

## Chapter 5: Database Synchronization

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### Overview

The PowerNet Software system is a fully distributed system, and as such, it does not rely on exclusive access to a centralized computer or database. However, each PowerNet Software application requires access to certain common system information in order to function accurately, most notably NetPower DeviceServer configuration information and security information.

In order to have access to data that is centralized in nature, yet not rely on one centralized computer or database, PowerNet Software keeps NetPower DeviceServer configuration and security information in two “master” databases on one computer, and in “backup” copies of databases on each computer that runs a PowerNet Software application. The backup (or local) copies of the databases are then synchronized with the master copies of the databases. The two primary master databases are the Master Configuration Database and the Master Security Database.

Each application accesses the local copies of the Configuration database and Security database so that it can run uninterrupted for the maximum amount of time possible. To ensure that the local database has up-to-date information, each PowerNet Software application, upon starting, compares the master databases with the local copies. If either local copy differs from the master databases, a message displays advising you to close all PowerNet Software applications on your computer and proceed with database synchronization.

As information in the master databases may change while you are running an application, PowerNet Software automatically displays a system event message on every computer running a PowerNet Software application whenever a change is made to either the Master Configuration Database or the Master Security Database. This ensures that the local copies of the databases always contain the most recent information.

When you receive the system event message, you perform database synchronization by first exiting all PowerNet Software applications, then restarting the applications. When a PowerNet Software application and the local database are not up-to-date, you are prompted to synchronize. When database synchronization is complete, the application is available for use.

In order for database synchronization to work properly, you must correctly set up each computer on a network for database synchronization. To correctly set up a computer for database synchronization, you must:

- ◆ Determine the drive on which the master databases are to reside.
- ◆ Make the proper synchronization setup for each computer on a network.

Once each computer on a network is correctly set up for database synchronization, the computer is able to perform database synchronization. You can perform database synchronization only when you start or restart a PowerNet Software application.

## Database Synchronization

In order to set up database synchronization for a computer using a PowerNet Software application, you must first identify where the Master Configuration Database and Master Security Database are to reside. Once you move the database files to the desired drive, you set up all computers on a network to synchronize the local databases to the master databases.

It is recommended that you install both NetPower Configurator and NetPower Security Manager on the same computer, and that you use this computer to store your Master Configuration Database and your Master Security Database.

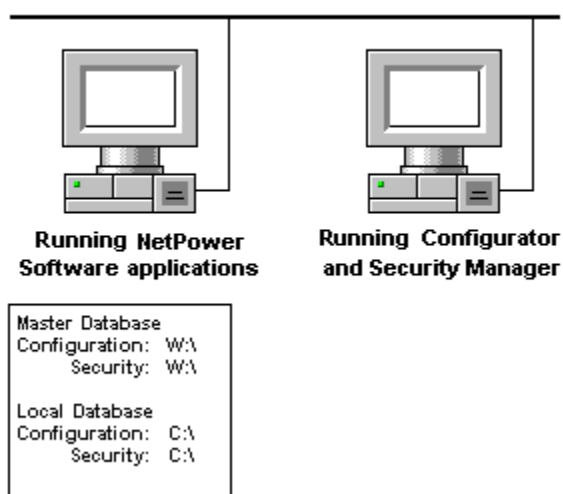
### **Important**

You must set up database synchronization for all computers on a network. If you do not initially set up a computer to synchronize with the master databases, then database synchronization will not be available for that computer. Also, every time a user starts an application on that computer, the Database Synchronization Setup dialog box displays. In order to stop the Database Synchronization Setup dialog box from displaying every time you start an application, you must enter the appropriate information in the dialog box input fields.

There are two scenarios to set up database synchronization:

- ◆ If your computer is not running NetPower Configurator and NetPower Security Manager, you must map the drive of the computer that is running NetPower Configurator and NetPower Security Manager to a local drive, and then set up Database Synchronization to point to the correct pathnames for the master and local databases. This is the most common scenario.

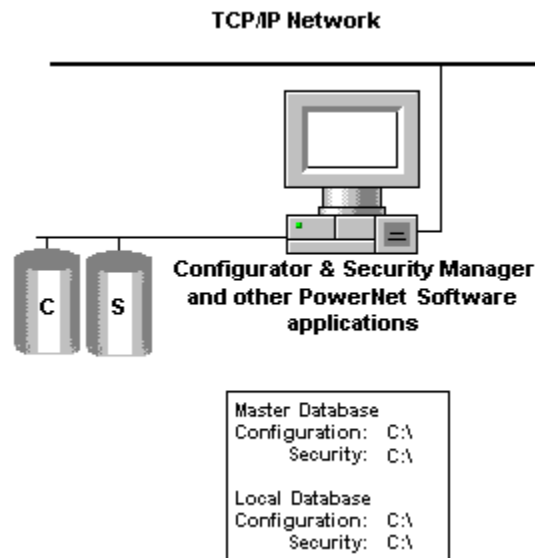
#### **TCP/IP Network**



#### **Note**

For information about how to map network drives to drive letters, see Microsoft Windows on-line help.

- ◆ If your computer is running NetPower Configurator and NetPower Security Manager, then you must set up database synchronization to point your Master Configuration Database and your Local Configuration Database to the same database, and point your Master Security Database and your Local Security Database to the same database.



The procedure to set up database synchronization is the same for both scenarios.

## Setting up Database Synchronization

To set up database synchronization, do the following:

1. Determine the drive that stores the Master Configuration Database and the Master Security Database, and verify that both files are installed on the computer.

The files are found in the directory where you installed the PowerNet Software applications.

- ◆ \IMPACC\Power Vision\Database\NGSWSS.MDB
- ◆ IMPACC\Power Vision\Database\NGSWCONFIG.MDB

2. Start any PowerNet Software application.

### Note

For detailed information on starting an application, see *Chapter 6: Logging On and Off*.

If you have not previously set up database synchronization, the Database Synchronization Setup dialog box displays.

**Database Synchronization Setup**

Master Database (Copy From)

Configuration: D:\PowerNet\database\NgswConfig.mdb

Security: D:\PowerNet\database\NgswSS.mdb

Local Databases (Copy To)

Configuration: D:\PowerNet\database\NGSWCONFIG.MDB

Security: D:\PowerNet\database\NGSWSS.MDB

OK Cancel

**Note**

If you have setup database synchronization previously, select Setup Database Synchronization from the File menu, in the main window.

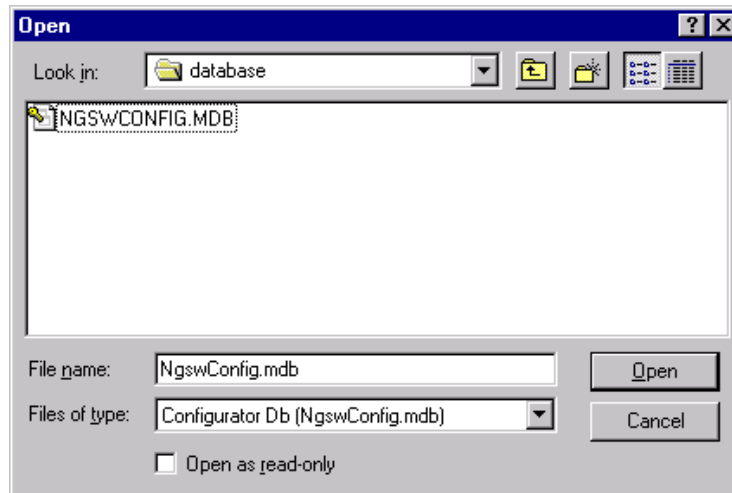
The dialog box has two sections. The top section represents the Master Configuration Database and the Master Security Database. The lower section of the dialog box represents the Local Configuration Database and the Local Security Database.

**Note**

You can set up Database Synchronization from every PowerNet Software application. Once you enter the correct pathnames in one application, all other PowerNet Software applications on your computer automatically update their Database Synchronization information.

3. In the master database section of the dialog box, click the browse icon of the Configuration input field.

The Open dialog box displays.



4. In the Open dialog box, browse for and select the drive and folder that contains the correct Master Configuration Database.
5. Click Open.
6. Repeat steps 3 through 5 to enter the correct pathnames for the Master Security Database.
7. Click OK in the Database Synchronization Setup dialog box.

The set up for database synchronization is complete. All PowerNet Software applications on your computer are updated for database synchronization.