

Chapter 8: NetPower Security Manager

What is NetPower Security Manager?

The PowerNet Software Security System allows you to create and modify user IDs and passwords for each PowerNet Software user. In addition, the PowerNet Software Security System allows you to assign security privileges to certain application functions, and to limit user access to IMPACC devices connected to a NetPower DeviceServer.

NetPower Security Manager is the PowerNet Software application that is used to perform security administration. NetPower Security Manager allows you to:

- ◆ Assign a unique user ID and password for each PowerNet Software user.
- ◆ Designate the functions that each user can access.
- ◆ Limit the devices that each user can access by assigning devices to device classes.
- ◆ Broadcast a system message that alerts application users to a change in the security profile, and requests that the users restart the applications they are running.
- ◆ Downloads the security profile, consisting of user and device class information, to all configured NetPower DeviceServers in the NetPower Security Manager's PowerNet Domain.

How Does NetPower Security Manager Work?

NetPower Security Manager stores user information and security privileges in the Master Security Database. Whenever you use NetPower Security Manager to change user information or security privileges, NetPower Security Manager downloads a user list and device class information to the NetPower DeviceServers within its PowerNet Domain.

Note

For information about PowerNet Domains, see the section *PowerNet Domain*.

NetPower Security Manager then broadcasts a system message that alerts application users to a change in the security profile and requests that the users restart the applications they are running.

When a user successfully logs on to an application, the application automatically synchronizes the local copy of the Security Database with the Master Security Database, verifies the user ID and password, and grants the proper access privileges for the user to access the PowerNet Software system and the NetPower DeviceServer.

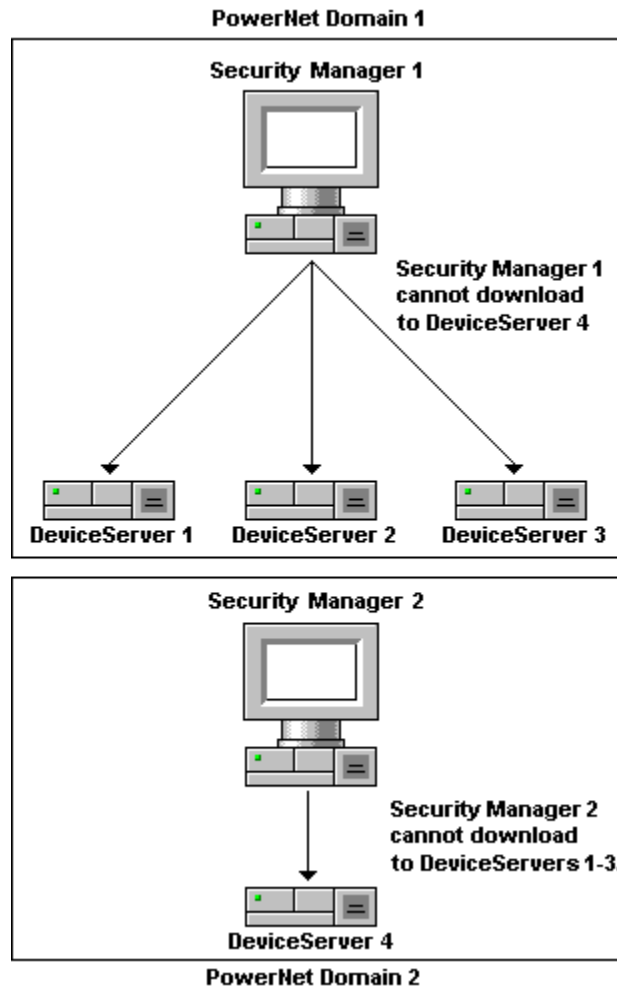
If the user does not have the security privileges to perform a function or access a device, the application denies the user access.

PowerNet Domain

A PowerNet domain includes NetPower Security Manager and the NetPower DeviceServers with which it communicates.

The first time NetPower Security Manager downloads information to a NetPower DeviceServer, the NetPower DeviceServer stores the IP address of the computer that is running NetPower Security Manager. That NetPower Security Manager becomes the NetPower DeviceServer's PowerNet Domain Security Manager. One NetPower Security Manager manages the security for one PowerNet domain.

When NetPower Security Manager connects to the NetPower DeviceServer to download the security profile, the NetPower DeviceServer compares the IP address of the connecting NetPower Security Manager with the IP address of its Domain Security Manager. If the IP address does not match the known Domain Security Manager, NetPower DeviceServer refuses the security profile download.



A user from another PowerNet domain can connect to the NetPower DeviceServer, but that individual will have view-only access to the NetPower DeviceServer.

Running NetPower Security Manager

For detailed information about starting, logging on to, checking out a license for, logging off of, and exiting an application, see *Chapter 6: Logging On and Off*.

Starting NetPower Security Manager

To start NetPower Security Manager, do the following:

1. Choose NetPower Security Manager from the IMPACC PowerNet Suite program group in the Start menu.
2. If you have not previously checked out a license, check out a license for NetPower Security Manager

The NetPower Security Manager main window displays. If you are not currently logged on to a PowerNet Software application, you have view-only security privileges. If you are currently logged on to an application, you are logged on to NetPower Security Manager with the last user ID and Password you used.

Logging On

Important

You must have System Administrator privileges in NetPower Security Manager to log on to NetPower Security Manager.

To log on to NetPower Security Manager, do the following:

1. If you have not previously logged on to an application, select Log On “NetPower Security Manager” from the File menu.
2. Enter your user ID and password into the Log On dialog box.
3. Click OK.

NetPower Security Manager logs you on and grants you privileges to edit user information.

Logging Off

Note

If NetPower Security Manager does not detect any keyboard input or mouse movement, you will be logged off automatically after a set time interval. For more information, see *Chapter 6: Logging On and Off*.

To log off NetPower Security Manager, choose Log Off “NetPower Security Manager” from the File menu.

NetPower Security Manager logs you off. You now have view-only security privileges.

Exiting NetPower Security Manager

To exit NetPower Security Manager, do the following:

1. From the File menu, choose Exit.
A confirm dialog box displays, verifying the request to exit.

2. Click OK.

NetPower Security Manager exits and returns the license.

Note

You can also use the Exit and Keep License command, which does not return the license to the NetPower License Manager. For more information about automatic log off, see *Chapter 6: Logging On and Off*.

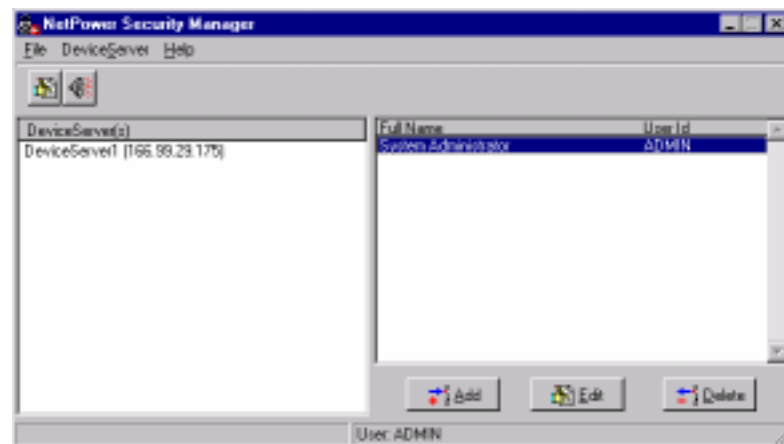
NetPower Security Manager Main Window

On the left-hand side of the NetPower Security Manager main window is the NetPower DeviceServer(s) Communicating list box, which lists the NetPower DeviceServers to which NetPower Security Manager can communicate. The list box on the right-hand side of the NetPower Security Manager main window lists the names and user IDs of all the users that have been added to NetPower Security Manager.

From the main window, you can:



- ◆ Add or delete users.
- ◆ Edit user information.
- ◆ Set up and edit control classes for configured devices.
- ◆ Send the security profile to all configured NetPower DeviceServers, and broadcast a security update message to users of applications connected to a NetPower DeviceServer.

For information on configuring devices, see *Chapter 9: Configuring the System*.



Menu Options and Toolbar Icons

The following table describes the menu options and their corresponding icons:

Menu Option	Description	Icon
File		
Setup Database Synchronization	Sets up Database Synchronization.	N/A
Setup Auto Logoff	Sets up the automatic logoff time interval.	N/A
Log On "NetPower Security Manager"	Logs you on to NetPower Security Manager.	N/A
Log Off "NetPower Security Manager"	Logs you off of NetPower Security Manager.	N/A
Exit & Keep License	Exits NetPower Security Manager without returning the license.	N/A
Exit	Exits NetPower Security Manager and returns the license.	N/A
NetPower DeviceServer		
Assign and Download Device Class	Assigns and downloads the classes for a NetPower DeviceServer's configured devices.	
Download User and Device Class to DeviceServer(s)	Downloads user and device class information to the connected NetPower DeviceServers, and sends a System Event message to applications connected to NetPower DeviceServers.	
Help		
Contents	Displays the table of contents for on-line help.	N/A
Keyword Search	Performs a keyword search.	N/A
About	Displays the About NetPower Security Manager dialog box.	N/A

User Administration

Important

You must be logged on as a system administrator in order to edit any user information. For more information, see the section *Logging On*.

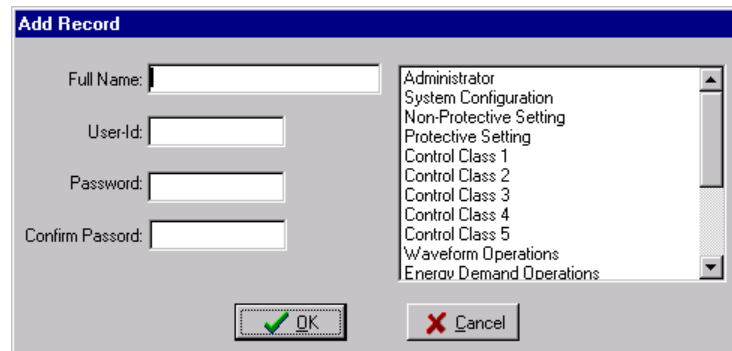
When you log on to NetPower Security Manager for the first time, you should change the password for the System Administrator.

Adding a User

To add a user, do the following:

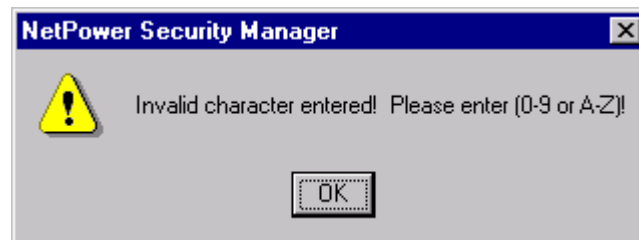
1. In the NetPower Security Manager main window, click Add.

The Add Record dialog box displays.

The 'Add Record' dialog box has a blue title bar. It contains four text input fields on the left: 'Full Name:', 'User-Id:', 'Password:', and 'Confirm Password:'. To the right of these fields is a list box containing the following items: 'Administrator', 'System Configuration', 'Non-Protective Setting', 'Protective Setting', 'Control Class 1', 'Control Class 2', 'Control Class 3', 'Control Class 4', 'Control Class 5', 'Waveform Operations', and 'Energy Demand Operations'. At the bottom of the dialog are two buttons: 'OK' with a green checkmark icon and 'Cancel' with a red X icon.

2. In the Full Name field, type the user's full name. The name can be a maximum of 20 characters and can be any combination of letters, numbers, or other keyboard characters.
3. In the User ID field, type the individual's user ID. The user ID can be a maximum of 12 characters in length, and can only contain alphanumeric characters.

If a non-alphanumeric character is entered, the NetPower Security Manager dialog box displays, informing you that you typed an invalid character.

The 'NetPower Security Manager' error dialog box has a blue title bar with a close button. It features a yellow warning triangle icon on the left. The text in the center reads: 'Invalid character entered! Please enter (0-9 or A-Z)!'. At the bottom center is an 'OK' button.

Click OK, and type the user ID using valid characters.

4. In the Password field, type the user's password. The password can be from one to 12 characters in length, and can only contain alphanumeric characters.

If a non-alphanumeric character is entered, the NetPower Security Manager dialog box displays, informing you that you typed an invalid character.

Click OK, and type the password using valid characters.

5. In the Confirm Password field, type the user's password exactly as you typed in it in the Password field.
6. From the list to the right of the Add Record dialog box, select the options to which you want the user to have access.

The options you select are highlighted.

The following table describes each option.

Option	Description
Administrator	Permits the user to have access to all functions and privileges.
NetPower DeviceServer Configuration	Permits the user to do the following: <ul style="list-style-type: none">◆ Configure devices.◆ Set up communications and device polling.◆ Enable and disable a NetPower DeviceServer.◆ Automatically disable control functions for a user after a user-defined time-out period (set Auto-low access).
Non-Protective Setting	Permits the user to acknowledge alarms.
Protective Setting	Permits the user to download setpoints to a device.

Option	Description
Control Class 1 Control Class 2 Control Class 3 Control Class 4 Control Class 5	<p>Permits the user to do the following:</p> <ul style="list-style-type: none"> ◆ Turn a device on and off. ◆ Activate and deactivate relays. ◆ Start and stop motors. ◆ Open and close a device. ◆ Enter test mode. ◆ Reset a trip. ◆ Tag Out and remove Tag Out. ◆ Enter speed setpoints. <p>The devices associated with each Control Class are user-defined. See the section <i>Setting or Editing Device Classes for Configured Devices</i> for additional information.</p>
NetPower Waveform Operations	Permits the user to use NetPower Waveform.
Energy Demand Operations	Permits the user to perform energy demand operations.
Reset Energy	Permits the user to reset energy.
Reset Timers and Counters	Permits the user to reset timers and counters.
Reset min & max values, current demand	Permits the user to reset minimum and maximum values, and current demand for alarms.
Reset Communications Statistics	Permits the user to reset communication parameters.
Alarm Configuration	Permits the user to configure the alarm list.
Data Logging Configuration	<p>Permits the user to do the following:</p> <ul style="list-style-type: none"> ◆ Set up the event log file. ◆ Set up the trend log file. ◆ Set up the time stamp trip log. ◆ Start and stop data logging.

Option	Description
Client Configuration	Permits any configuration on any application, excluding NetPower Configurator.

Note

All users, regardless of the options to which they have access, can view data.

7. Click OK.

If the passwords entered in the Password and Confirm Password fields do not match, the NetPower Security Manager dialog box displays, informing you that the passwords do not match.

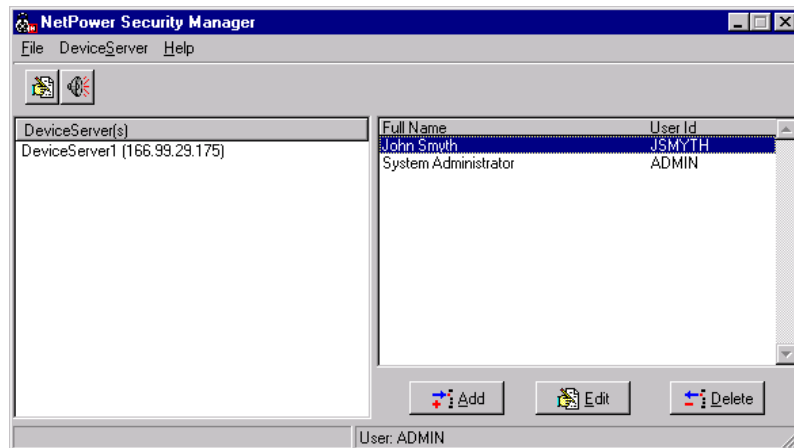


Click OK and re-type the desired password into the Password and Confirm Password fields.

If the passwords entered in the Password and Confirm Password fields match, NetPower Security Manager updates the user information and downloads the information to the NetPower DeviceServers. NetPower Security Manager then broadcasts a System Event message to all applications connected to a NetPower DeviceServer to notify users that the security profile has changed.



The NetPower Security Manager main window displays the new user in the list.



Editing User Information

You can edit a user's name, password, or the options to which the user has access.

Note

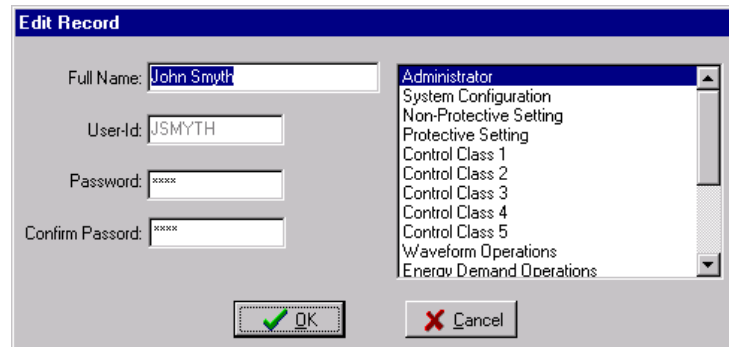
You cannot edit a user ID. To change an individual's user ID, you must delete the user, then add the user, using a different user ID.

In addition, you cannot edit the user ID you used to log on to Net Power Security Manager.

To edit a user's information, do the following:

1. In the NetPower Security Manager main window, click Edit.

The Edit Record dialog box displays.



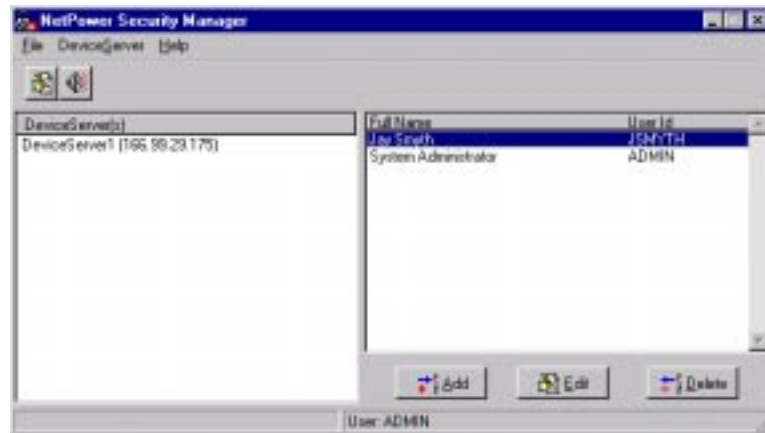
2. To edit the name, type the new name in the Full Name field.
To edit the password, type the new password in the Password and Confirm Password fields.

To edit the options to which the user has access, select or clear the options from the list on the right of the Edit Record dialog box.

3. Click OK.

NetPower Security Manager downloads the edited information to the NetPower DeviceServers, then broadcasts a System Event message to all applications connected to a NetPower DeviceServer to notify users that the security profile has changed.

The NetPower Security Manager main window displays. If the name was edited, the new Full Name displays in the list.



Deleting a User

To delete a user, do the following:

Note

You cannot delete the user ID you used to log on to NetPower Security Manager

1. From the list on the NetPower Security Manager main window, select the user you want to delete.
2. Click Delete.

The NetPower Security Manager dialog box displays, verifying the request to delete the user.



3. Click Yes.

NetPower Security Manager deletes the user, then downloads the information to the NetPower DeviceServers, and broadcasts a System Event message to all applications connected to a NetPower DeviceServer to notify users that the security profile has changed.

The NetPower Security Manager main window displays; the deleted user is no longer listed in the list.

Setting or Editing Device Classes for Configured Devices

You can set up security for devices by assigning devices to control classes and then granting users access to the classes.

You can assign any device to one or more of the control classes 1-5. For each user, you can specify the class or classes to which that user has access, and the nature of the access.

Note

If you do not assign a device to a class, by default, that device will be assigned to all five classes.

The classes are arbitrary and have no inherent meaning. You give meaning to a class by the way you assign access to that class.

For example:

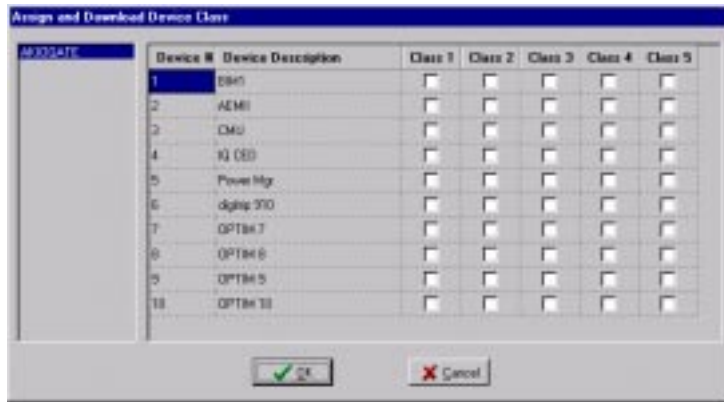
- ◆ A hierarchical security system can be set up by grouping your devices into up to five levels of security risk and then specifying user access according to a user's security clearance.
- ◆ A non-hierarchical way of setting up classes is to assign devices to classes according to department, work group, or company division, and then specify user access according to a user's department, work group, or division.

If you are setting up a class system, you should plan the type of class system you want, and ensure that the policies are in place for assigning new devices and specifying user access to classes. These activities should be conducted in a manner consistent with the approach taken by your class system.

To set or edit classes for a configured device, do the following:

1. On the NetPower Security main window, click the Assign and Download Device Class icon.

The Assign and Download Device Class dialog box displays.



The Assign and Download Device Class dialog box displays the names of the available NetPower DeviceServers in the list on the left-hand side of the dialog box. The list box on the right-hand side of the dialog box displays a table that contains the device number, description, and classes for the devices configured on the highlighted NetPower DeviceServer.

2. If the highlighted NetPower DeviceServer is not the NetPower DeviceServer for which you want to set the control classes, select a different NetPower DeviceServer.
3. In the row of a device, highlight the checkbox of the class you want to assign to that device, then select the checkbox.

If you want to select more than one class, highlight another class checkbox, then select that checkbox.

If you want to remove a device from a class, in the row of a device, highlight the checkbox of the class you want to remove, then clear the checkbox.

4. Click OK.

NetPower Security Manager downloads the new control class data to the configured NetPower DeviceServers, then broadcasts a System Event message to all applications connected to a NetPower DeviceServer to notify users that the security profile has changed.

Note

System event messages cannot be sent through routers. Users connected to the network from a remote connection will not receive the system event message.

The NetPower Security Manager main window displays.

Downloading User and Device Class Information

NetPower Security Manager automatically downloads user and device class information, then broadcasts a System Event message to all applications connected to a NetPower DeviceServer whenever any user profile information changes. You can also download user and device class information and broadcast a System Event message without changing any user profile information.

To download the user and device class information and send a System Event message, click the Download User and Device Class to NetPower DeviceServer(s) icon.

NetPower Security Manager downloads the user and device class information to all configured NetPower DeviceServers and broadcasts a System Event message to all applications connected to a NetPower DeviceServer to notify the users that the security profile has changed.

