tab and click on the **Connection Parameters** button.
3. Select **MS SQL Server** as the Data Provider and click the **Build Connection String** button.
4. Choose the server you wish to connect to. For a local SQL server, you may leave this box empty. Enter the User Name and Password that you configured in the SQL Enterprise Manager, or enter the default MSDE “sa” account. Then select the database and table to which you wish to connect.

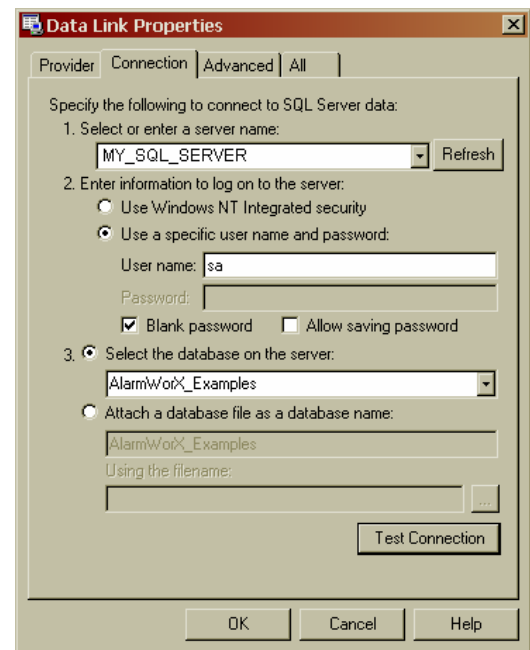


Figure 1 - Alarm Report ActiveX SQL Authentication

5. Test the connection. If it works, hit OK to exit the Data Link Properties.
6. Select the table that you wish to view (by default, “EventLog” will be selected if it exists, then hit the **Connect** button. Once the ActiveX is connected, click OK.
7. Save the display. Publish the display to HTML again so that you can access the page over WebHMI.
8. Test the display over the web to ensure that you have access to the database.

## Windows Authentication Method

The Windows authentication method is potentially more secure than using SQL authentication, however it is much more complicated to set up. Follow these steps to setup Windows authentication over WebHMI.

1. On the IIS Server machine, open the **Computer Management** screen from Start→Settings→Control Panel→Administrative Tools→Computer Management.
2. Browse into Services and Applications→Internet Information Services→Default Website to find the **MSADC** folder. Right-click on the folder and choose **Properties** to open the MSADC Properties window.
3. Go to the **Directory Security** tab of the MSADC Properties, and press the **Edit** button for **Anonymous access and authentication control**.
4. Configure the **Authentication Methods** for **Integrated Windows authentication** as shown below in Figure 2.

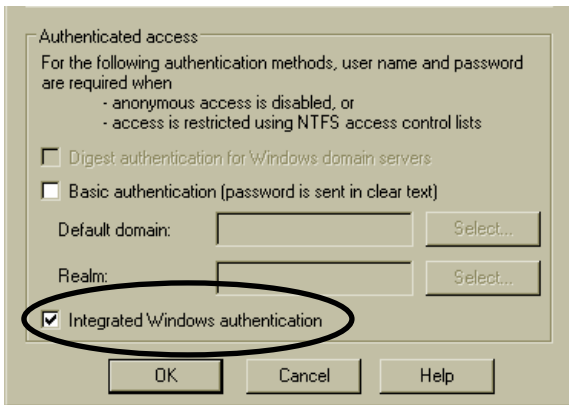


Figure 2 - Authentication Methods for Integrated Windows

- Open the display that contains the Alarm Report ActiveX. Go to the **General** tab and click the **Connection Parameters** button, then select **MS SQL Server** and click **Build Connection String** to configure the connection to the SQL (or MSDE) database as shown in Figure 3.

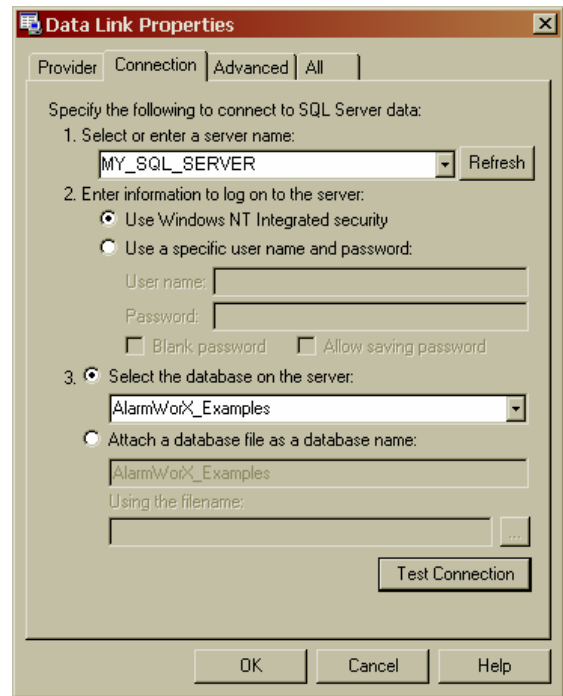


Figure 3 - Alarm Report ActiveX Windows Authentication

- Click **OK** when finished to return to the ActiveX properties window. Choose the **Web Access** tab and check the **Access database over the Internet via Remote Database Agent** checkbox enter the IP address or web address of the IIS Server, as shown in Figure 4, and press **Apply**

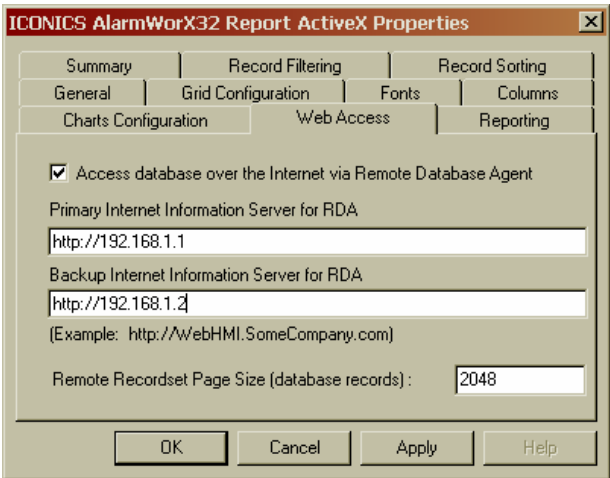


Figure 4 - Alarm Report Web Access

- With these settings in place, publish the display to your WebHMI server.
- Test the web page by opening it in a web browser on a WebHMI client. You should be presented with a Windows login screen as shown below. After entering your NT login information correctly, the connection to the database should be established and the alarm report should be displayed in the browser.



Figure 5 - Windows Login Screen for Database Connection