Impero

13 December 2022

Connect

Contents

1 Introduction

The **Impero Connect Security** is a centralized authentication server for **Impero Connect Hosts**. It can also act as a centralized log server for **Impero** activity from both the **Impero Host** and **Impero Guest**.

The **Security Server** consists of two components. One is simply called the **Security Server** module and it is the engine that runs, listens, and processes authentication requests from the **Host**. The second component is called the **Security Manager** which is a GUI to edit the security roles and role assignments in the database. The **Security Manager** also allows you to view the **Impero** activity log.

This document walks you thought the installation of **Impero Security Server** and integration with an SQL database and the Active Directory, ensuring functionality with **Impero** components.

This guide does not explain all options within the **Security Server**. For detailed information on the **Impero Security Server** complex functionality, refer to the Impero Connect Administrator's Guide.

1.1 Assumptions

This guide assumes that you have installed an **Impero Guest** and an **Impero Host** on different computers and you can make a remote control connection between the two.

1.2 Prerequisites

Before you begin you are required to obtain the **Impero Connect Security** Server MSI and a valid serial number.

2 Required setups prior the Security Server Installation

2.1 Create domain admin account user

On the Active Directory server create a domain account:

1. Go to **Start** > **Programs** > **Administrative Tools** and click on **Active Directory Users and Computers**.

2. In the Active Directory Users and Computers window, expand `<domain name>`.

3. Right-click on **Users**, point to **New**, and select **User**.

4. In the New Object - User dialog box, do the following:

   - In the **First name** and **Last name** fields, specify a first and last name for the account.

   - In the **User logon name** field, specify the username that is used to log on to the Active Directory domain.

5. Click on **Next**.

6. In the **Password** field, specify a password for the account, and then in the **Confirm password** field, specify the password again.

7. Select the **User cannot change password** and **Password never expires** options:

8. Click on **Next**, then click on **Finish**. The domain account users are added to the domain.

NOTE: To install Security Manager, you must be an administrator or a user with local administrator rights to the server and with access rights to the Windows Server console.

Give the domain account administrative privileges:

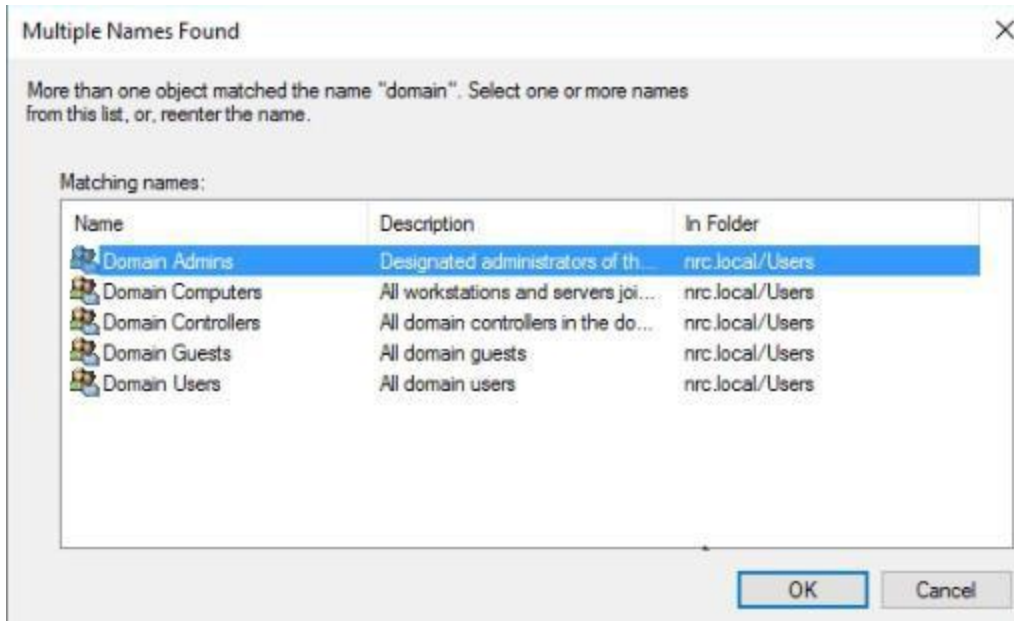1. Right-click on the created user account and select **Add to a group**.
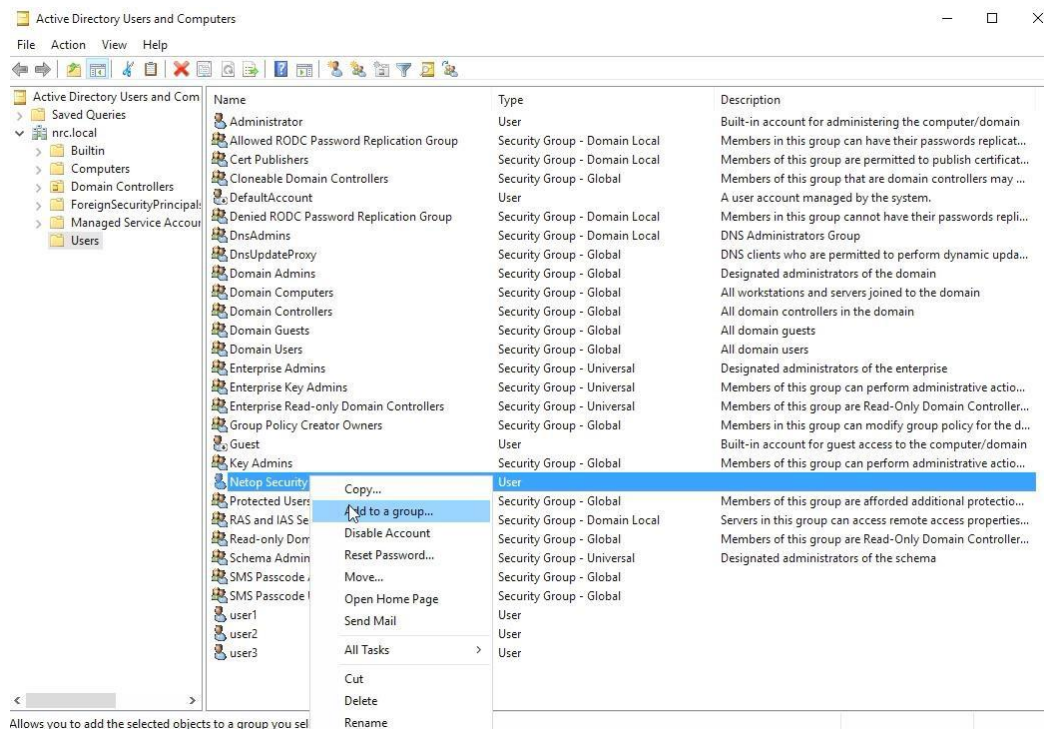
2. In the Select Groups dialog box, search for the group name by specifying the name in the **Enter the object name to select** field and clicking on **Check Name**.
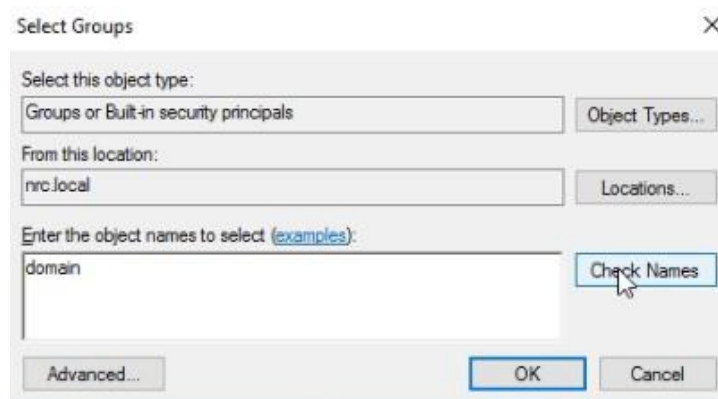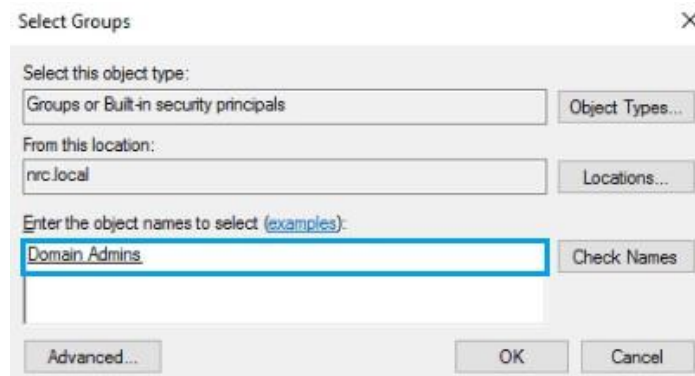

3. Click on **OK**.

4. If multiple group names are found, select **Domain Admins**.

5. Click on **OK**. The selected group is displayed in the Select Groups dialog box:

6. Click on **OK**. The selected domain account was granted administrative privileges.

2.2 SQL setup

2.2.1 Add the domain account user to the SQL DB

1. In SQL Server Management Studio, open Object Explorer and expand the Security folder.
2. Right-click on the **Logins** folder and click on **New Login...**.
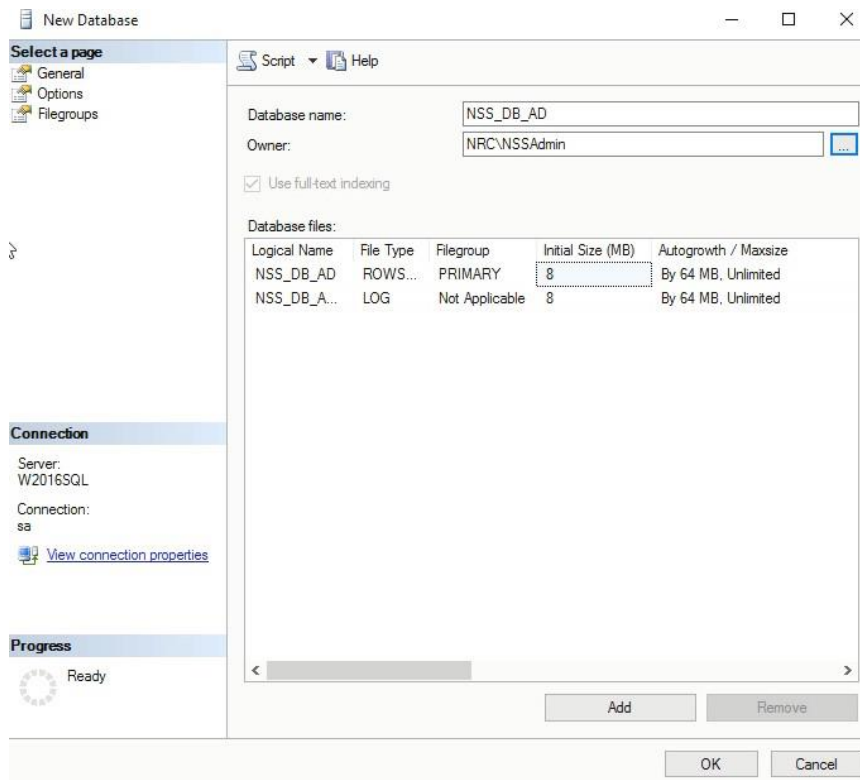
3. Search for the domain account user and make sure to select Windows authentication.
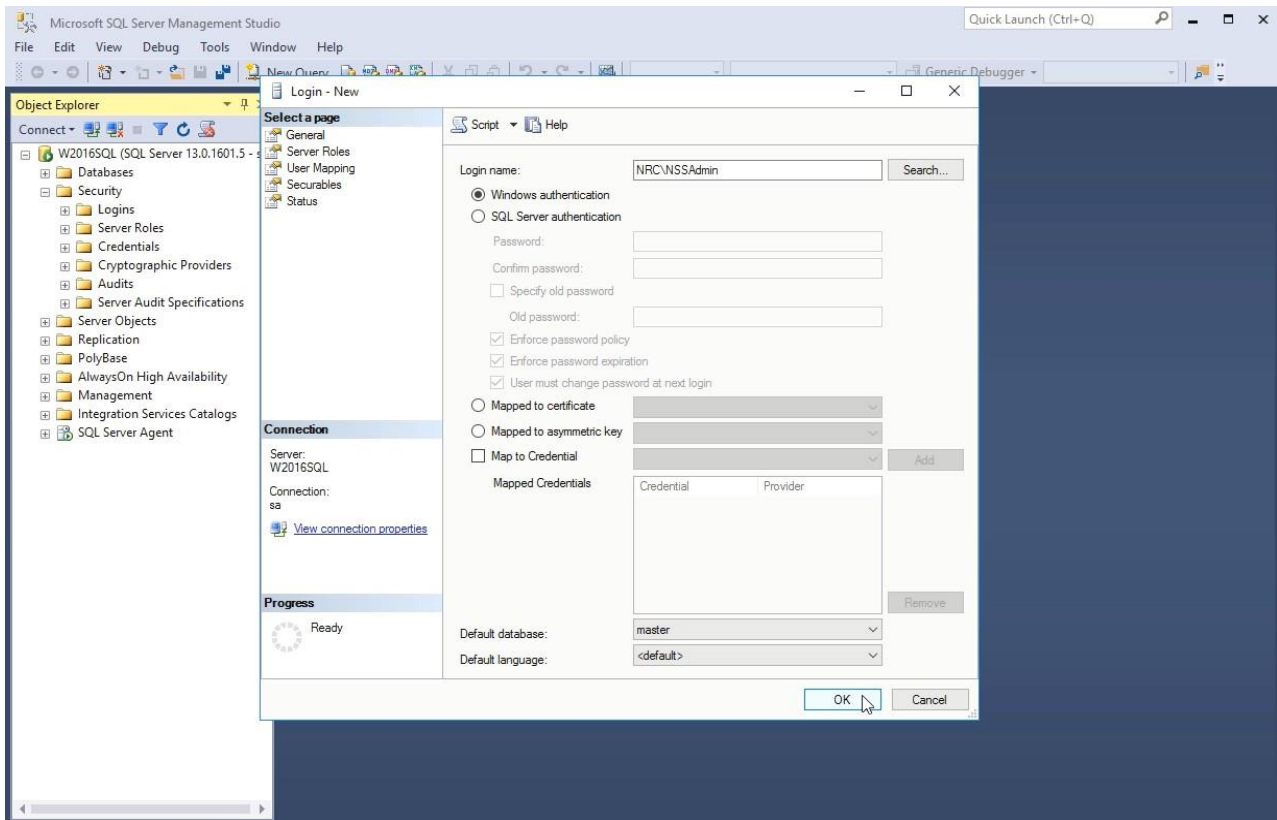

4. Click on OK.

2.2.2 Create the NSS DB

In the Object Explorer, right-click on the **Databases** folder and click on the **New Database...** button. In the New Database window, specify a name for the **Impero Security Server** database and make the domain account user the DB owner.

Click on **OK**.

ᴈ Install the Security Server

Prerequisite: On the machine where you install the **Impero Security Server**, add the domain admin user to the Windows Local Administrator list.
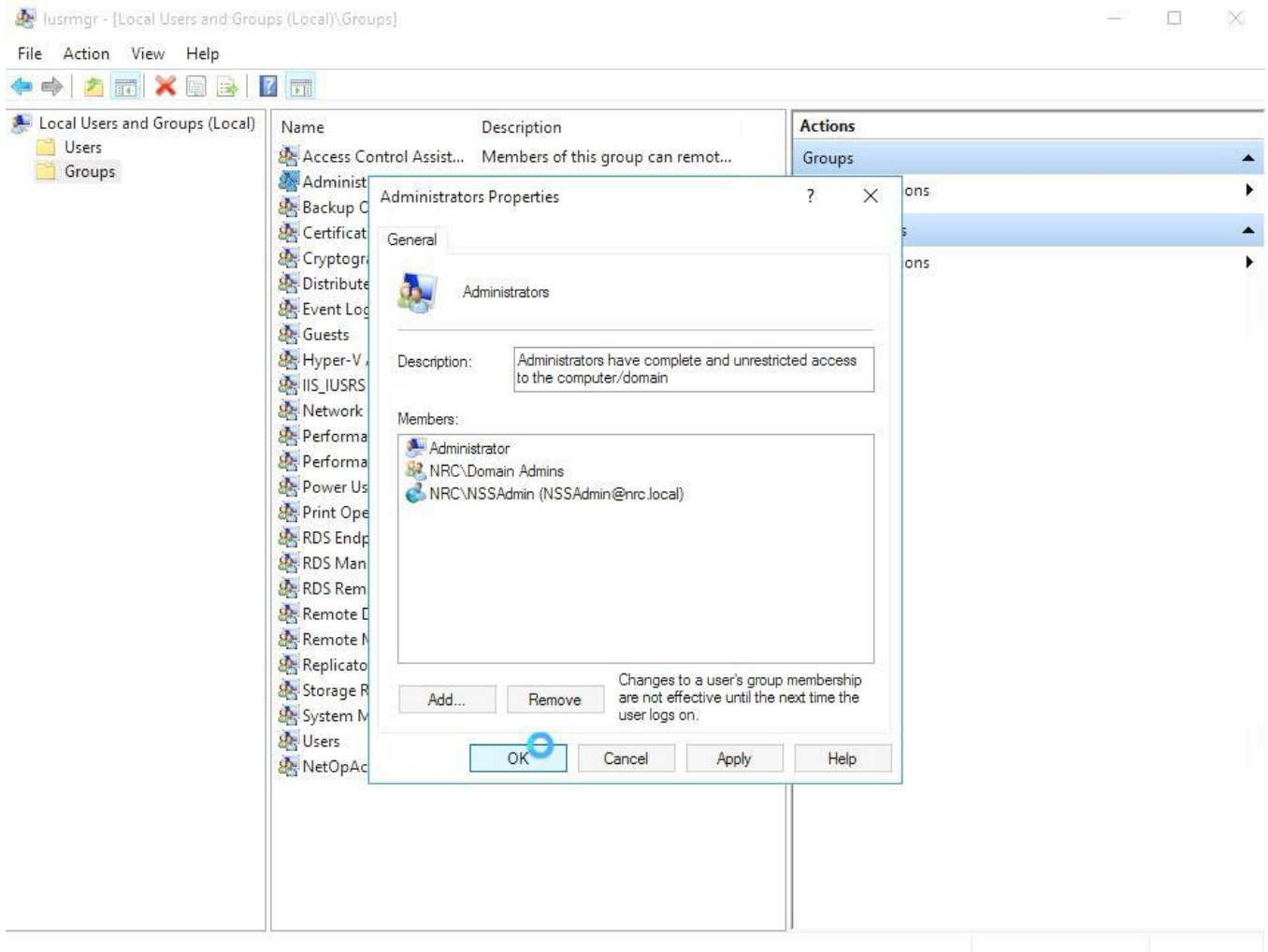
1. Log into the Windows Server console using the account with local administrator rights (the one mapped with the NSS DB on the SQL server).

2. Go to the folder you have saved the Impero Connect Security Server MSI and double-click on it. The **Impero Security Server** – Setup is displayed.

3. Click on **Next**.

4. Accept the **Impero End-User License Agreement**.

5. Click on **Next**.

6. Specify the username, organization, and the **Impero Security Server** Serial Number (sometimes referred to as the License Key).

7. Click on **Next**.

8. Select the **Typical** setup type.

Some **Impero** features might require a restart of the **Impero** service or the computer.

9. Make sure that the **Restart service if needed** option is checked.

10. Click on **Next**.

11. Make sure that the **Allow Impero Security Server to accept incoming network connections** option is checked.

12. Click on **Next**.

13. Optionally, you can choose to **Save Installation files for future use (Change or Repair)**.

14. Click on **Install**.

    IMPORTANT: Uncheck the **Launch the Impero Security Server Product** checkbox.
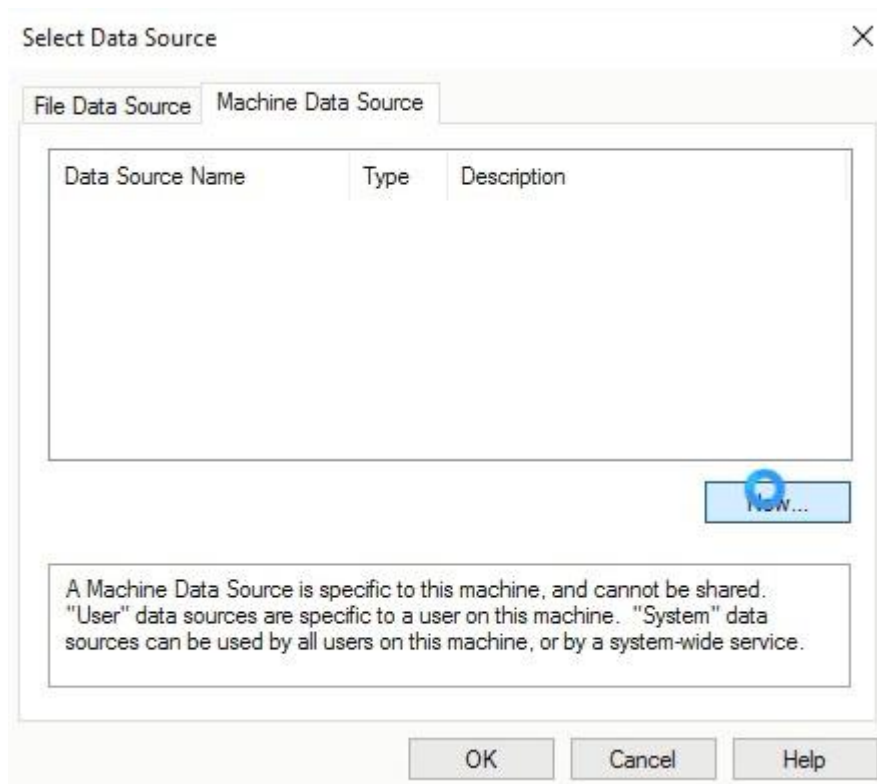
15. Click on **Finish**.

4 Configure the Security Server

1. From the Windows desktop go to the **Start** > **All Programs** > **Impero Connect** and run as administrator the **Security Manager**. The **Impero Security Manager Setup Wizard** is displayed.

2. In the Logon to Database dialog box, make sure that the **Create local test database** option is not selected and click on **Change**.
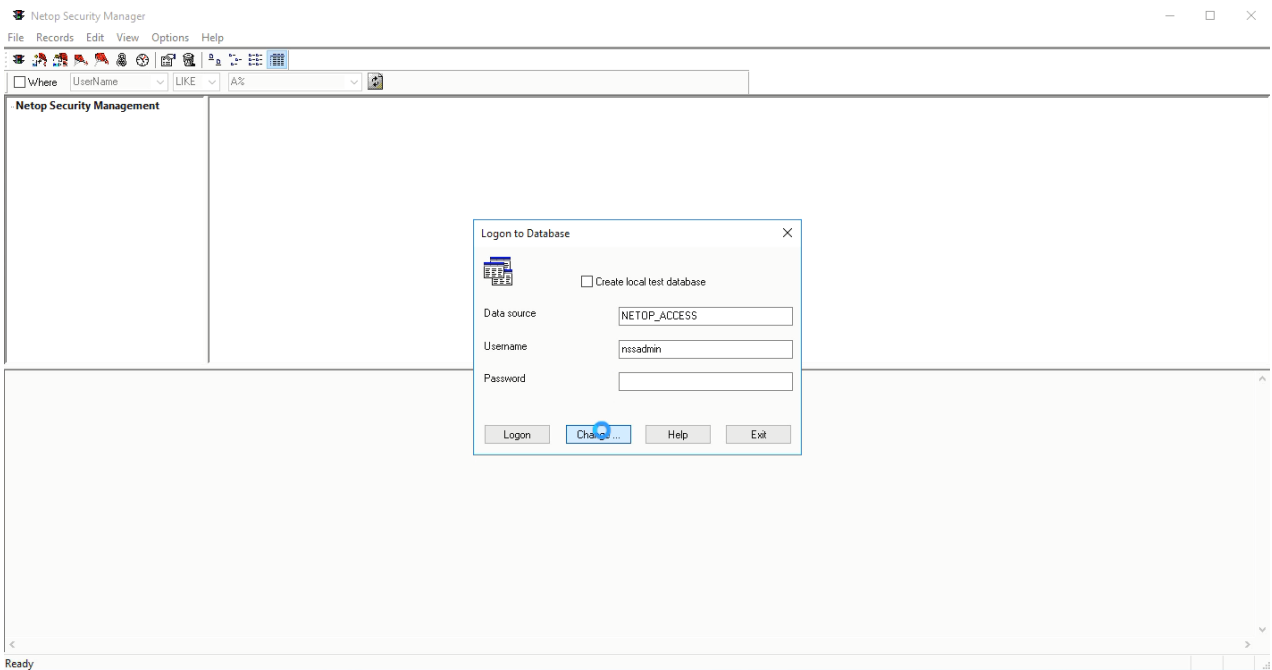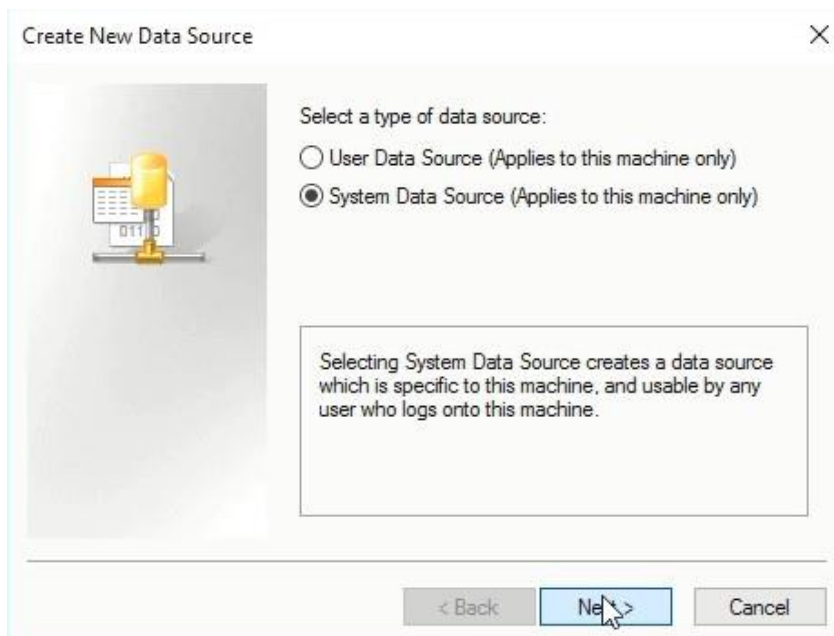

The Select Data Source dialog box is displayed.
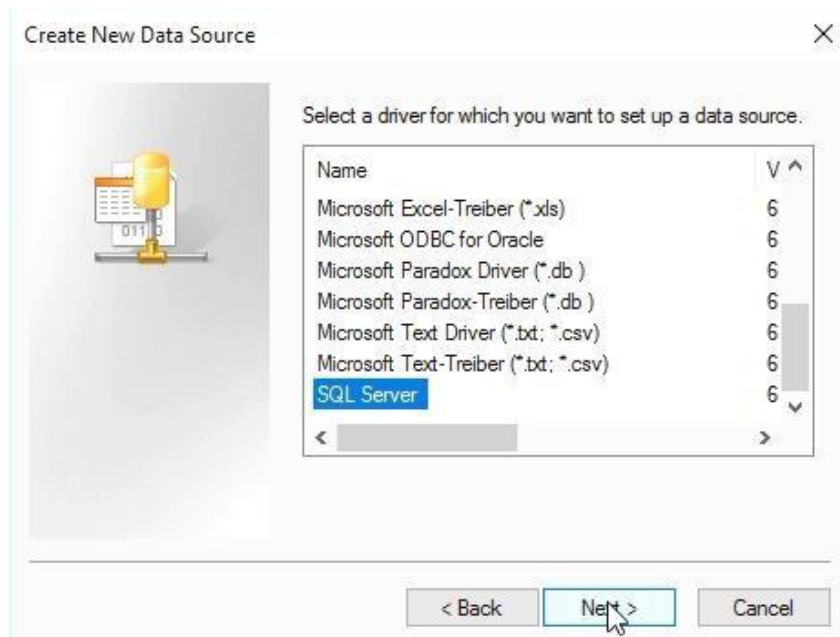
3. Select the **Machine Data Source** tab.

4. Click on **New**.

5. In the Create New Data Source dialog box, select **System Data Source (Apply to this machine only)**.

6. Click on **Next**.

7. Select **SQL Server** as driver for which you want to set up a data source.

8. Click on **Next**, then click on **Finish**. The Create a New Data Source to SQL Server wizard is displayed.

9. Type a name for the data source and from the **Server** drop-down list select the MS SQL server you connect to:
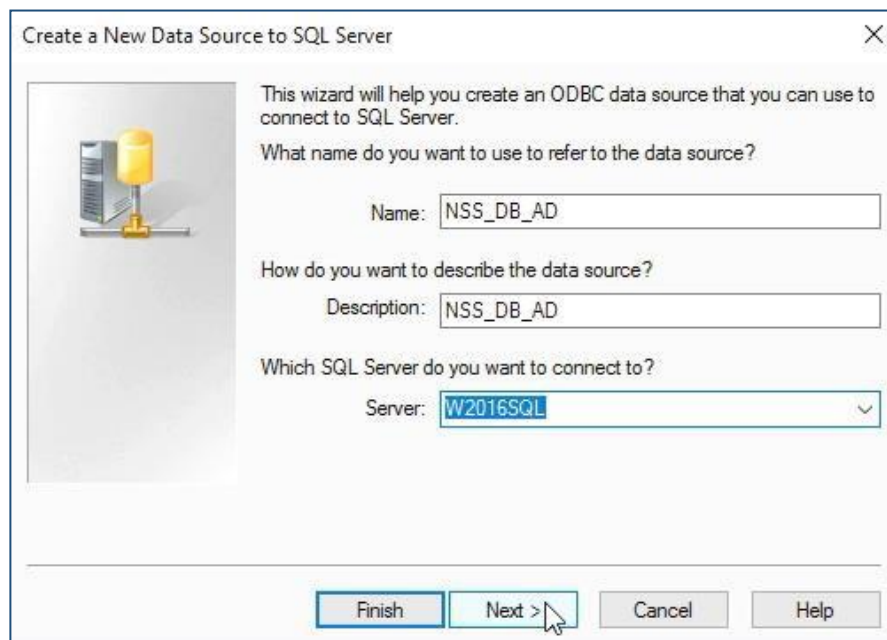
10.   Click on **Next**. Make sure that the following options are selected:

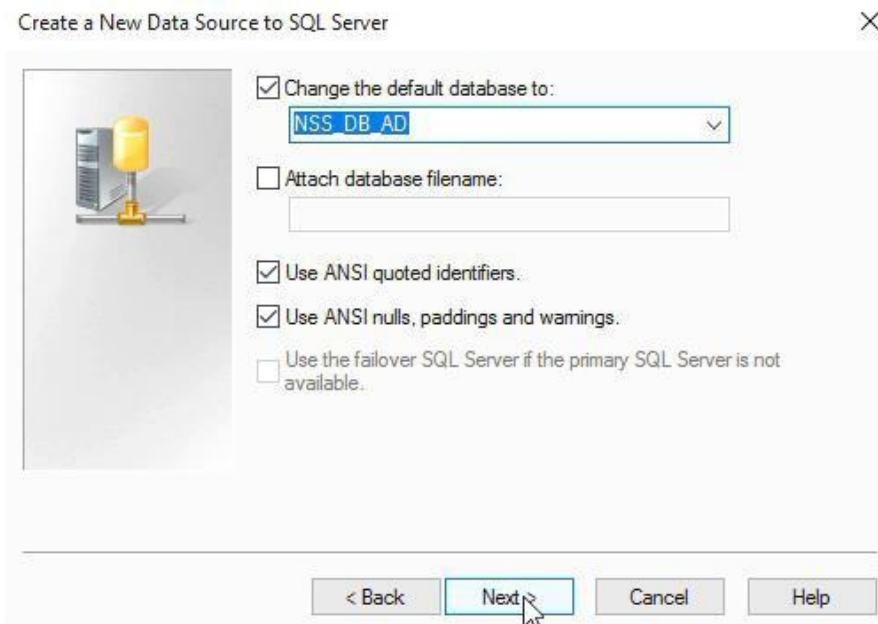- With Windows NT authentication using the network login ID.

- Connect to SQL Server to obtain default settings for the additional configuration options.
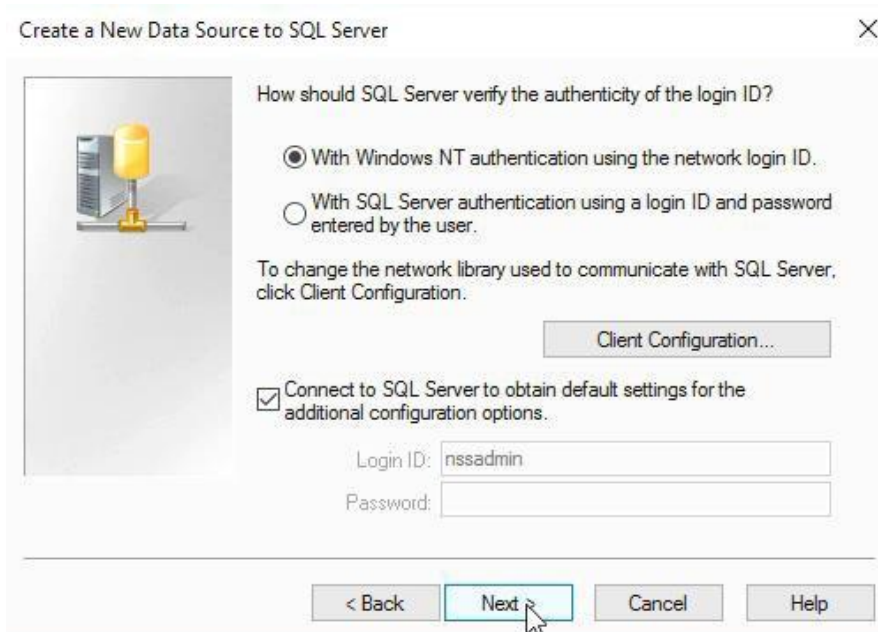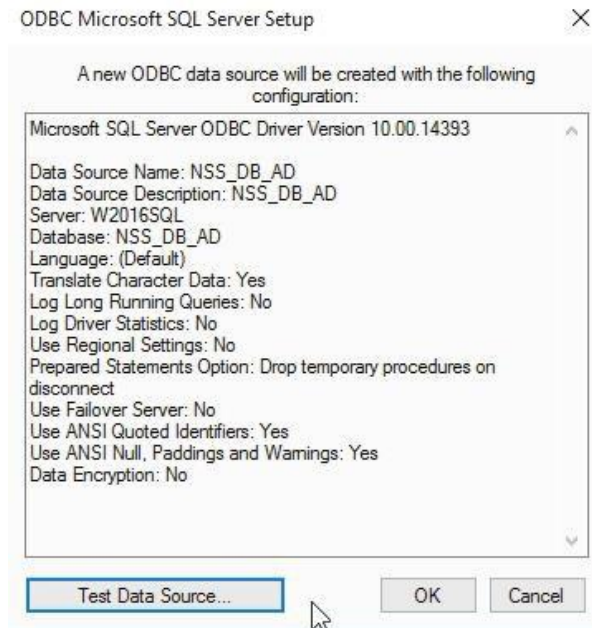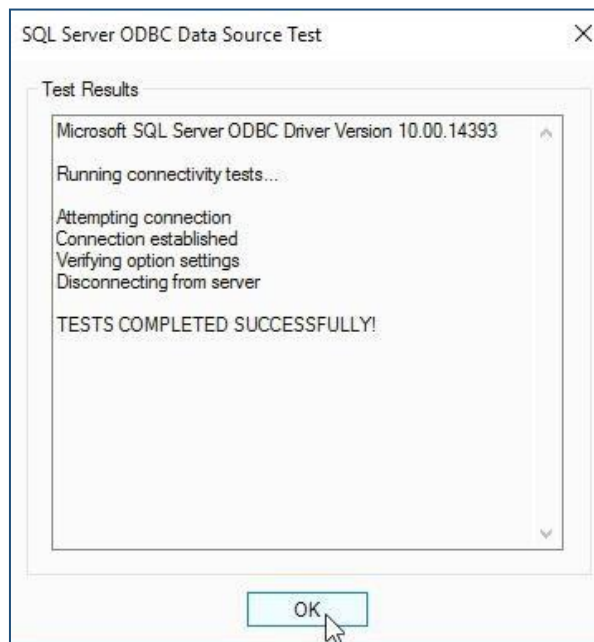

11. Click on **Next**.

12. Select **Change the default database to** the Impero Security Server DB, as defined in the SQL Server:
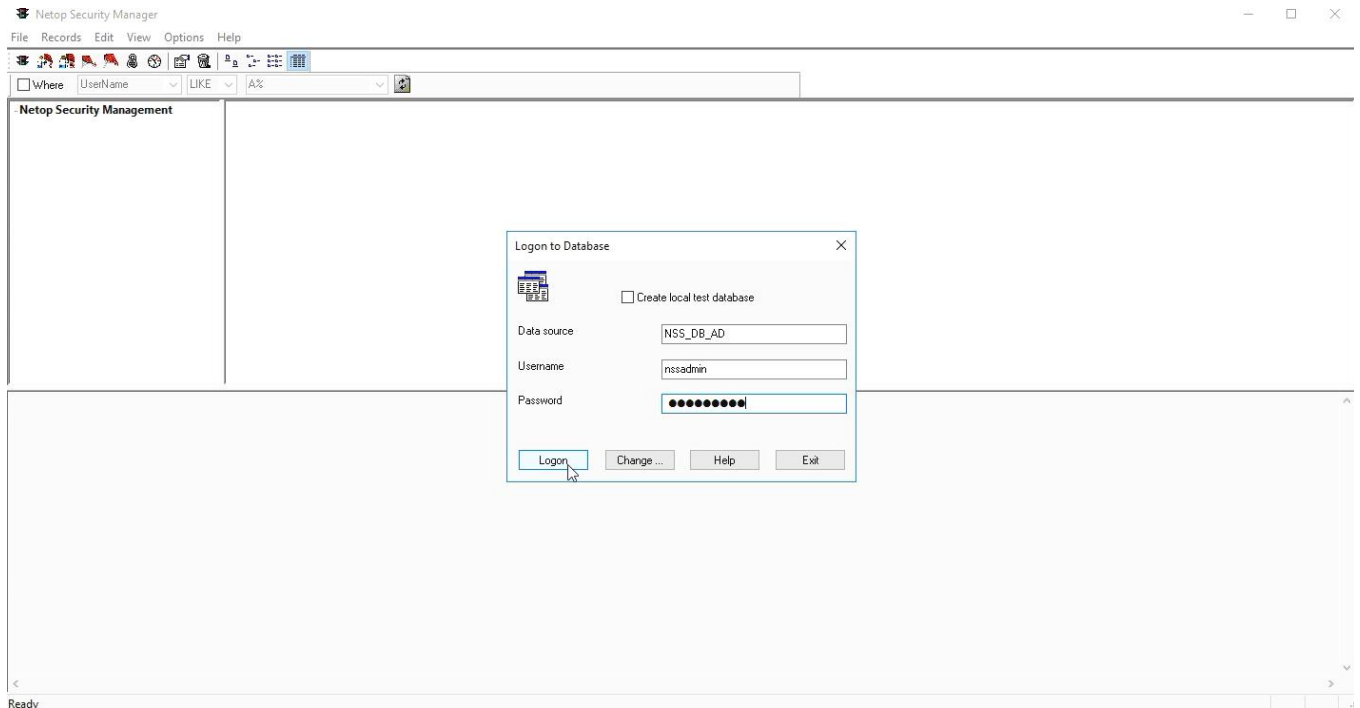
13. Click on **Next**, then click on **Finish**. The ODBC Microsoft SQL Server Setup dialog box is displayed:

14. Test the data source. If successful, click on **OK**.

15.   Click on **OK** three times to reach the **Logon to Database** dialog box.

16.   Specify the password and click on **Logon**.

17.   In the **Impero Security Server – Security Server Public Key** dialog box, click to **Generate New Public Key**.

18.   Click on the **Generate New Public Key** button.

19.   Select the public key generated then click on the **Copy to clipboard** button.

20.   Click on **Next** twice.

21.   In the **Group Name (Private)** field enter your domain and specify it in the **Confirm Group Name** field.

22.   Click on **Next**. The **Security Server** list is displayed. The name of your **Security Server** is displayed in the server field.

23.   Click on **Add** to add your Security Server to the database, then click on **Next**.

24.   Select **Guests enter Directory Services username and password**.

25.   Click on **Next** and select **Always the Workstation**.

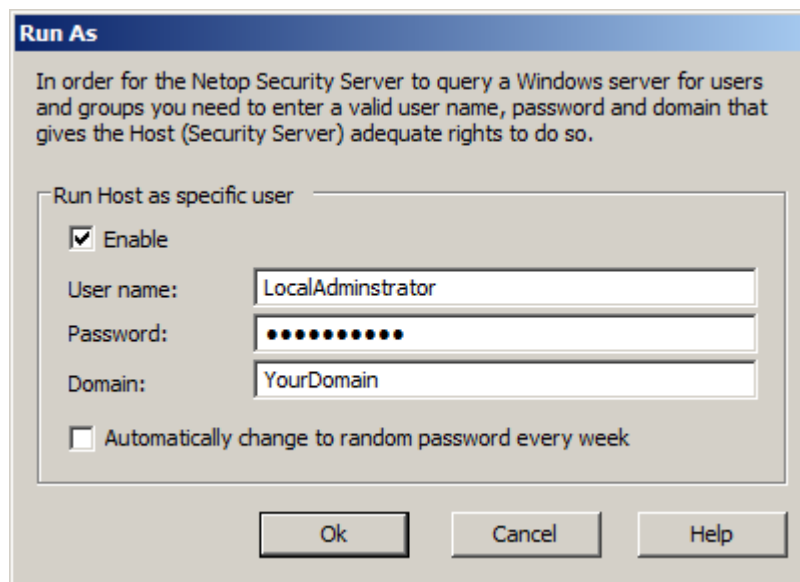26.   Click on **Next**, then close the **Impero Security Manager**.

Open a txt file and paste the **Security Server Public Key** you have previously saved to clipboard.

# 5 Launch the Security Server module and run the setup wizard

1. From the Windows desktop go to the Start menu and select **All Programs** > **Impero Connect** > **Security Server**.

It is required that you select to **Run Host as specific user** by checking the **Enable** box.

2. Specify the Windows credentials that have been added to the Local Administrators Group on this server.
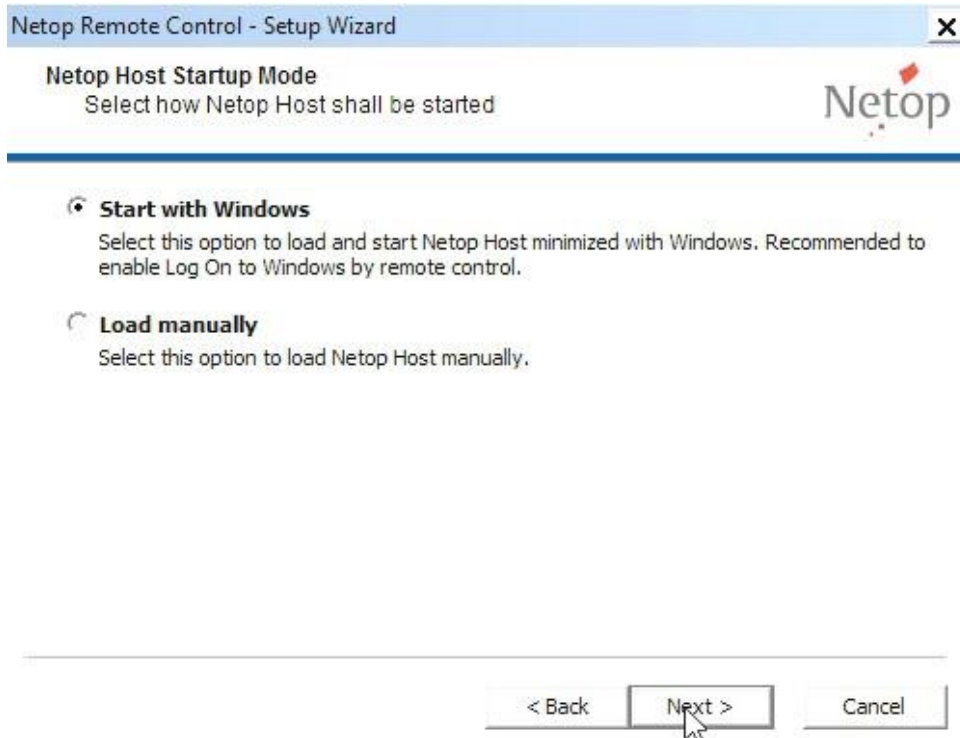

3. Click on **OK**. The Impero Security Server Setup Wizard is displayed.

4. Click on **Next**.
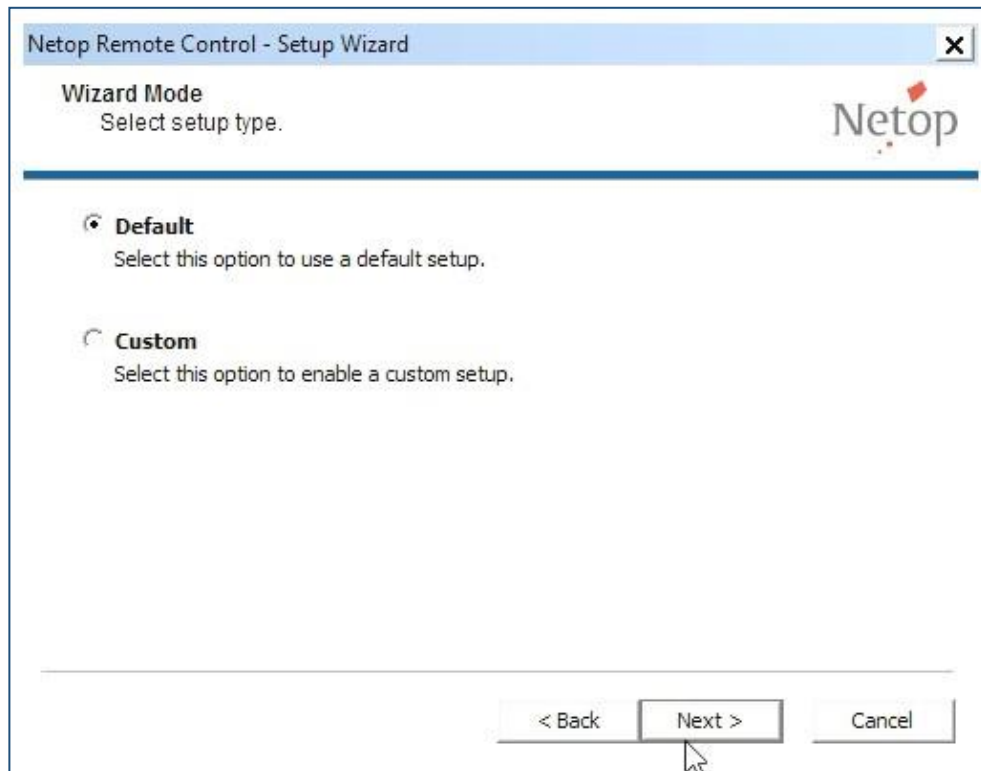
5. Make sure that the **Default** option is selected.

6. Click on **Next**.

7. Make sure that the option to **Start with Windows** is selected.

8. Click on **Next**.

9. Specify a secure password that can be used later to remote control the **Security Server** from your **Impero Guest**. Make sure to confirm the password.

10. Click on **Next**.

11. Make sure that you choose not to configure **WebConnect** by selecting **No**.

12. Click on **Next**.

13. Select the **No, I do not want to register my Impero License now** option.

14. Click on **Next**.

15. Click on **Finish**.

16. The **Impero Security Server** is now running. The **Impero Security** icon appears in the system tray.

17. Right click on the icon and select **Restore**.

18. Go to the **Tools** menu and select **Security Server Setup**. The database setup is displayed.

19.   In the upper-right corner of the page, click on the ellipsis button. The Select Data Source page is displayed from where you select the desired database.
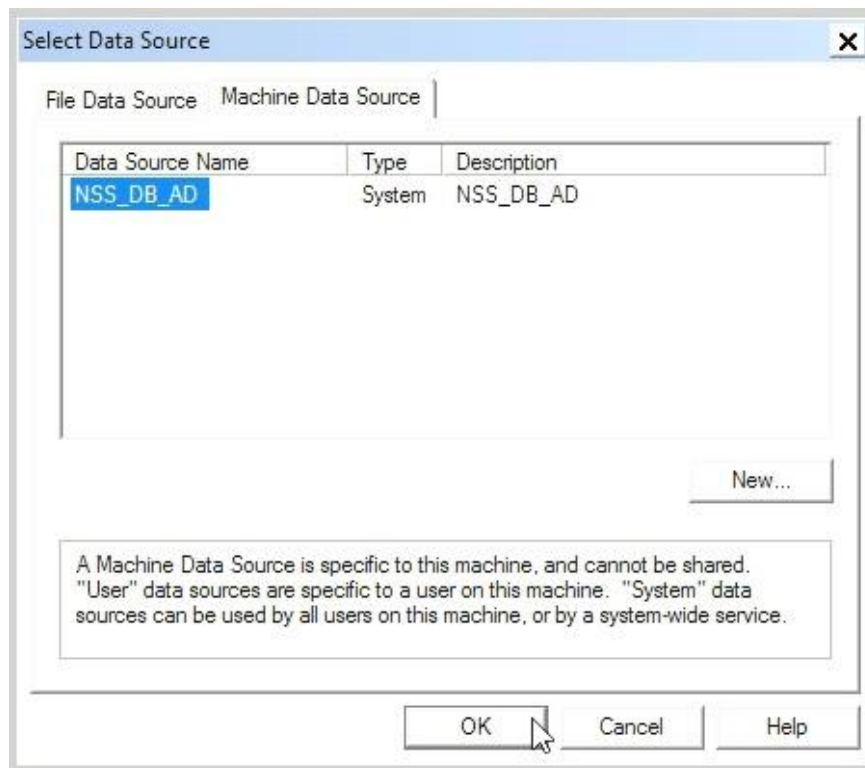

20.   Click on the **Machine Data Source** tab, select the **Impero_Security_Evaluation** data source name and click on **OK**.

21.   No need to specify credentials; click on **OK**.

22.   Click on the **Logon** button.

23.   Wait until you see the Information Status: *"Security Server running."*

24.   Click on **OK**.

25.   Restart the **Impero Security Server**.

# 6 Configure the Host to use Security Server

1. Open GUI of the **Host** you want to use with **Security Server**.

2. Make a note of the **Host ID** as it is displayed in the **General** tab. You might want to use this ID later when making role assignments in the Security Manager.

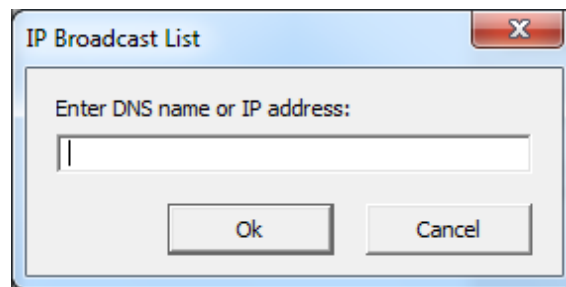3. On the main menu click on **Tools** and select the **Communication Profiles** option. The **Communication Profile Setup** is displayed.
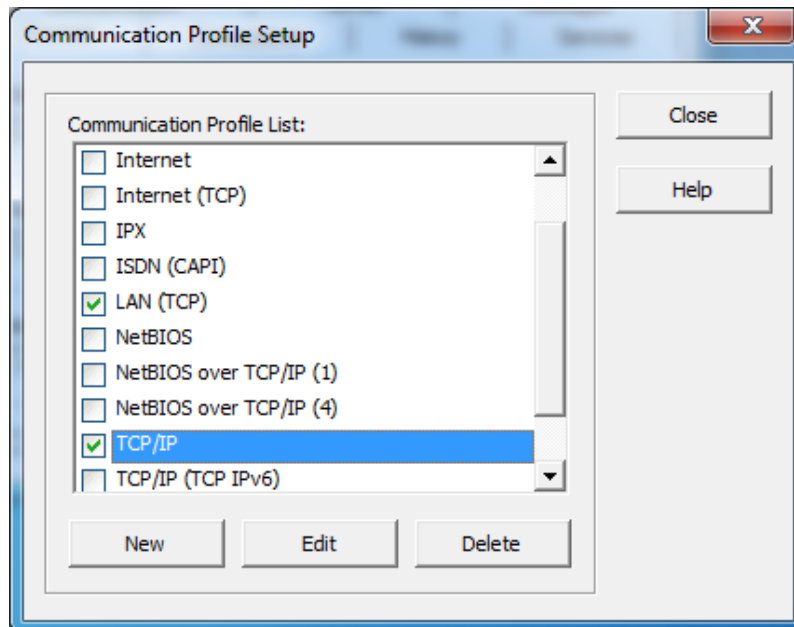
4. Make sure that the TCP/IP communication profile is selected. Click on it then click on the **Edit** button.
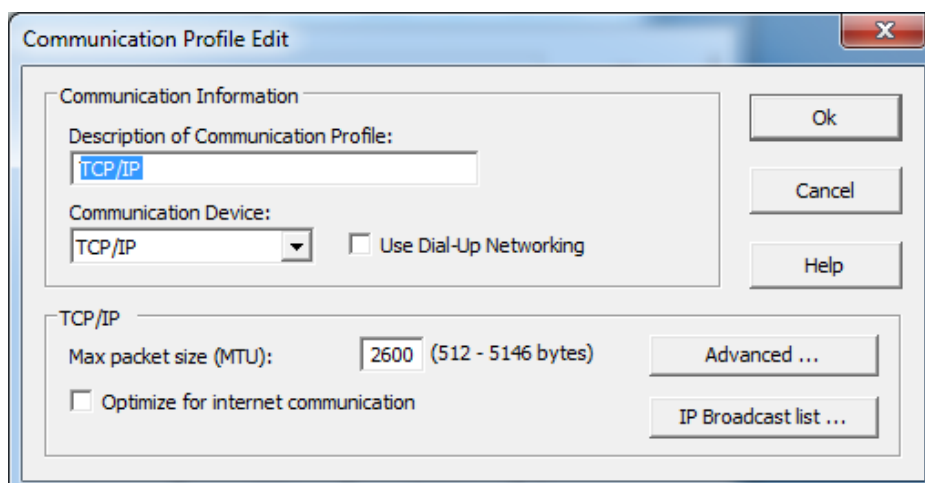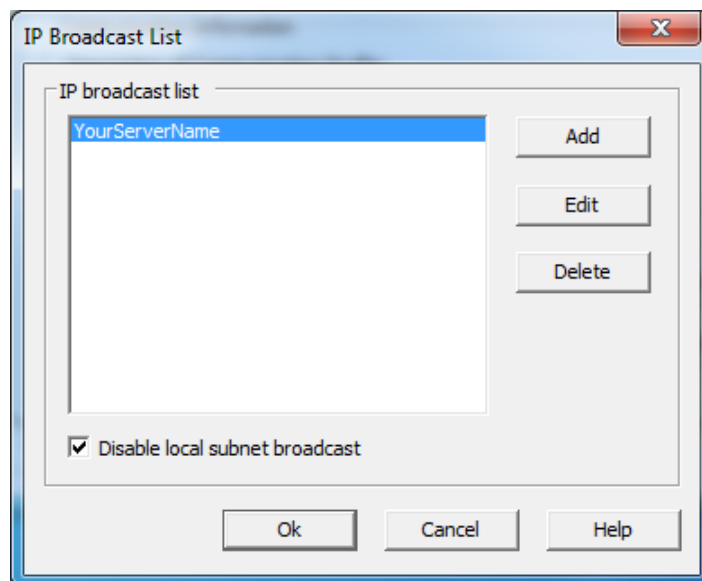
5. Click on the **IP Broadcast list…** button.
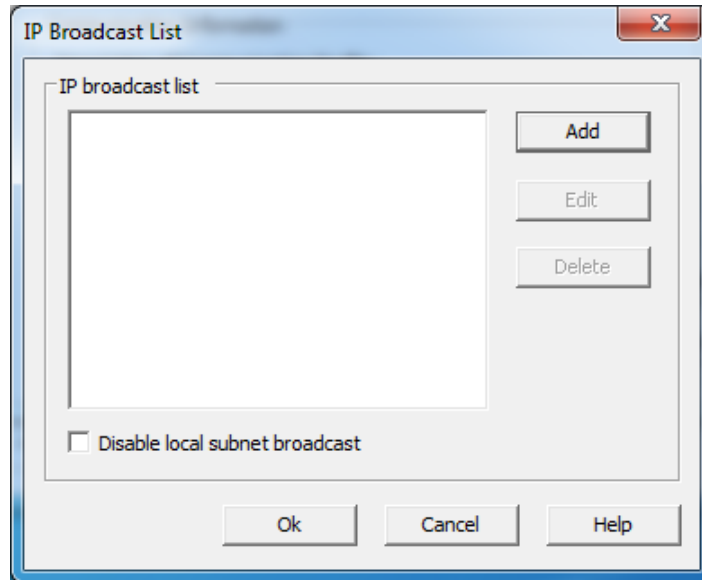
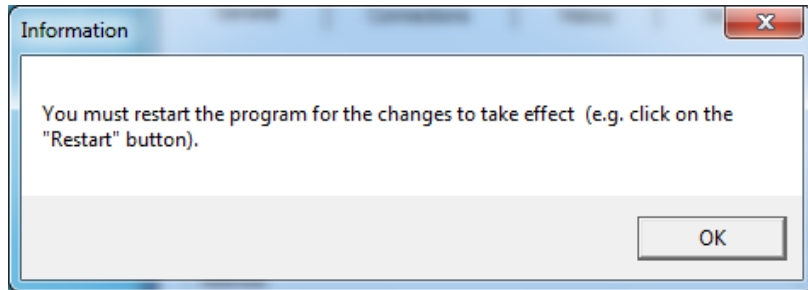6. Click on the **Add** button.

7. Specify your Security Server's **DNS name or IP address** and click on **OK**.
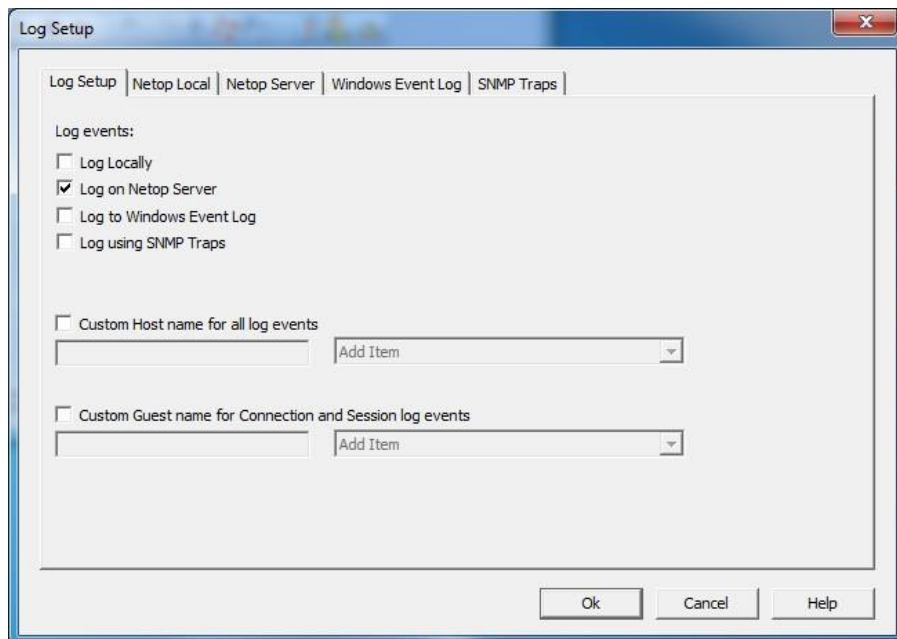

8. Optionally, you can select to **Disable local subnet broadcast**.

9. Click on **OK** twice then click on **Close**. You are prompted to restart the
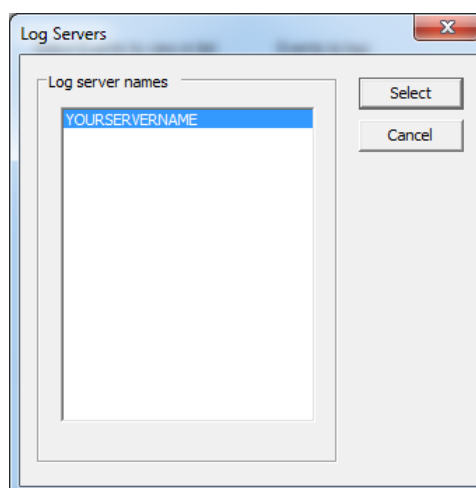
Host.

10. Click on **OK**.

11. In the main menu, click on **Actions** tab and select **Restart**.

12. Once the **Host's** status returns to running on the main menu click on **Tools** and select the **Log Setup** option.
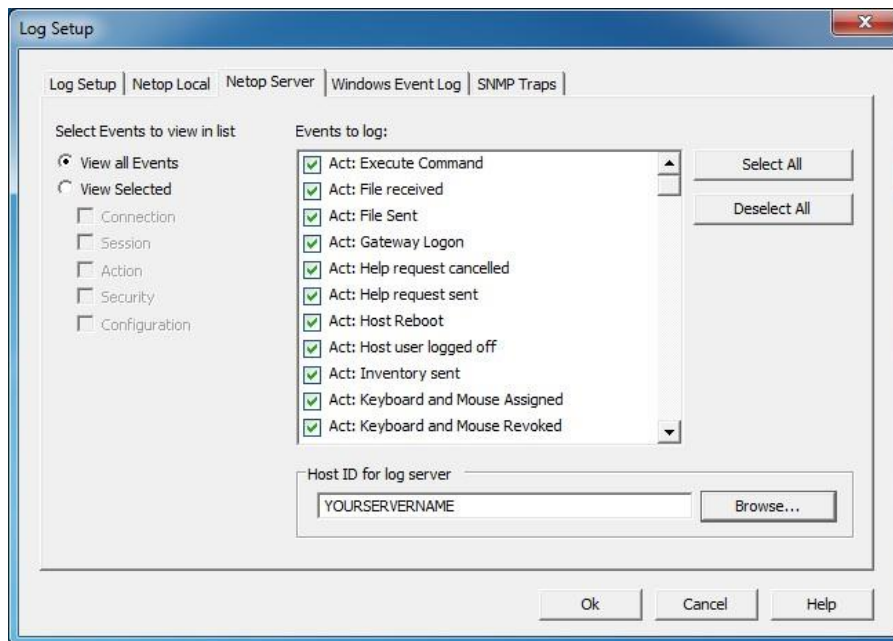

13. Select the **Log on Impero Server** option.

14. Click on the **Impero Server** tab.
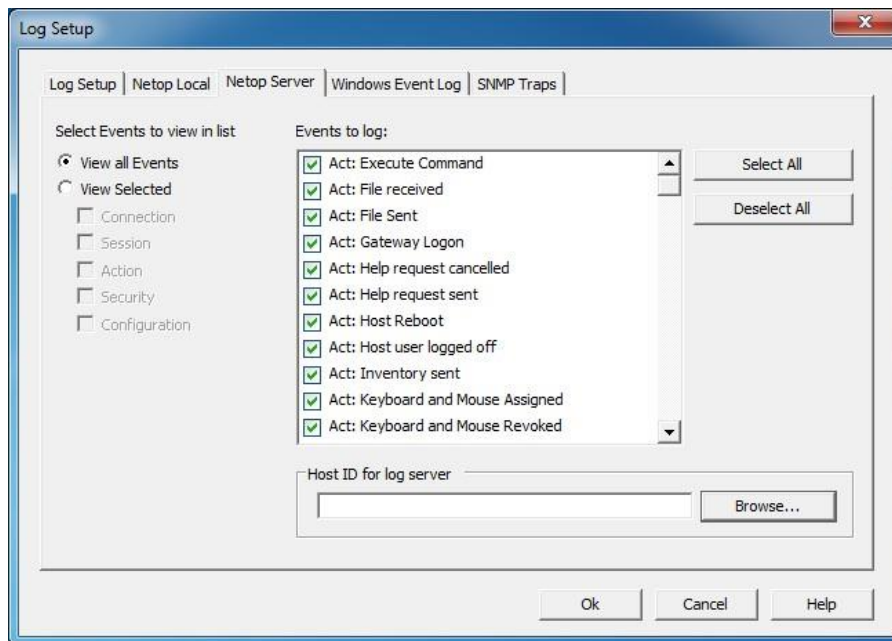
15.   Click on the **Select All** button to enable logging of all **Impero** events.

16.   Click on the **Browse…** button. You are prompted to wait until the Log Servers list is displayed. Your **Impero Security Server** is displayed in the list.
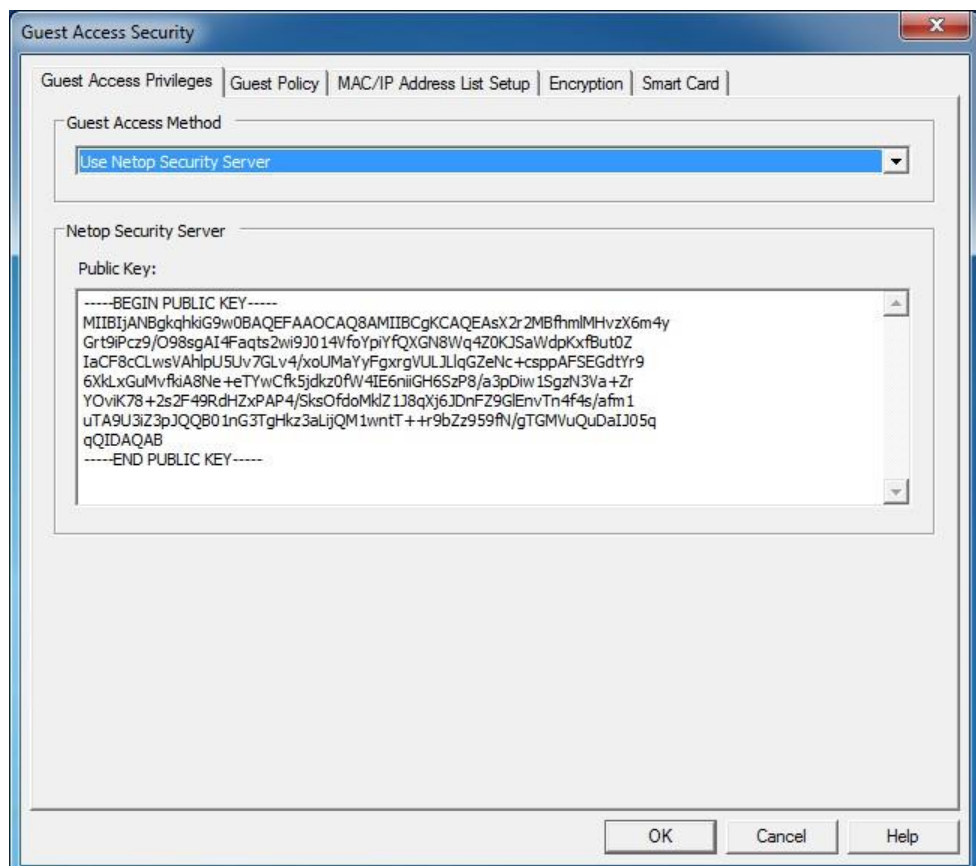

17.   Select the server's name from the list and click on the **Select** button.

18.   Click on **OK**. The **Impero Host** is checking if the log server is available.
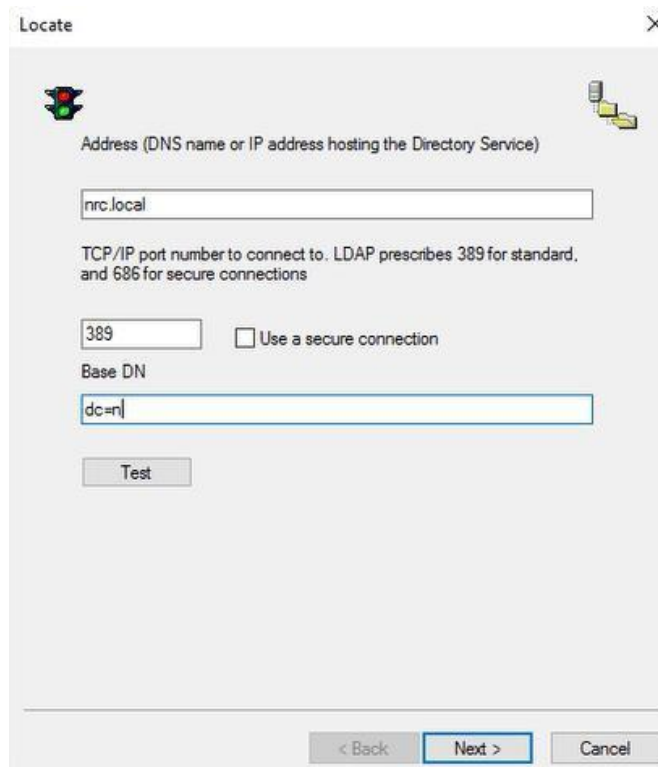
19.   On the main menu click on **Tools** and select the **Guest Access Security** option.

20.   From the **Guest Access Method** drop-down list select the **Use Impero Security Server** option.

21.   Copy and paste the Public Key from the Public Key text file that you made while setting up the **Impero Security Manager**.

22.   Click on **OK**.

⇗ Configure the Security Role Assignment

1. Return to the **Impero Security Server** device and open the **Impero Security Manager** application.

2. On the left tree collapse **Directory Services Definitions** and select **Directory Services**.

3. Right-click on the right side of the window and select **New**.

4. Specify the DNS name or IP address hosting the Directory Service, then specify the domain name:

5. Optionally, you can test if the Directory Service is found by clicking on the **Test** button.

6. Click on **Next**.

7. Select the **Encrypted bind** option and specify the domain admin account credentials:
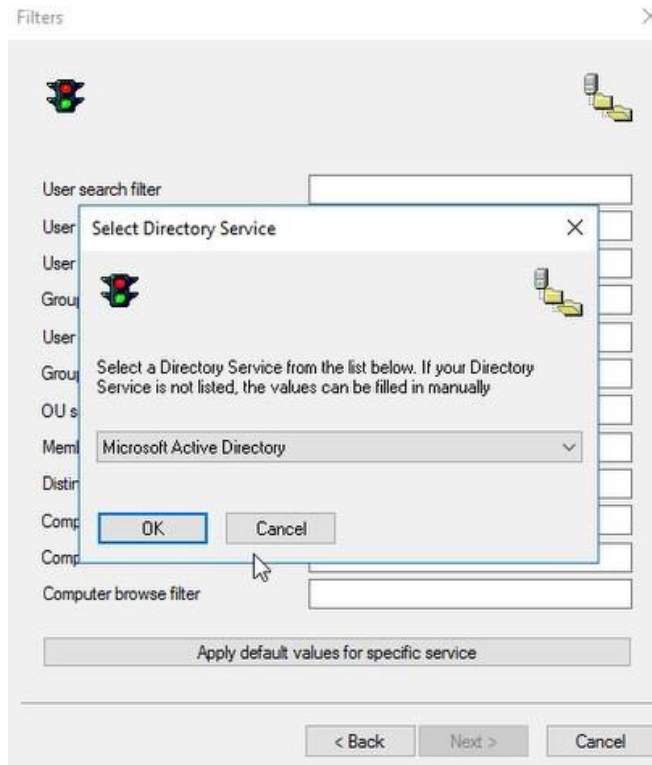
8. Optionally, you can test the logon to Directory Services by clicking on the **Test** button.

9. Click on **Next**.

10. In the **Filters** dialog box click on **Apply default values for specific service**.
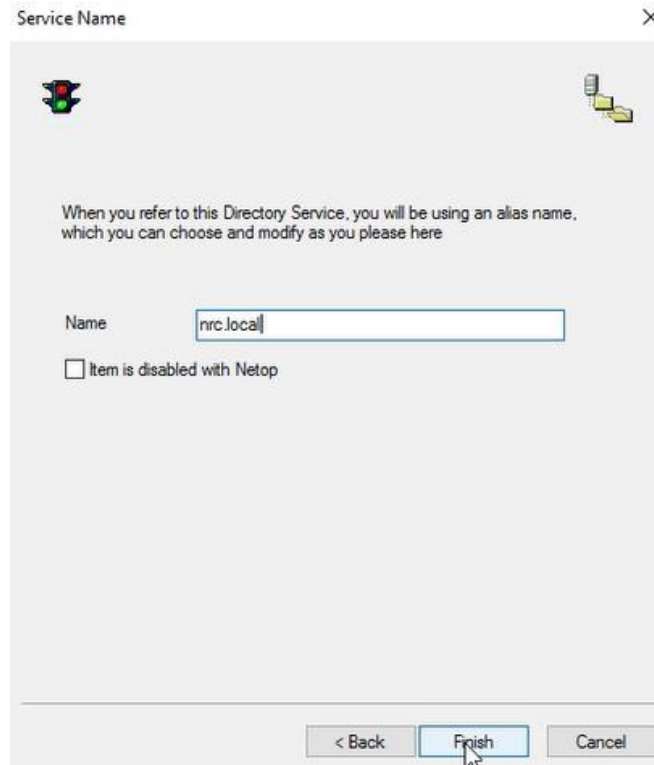
11. In the Select Directory Service pop-up make sure to select **Microsoft Active Directory** from the drop-down list.

12. Click on **OK**. The pop-up closes. Click on **Next**.

13. Click on **Next** again.

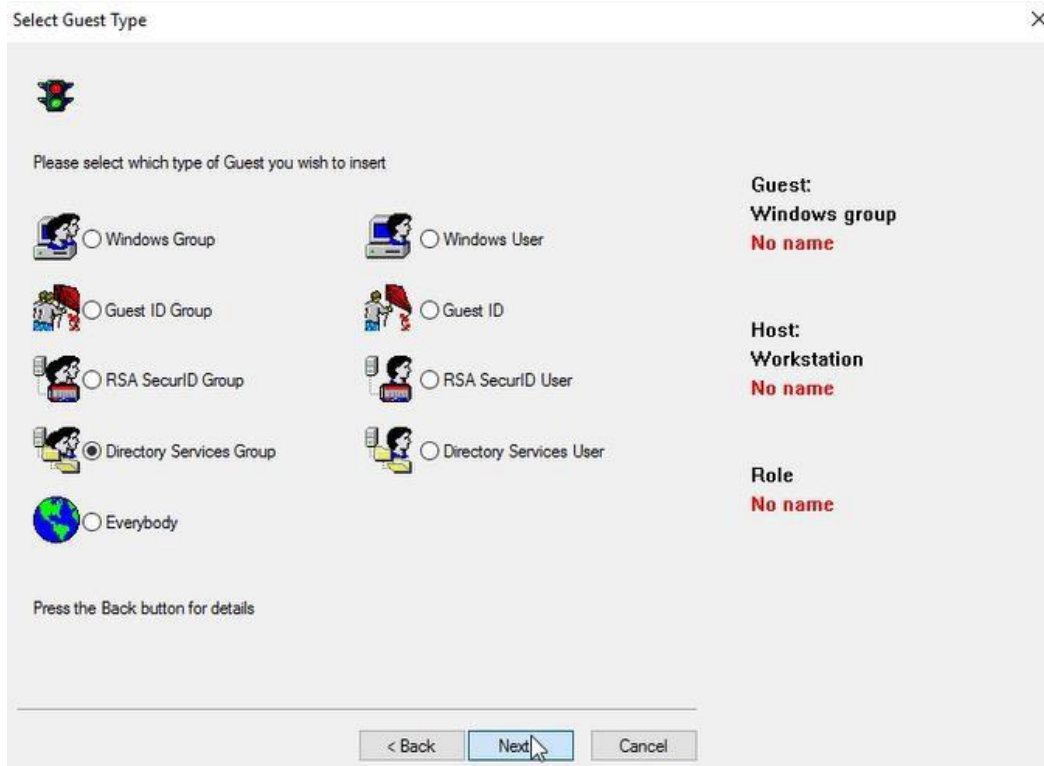14. Specify an alias for the Directory Service:

15. Click on **Finish**.

16. On the left tree, collapse **Security Settings** and select **Role Assignments**.

17. Right-click on the right side of the window and select **New**.
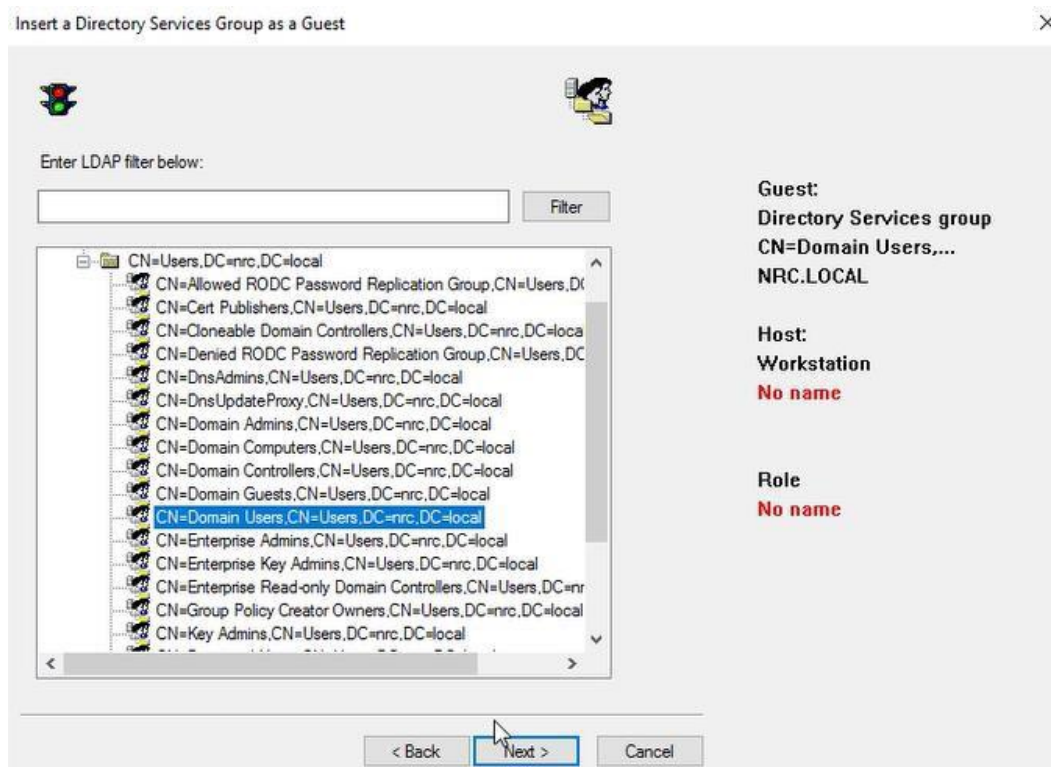
18. In the Select Guest Type dialog box select **Directory Services Group**.
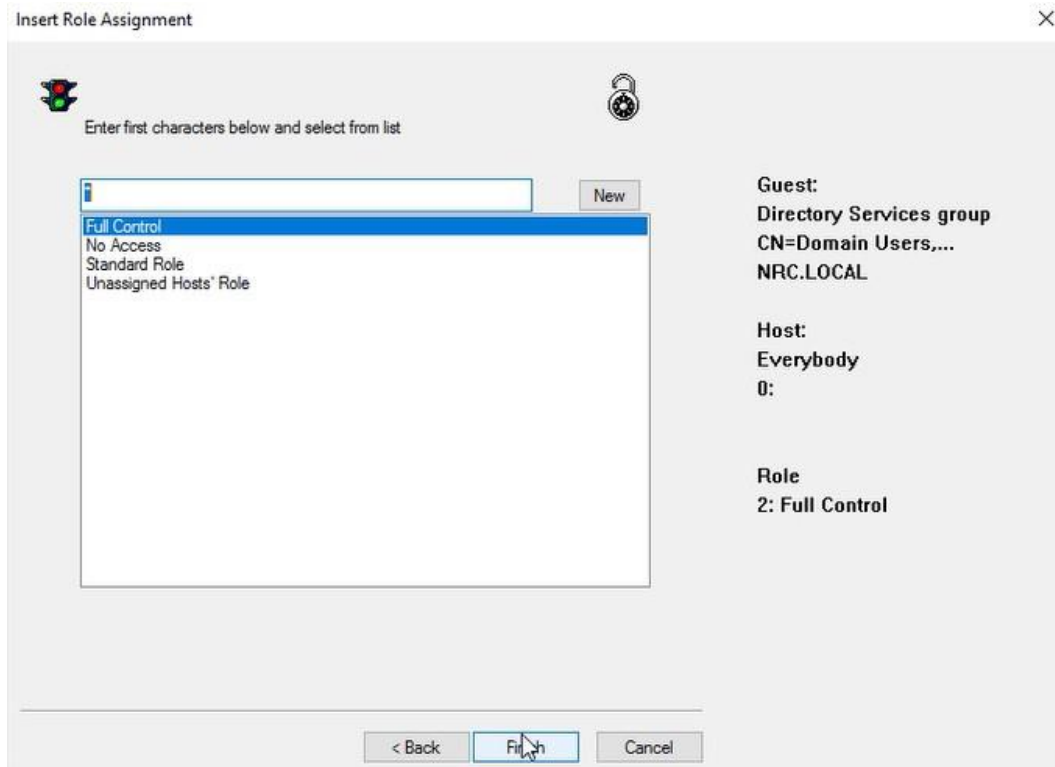
19. Click on **Next**.

20. Expand the Directory Service, search for the domain users' group and select it.

21. Click on **Next**.

22. In the **Select Host Type** dialog box select **Everyone** and click on **Next**.

23. In the Insert Role Assignment, the **Full Control** security role is selected by default:

24. Click on **Finish**.

You have now completed your first role assignment for testing.

If you have configured everything correctly, you can connect from your **Impero Guest** to the **Impero Host** using **Security Server** authentication and **Security Server** logging.