

AMANO®

ATVS

Amano Time Validation System

Installation and Operation Guide

Enterprise Edition Version 4.3

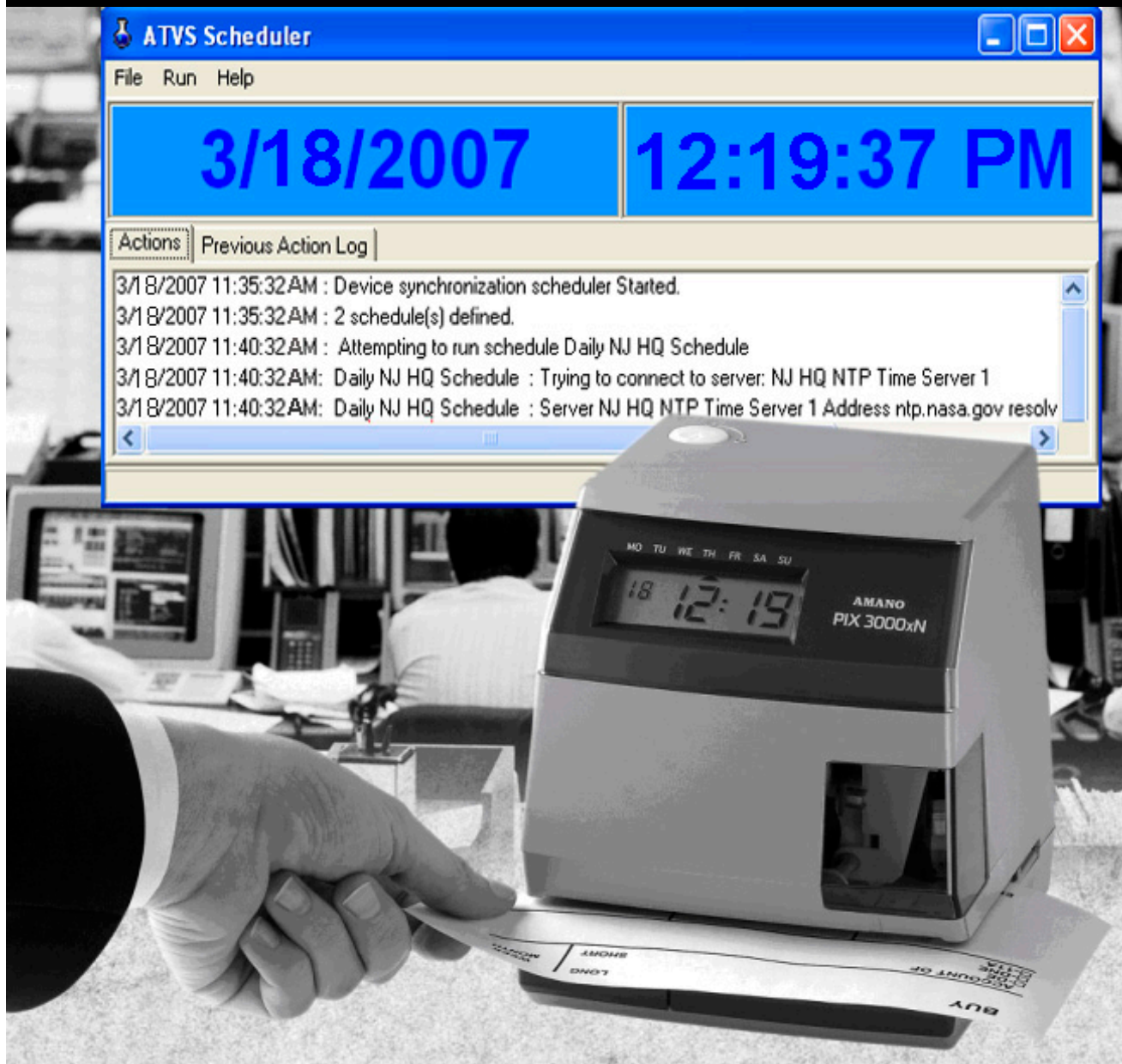


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Chapter 1: Introduction and Installation

The ATVS application is available in 2 different versions:

- An enterprise edition to provide the TCP/IP solution for a “true” Ethernet time stamp solution. It does not simply attach to a network workstation, as with other so called TCP/IP solutions. Each PIX-3000xNT time stamp has an internal NIC and is given an IP address for synchronization over your network. The enterprise ATVS Software is installed on a server on your network. The PIX-3000xNT time stamps are then deployed anywhere on your network. Each time stamp requires an active available network port set to Base 10 communication speed, with network connectivity back to the single ATVS Software installation. Also works with PIX-3000xN time stamps, and the PIX-3000xN and PIX-3000xNT can co-exist on the same server.
- A standard edition for a serial broadcast solution utilizing the same ATVS Configuration Software installed on your own server as the host, but using the PIX-3000xN time stamps (note: also works with PIX-3000xNT). Instead of transmitting the signal to each clock over your network via TCP/IP, the signal is transmitted via the 9-pin serial port of the single server. This in turn would attach to provided line drivers and patch panels to the office cabling infrastructure going out to the clocks at the facility. The end-user can utilize standard CAT5 or better grade, straight cable—no special wiring required. The PIX-3000xN and PIX-3000xNT can co-exist on the same server.

This manual [AJR-40120X] covers only the Enterprise Edition, while Amano ATVS Standard Edition Manual [AJR-40110X] discusses the standard version of the ATVS software.

How This Manual is Organized

The installation, configuration, and operation procedures in this manual are provided for user assistance.

Chapter 1 provides a brief overview of features, benefits, and system components. Also described is the general installation and configuration (using the Initial Wizard) guidelines. In most instances, configuration should only need to be completed once.

Chapter 2 provides step-by-step procedures for general operation of ATVS. Also, this chapter details how to use the Setup Wizard for additions/deletions to configuration performed with the Initial Wizard during installation.

Chapter 3 provides a user's guide to the operation of ATVS Scheduler.

Chapter 4 provides a user's guide to the operation of DeviceInstaller.

Chapter 5 explains how to define, modify and run Report Profiles in ATVS.

Chapter 6 contains a complete list of Action Log Messages and basic troubleshooting information.

Introduction – What is ATVS?

The **Amano Time Validation System (ATVS)** time synchronization software works in conjunction with one or more devices (PIX-3000xN or PIX-3000xNT Time Recorders). The software and time clock combination may communicate by way of TCP/IP or Serial RS485 connection.

The PIX-3000-series time clocks communicate according to these protocols:

- PIX-3000xN clocks with Serial RS485 direct connection

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- PIX-3000xNT clocks via Ethernet TCP/IP network connection

ATVS software runs on a Windows NT® 4.0 (or later) platform. This enables the use of standard network management software and backup procedures to manage, maintain, and monitor the software host.

The devices connected to the ATVS Host Server are synchronized by having the ATVS synchronized to NIST's NTP (Network Time Protocol) server in Boulder, Colorado, or another preprogrammed NTP source via the Internet. Once the ATVS Host Server has synchronized itself, the correct time is then transmitted to all the devices.

What is OATS Compliance?

The Amano PIX-3000xN and PIX-3000xNT, used in conjunction with ATVS software, have been specially designed by Amano in compliance with the Order Audit Trail System (OATS) rule 6953, Synchronization of Member Business Clocks.

Following is the OATS NASD rule:

Rule 6953 requires any NASD member firm that records order, transaction or related data required under the By-Laws and Rules of the Association to synchronize all business clocks used to record the date and time of any market event. Clocks, including computer system clocks and manual time stamp machines, must record time in hours, minutes and seconds with to-the-second granularity and must be synchronized to a source that is synchronized to within three seconds of the National Institute of Standards' (NIST) atomic clock. Clocks must be synchronized once a day prior to the opening of the market, and remain in synch throughout the day. In addition, firms are to maintain a copy of their clock synchronization procedures on-site. Clocks not used to record the date and time of market events need not be synchronized.

Note: The above rule is similar to NYSE Rule 132A, to which this application and associated hardware is also compliant.

ATVS Software Features

- Automatic time synchronization to an official time source.
- Event notification through SNMP (Simple Network Management Protocol) traps. This feature enables network administrators to manage time clock performance, find problems, and solve them in a timely manner.
- Amano has registered a unique SNMP identifier, which validates the SNMP trap feature.
- Multiple communications options to time validation units.
- NTP (Network Time Protocol) syncs clocks to a time reference over a data network.
- NIST (National Institute of Standards & Technology) synchronization available via modem.
- Direct synchronization to the time source rather than to a computer.
- Log-in security with configurable rights to sections of application.
- Software supports two communication options and validation units:
 - PIX-3000xN clocks with Serial RS485 direct connection.
 - PIX-3000xNT clocks via Ethernet TCP/IP network connection.
- Synchronization logging data maintained per Order Audit Trail System (OATS) Rule 6953 requirements.
- Full OATS compliance with stand-alone units not linked to a PC.
- Complete server-based solution, not on individual trader computers.

-
- Reports including status/error, transaction log, and configuration settings.
 - Unlimited syncs per day for improved accuracy.
 - Compatible with Windows NT/98/2000/ME/2003/XP/Vista.
 - Employs Windows Services to perform synchronization.
 - E-mail notification of clock status and/or failure to synchronize time, configurable to select group/device and send e-mail to chosen recipients.

ATVS Benefits

- Assures financial institutions' compliance with OATS Rule 6953 as per NASD/SEC.
- Amano time stamp will continue to function and maintain time as a stand-alone unit, even if it does not receive synchronization from the provided ATVS host software.
- The PIX-3000 series is the highest quality OATS-compliant time stamp available.
- Log files maintained automatically on hard drive of computer to which the software is installed. Logs may be e-mailed, saved or printed as desired.
- Convenient system support provided by visible alarms on time stamp imprint and LCD display should synchronization not occur.
- Provides a solution for industry sectors that require strict adherence to good time keeping practices.

ATVS Typical User/Market

The following list is comprised of typical users/markets for Amano ATVS:

- Banks
- Investment Brokers
- NASDAQ traders
- Manufacturing
- Healthcare
- Emergency Call Centers

PIX-3000xN & PIX-3000xNT Hardware Features

- Maintain time within four tenths of a second over a 24-hour period once synchronized.
- Time imprint format includes seconds as per OATS 6953 requirements.
- Prints through up to 6 multiple-part carbonless copies.
- Capable of printing the alphanumeric identification.
- Full power reserve permits clock operation in the event of power outage.
- Quick and easy ribbon cartridge replacement.
- Direct-connect or Ethernet time validation units.

ATVS Requirements

ATVS Time Synchronization software (Enterprise version) for Windows may be used in conjunction with PIX-3000xN Time Recorders or PIX-3000xNT Time Recorders.

The ATVS software may be loaded on any PC and/or server operating under Windows NT or later.

ATVS General Information

During the installation process, both the ATVS application and ATVS Scheduler application use the Setup.exe file and the same supporting files.

The installation procedure provides simple instructions on each screen. It is important to follow these instructions carefully in the order for the ATVS Enterprise Edition to run correctly.

End-users may never need to change the configuration settings created thru the wizard at a later time after the initial configuration setup. *However, it is recommended that all configuration settings should be recorded in the event that the setup needs to be repeated in the future.*

While the Enterprise Edition of ATVS is running, the ATVS Scheduler runs as a service.

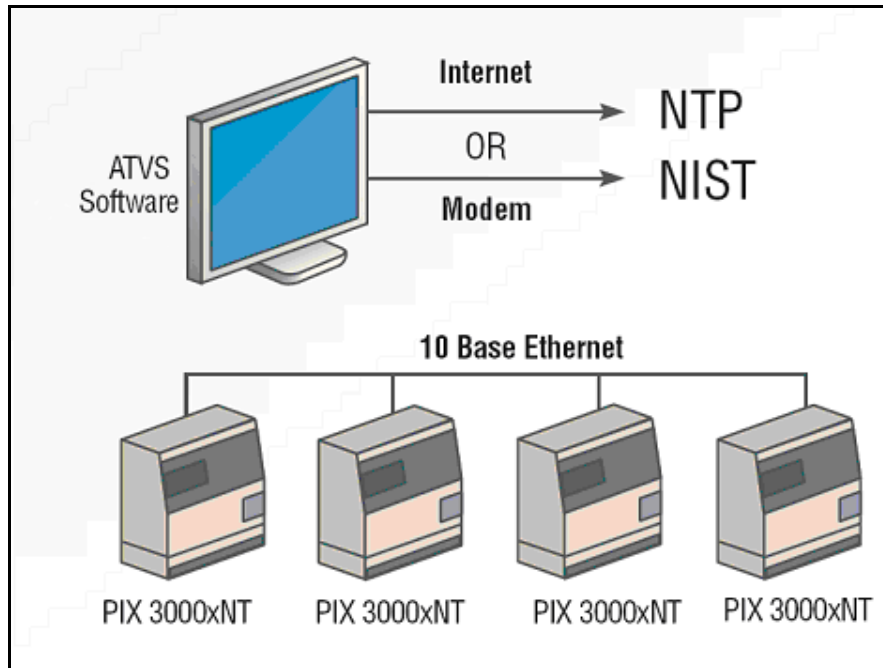
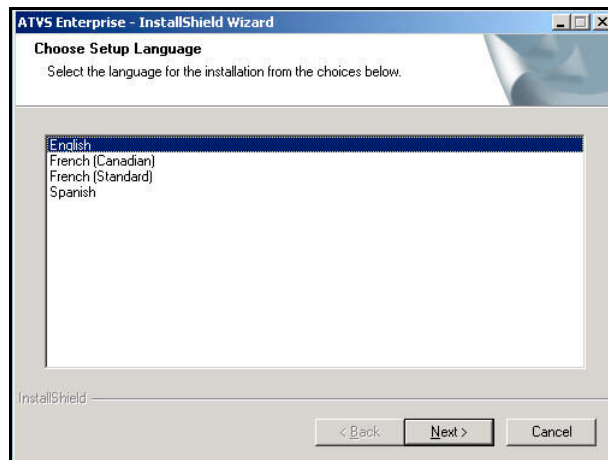


Figure 1. Enterprise Edition ATVS Diagram

ATVS Installation Guide

ATVS Initial Software Installation

1. Turn on the computer for the ATVS application to be loaded.
2. Verify that no additional applications are running.
3. Insert the ATVS disk in the CD-ROM drive.
4. The InstallShield Wizard screen for ATVS **Choose Setup Language** will appear as shown:



5. Click **Next** to continue the installation, and the Welcome to ATVS InstallShield Wizard will appear (see *Figure 2*).

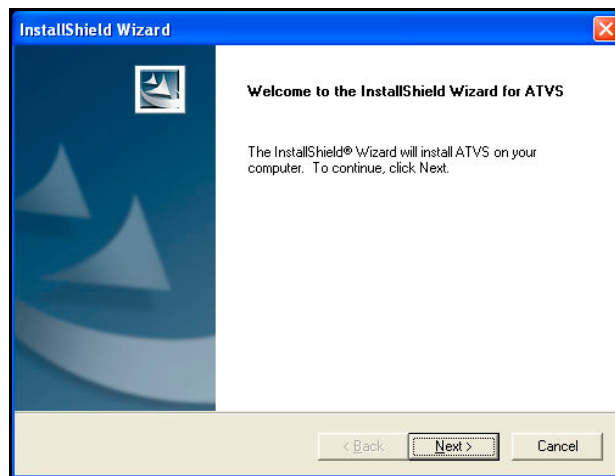


Figure 2. Welcome to ATVS InstallShield Wizard

- Click **Next** to continue the installation, and the Software License Agreement will appear to advise users of their legal responsibilities (see *Figure 3*). To continue the installation you must click **Yes** to accept this agreement.

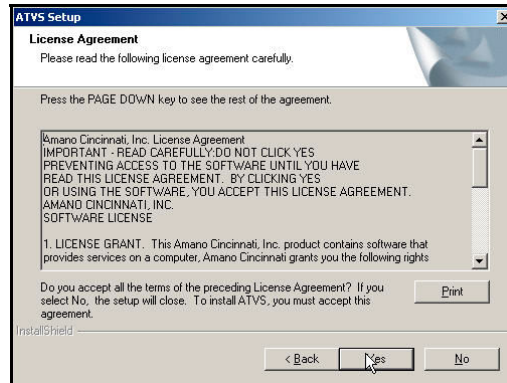


Figure 3 InstallShield Wizard License Agreement

Note: Press the Print button to print a copy of the license agreement.

- The following Customer Information screen will appear (see *Figure 4*). The ATVS serial number should be on the CD.

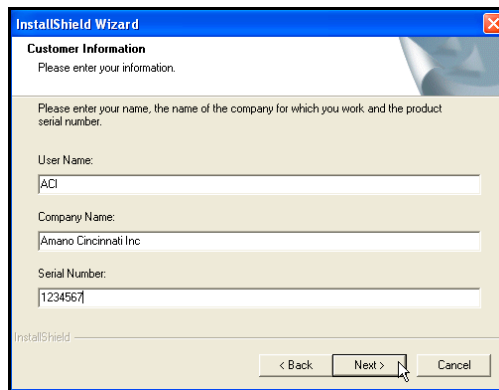


Figure 4. InstallShield Wizard Customer Information

- Enter the User Name, Company Name, and ATVS serial number. Then click **Next** to continue with the setup, and the Destination Location screen will appear as shown in *Figure 5*.

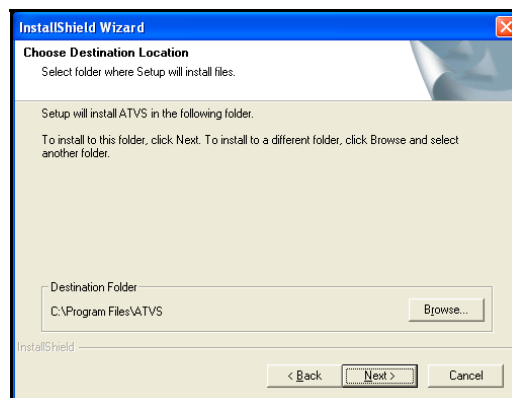


Figure 5. InstallShield Wizard Choose Destination Location

- When asked to Choose Destination Location, use the suggested Destination Folder (ATVS). If the drive is not applicable to your system, click the Browse button to select a drive. Then click **Next** to continue, and the Setup Type screen will appear (see *Figure 6*).

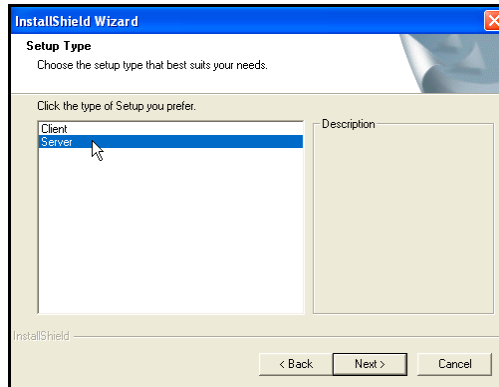


Figure 6. InstallShield Wizard Setup Type

- When asked to choose the type of setup, it is recommended to click on **Server**. If the PC you are loading ATVS on is connected to the ATVS system, you may want to click on Client. Then click **Next** to continue, and the Select Program Folder screen will appear (see *Figure 7*).

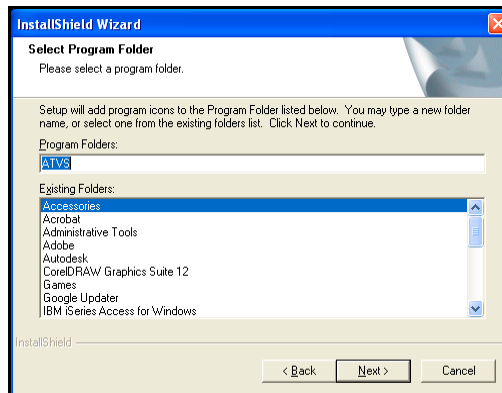


Figure 7. InstallShield Wizard Select Program Folder

- When asked to enter a server's (PC) IP Address, use the suggested **localhost**, and click **Next** to continue (see *Figure 8*).

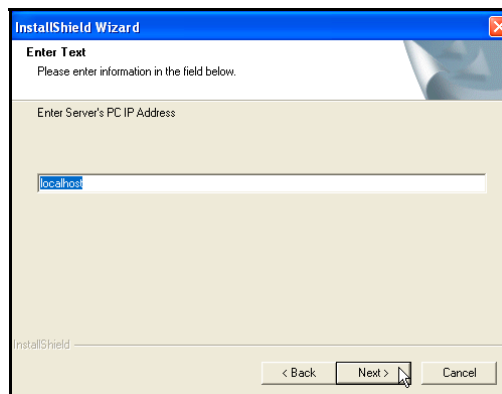
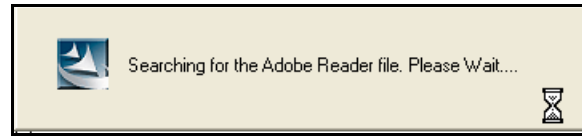


Figure 8. InstallShield Wizard Enter Text

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12. During installation, the installation will check for the presence of the Adobe Acrobat Reader, necessary for the display of PDF-formatted reports. If no Reader is present, that application will install. During that process, the following screen will briefly appear:



13. Next a Setup Status screen will appear showing a progress status bar for the ATVS installation as shown in *Figure 9*.

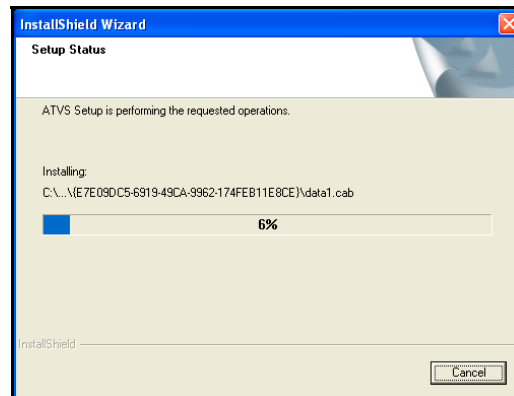


Figure 9. InstallShield Wizard Setup Status

14. During installation, if desired, click **Yes** to create a desktop icon for ATVS (see *Figure 10*).

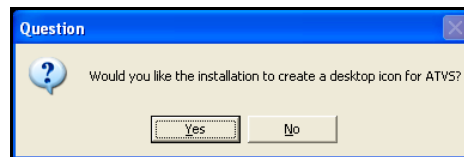


Figure 10. Desktop Icon Dialog

15. The InstallShield Wizard Complete will appear (see *Figure 11*) when done.

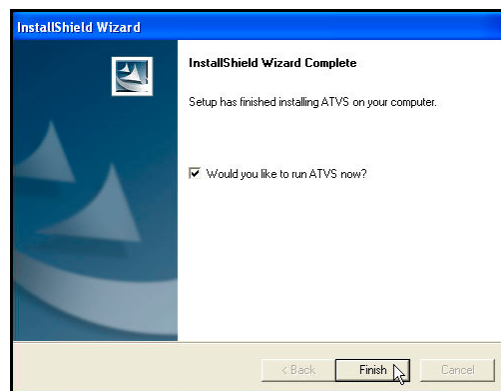


Figure 11. InstallShield Wizard Complete

16. Click on **Finish**, and if the box "Would you like to run ATVS now?" is checked, the program will immediately start, and the following screen will appear signifying the ATVS Scheduler service is starting (see *Figure 12*).

Note: See the next section, "ATVS Software Activation, which should normally be performed immediately following the ATVS software installation.

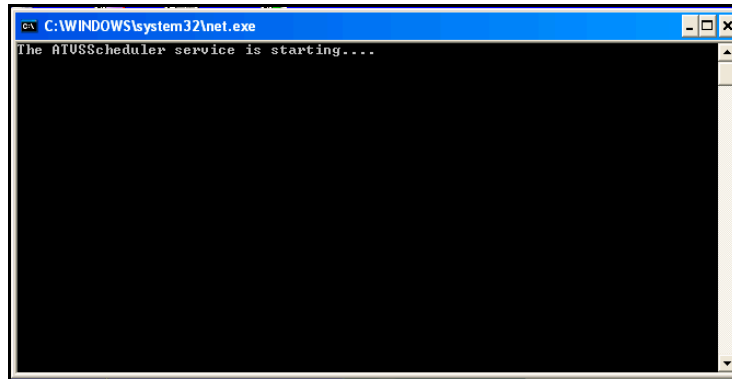


Figure 12. ATVS Scheduler Service Starting

ATVS Software Activation

1. *Figure 13* displays the Activate screen which appears the first time the program is started up after initial installation. Enter the serial number supplied with the software and click on the **Activate** button. If activation is successful the "Activation was successful. Would you like to register?" screen will appear (skip to step 4).

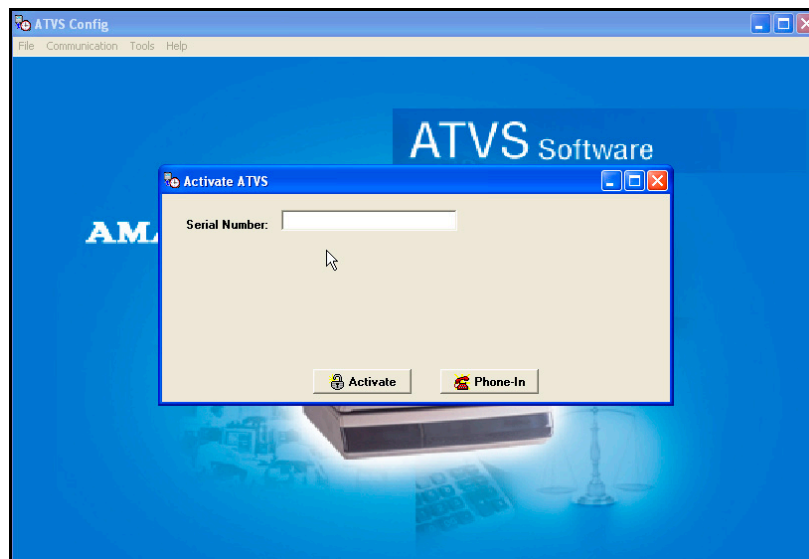


Figure 13. Activate ATVS

If you choose not to Activate the software at this point by canceling the activation the following error message will appear (see *Figure 14*). At this point you have a trial period of up to 14-days to use the ATVS software. During this period you must successfully activate the software. Click the **OK** button to launch the ATVS program and display the Initial Wizard screen (from this here proceed to step 1 of the ATVS Initial Configuration).

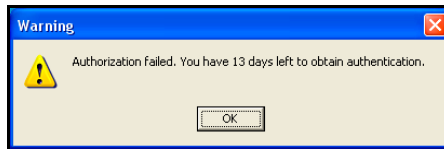


Figure 14. ATVS Authorization Failed

2. If an Activation error dialog message appears (see Figure 15), the serial number is incorrect, no Internet connection with the Amano authorization server occurred, or the same serial number was previously installed.

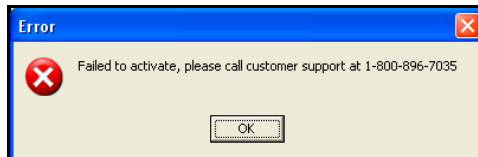



Figure 15. Failed to Activate Customer Support Required

3. If the serial number is valid, but customer support is desired click on the **Phone In**  button from the Activate screen and the Activate ATVS screen for customer support will appear (see Figure 16).

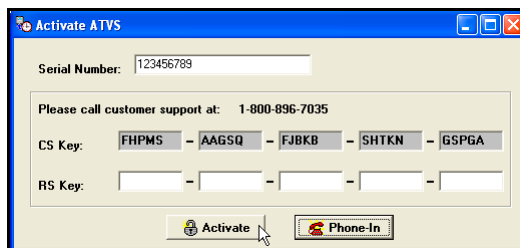



Figure 16. Activate ATVS with Customer Support

Call Amano support at **1-800-896-7035** and the support personnel will ask for the **CS Key** code letters displayed on your screen (see Figure 16). Enter the supplied [from Amano support] **RS Key** code into the appropriate fields in five character increments. Click on the **Activate**  button to activate and launch the ATVS program.

4. Upon successful authorization the following screen will appear (see Figure 17). Click **Yes** to register.

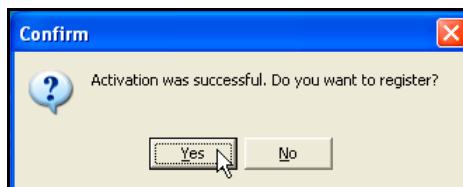


Figure 17. Confirm ATVS Activation

Alternately, the registration can be skipped by clicking the **No** button. However, it is suggested at this time to register, but you can always register by clicking on the **File** menu and pulling down to **Register** to open the registration screen (see the following figure).

Note: You cannot register the software until the activation process is complete.

5. Enter the appropriate information in the registry fields (see *Figure 18*). The minimum information required to successfully register is; Last Name, First Name, City, and Type [Red outlined fields]. Select the type from the dropdown menu, and click **OK** to register and launch the ATVS program to display the Initial Wizard (see *Figure 19*).

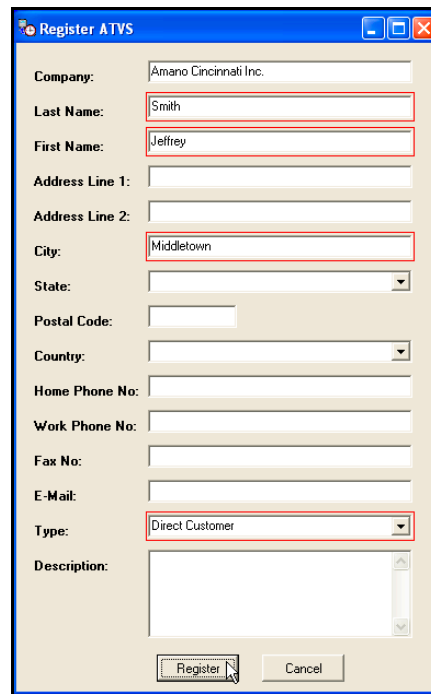



Figure 18. ATVS Registration

Click the **Cancel** button to abort the registration process to perform at a later time. The ATVS Initial Wizard screen should now appear (see *Figure 19*).


ATVS Initial Configuration

1. After the ATVS Scheduler and Config programs have started the Initial Wizard screen for ATVS will appear. All 4 steps must be completed to finish the initial configuration and installation. If the **Exit**  button is pressed before completion a warning confirmation dialog will appear. The next time ATVS is started the Initial Wizard screen will pickup with the last completed step. It is suggested to complete all the steps in numerical order.

Note: The green checkmarks indicate when a step is complete.



Figure 19. Initial Wizard

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2. For **Step 1**, from the Initial Wizard, click on the Create Users  icon and the Users screen will appear (see *Figure 20*).

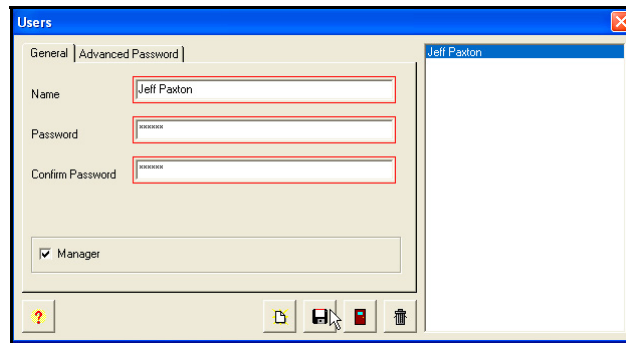




Figure 20. Users General Tab

3. Enter a Name, Password [6 character minimum], Confirm Password, and select a Language from the dropdown menu. Note that user names and password are case-sensitive. If **Manager** is not checked, click on the **Rights** tab to select the rights (see *Figure 21*). From the *Available* list, select the Rights by using the selection arrows ( or ) to move them to the *Selected* list on the right.

Note: If Manager is checked, then the "Rights" tab will not appear as all rights will automatically be assigned to this user.

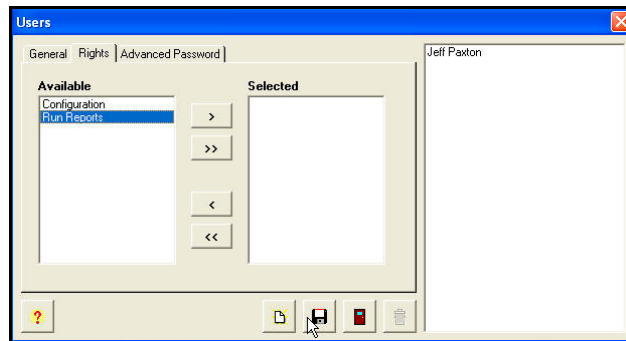


Figure 21. Users Rights Tab

4. Click on the **Advanced Password** tab to select a password expiration of: Never Expire, Expires after, or Expires On (see *Figure 22*). The default is Never Expire, so this screen can be skipped if the default selection is acceptable.

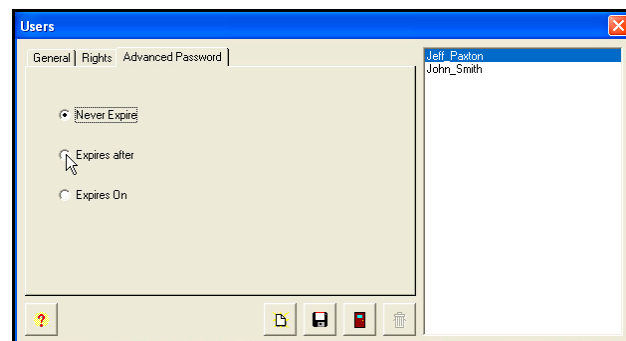





Figure 22. Users Advanced Password Tab

5. When finished entering each new user in this step, click on the **Save**  button to save the user settings. When finished creating new users, click on the **Close**  button to return to the Initial Wizard screen.
6. **Step 1** is now complete, and the Initial Wizard screen will indicate this with a green checkmark.
7. For **Step 2**, from the Initial Wizard, click on the Create Groups  icon and the Group screen will appear (see *Figure 23*).

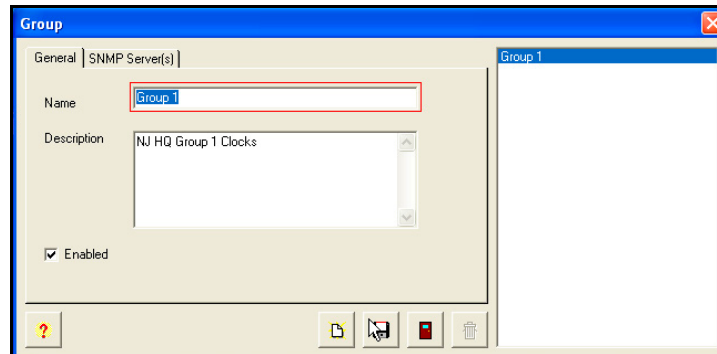


Figure 23. Create Groups General Tab

8. Enter a Name and Description. The **SNMP Server(s)** tab should not be used at this moment. See Step 1: Communication for more information about setting up SNMP Servers for SNMP traps.

Note: If "Enabled" is checked, then the Group will be active.




9. When finished entering each new group, click on the **Save**  button to save the group settings. When finished creating new groups, click on the **Close**  button to quit, and return to the Initial Wizard screen.
10. **Step 2** is now complete, and the Initial Wizard screen will indicate this with a green checkmark (see *Figure 24*).



Figure 24. Initial Wizard Step 2 Complete

11. For **Step 3**, from the Initial Wizard, click on the Create Devices  icon and the Device screen will appear (see *Figure 25*).

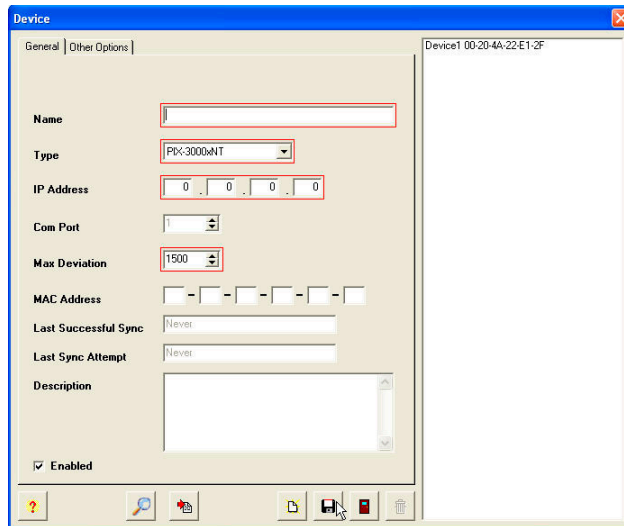




Figure 25. Create Devices General Tab

12. Select the Group from the dropdown menu, and enter the Name. Select the device Type from the dropdown of PIX-3000xN or PIX-3000xNT. Enter the IP Address if known (for PIX-3000xNT only).
13. If the IP address/ MAC Address is unknown, from the Device screen, click on the **Device Lookup**  button, and the DeviceInstaller will launch (for PIX-3000xNT lookup only).
14. From the DeviceInstaller, click on the Magnifying glass  to use the search tool to locate the PIX-3000xNT IP/Mac addresses. Figure 26 shows an example of a search.

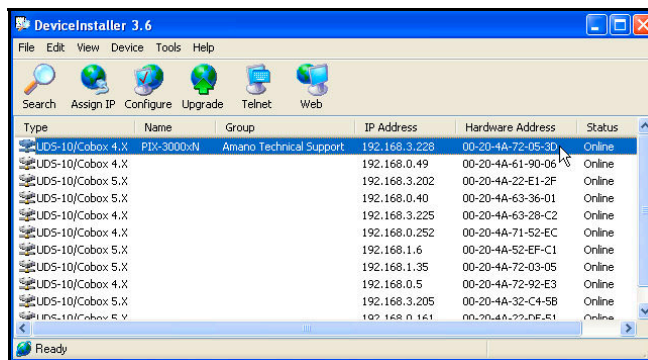


Figure 26. DeviceInstaller Search Results Example

15. Click on **File** and select the **Save As** sub-menu (see Figure 27).

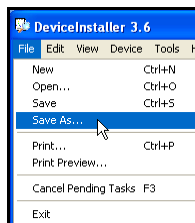


Figure 27. DeviceInstaller File/Save As Menu

16. From the **Save As** dialog (see *Figure 28*), select a destination folder [Save in:] and enter a file name. Click on the **Save** button and a text file with the IP search results will be saved.

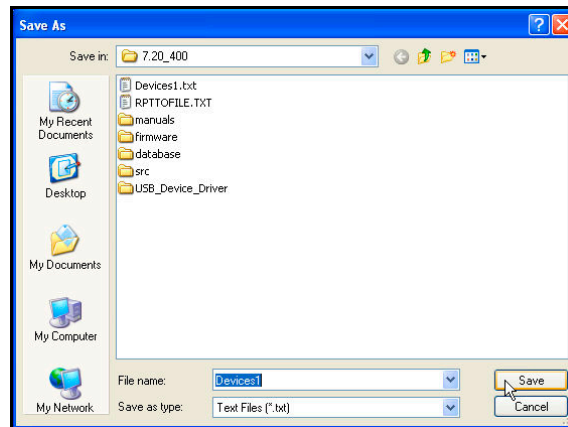





Figure 28. Save As Dialog

17. Close the DeviceInstaller, and from the ATVS Config Device screen click on the **Import Devices**  button and the Import Devices screen will appear (see the following figure).

Click on the **Import File Location**  button and navigate to the saved Devices txt file from the previous step. Once the file is selected, click on the **Open** button and the path for the text file with the IP search results will appear in the "Import File Location" field. Click on the Load File  button and the device information will appear (see *Figure 29*).

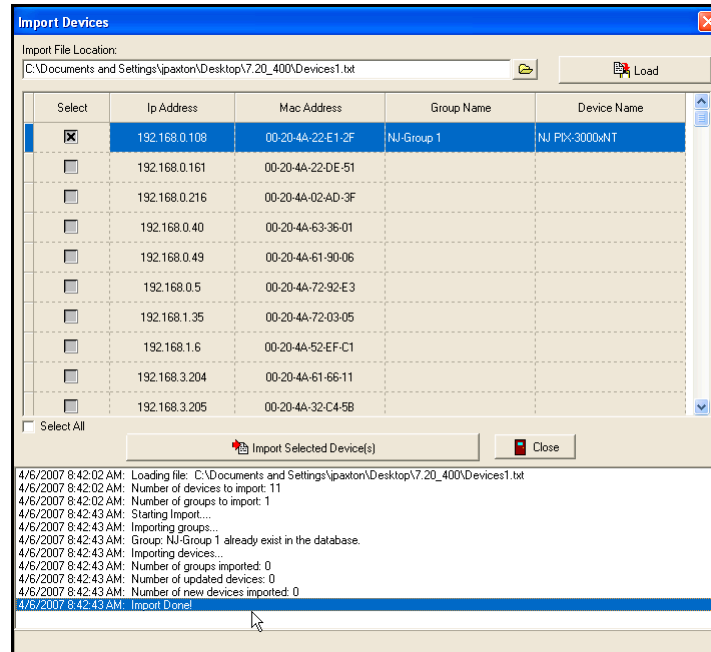
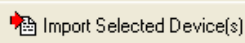


Figure 29. Import Devices Example

18. Select the desired device to import (load) by clicking in the "Select" box, and click the

Import Selected Device(s)



button and the dialog "Are you sure you want to import these devices?" will appear. Click on **Yes** to import the device(s). The status display on the bottom of the Import Devices screen will show the device import transaction.

Note: The Description field on the Device screen will be auto populated with the text; " This device was created in the import module" when the Import Module is used to create the device.

19. Click on the **Other Options** tab, and the screen will appear as shown in *Figure 30*. Either use the local Time Zone, or select the appropriate time zone from the dropdown menu. The Time Zone selected controls the specific Time Zone adjustment sent to the individual PIX-3000 device currently being configured within your ATVS setup. The setup for each PIX-3000 device allows for custom Time Zone configuration. Where OATS compliance is necessary, verify that the Use Local PC Time Zone option is not checked. The Time Zone must be set to Coordinated Universal Time (UTC) UTC-5:00 Eastern.

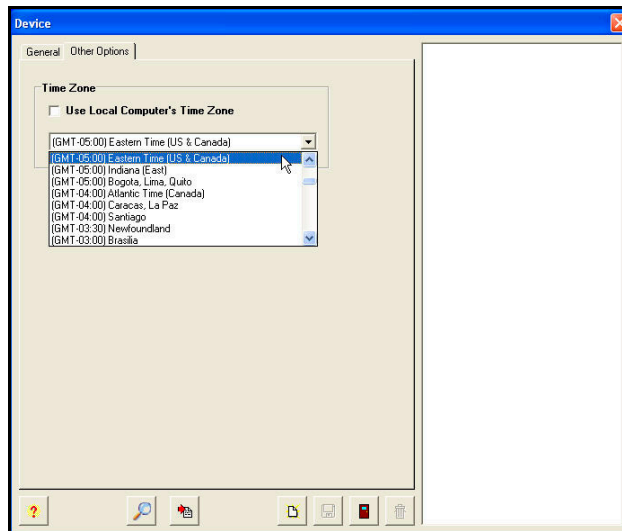





Figure 30. Create Device Other Options Tab

20. When finished entering each new device, click on the **Save**  button to save the device settings. When finished creating new devices, click on the **Close**  button to quit and return to the Initial Wizard screen.

21. For **Step 4** from the Initial Wizard, click on the Create Time Servers  icon, and the Time Server screen will appear (see *Figure 31*).

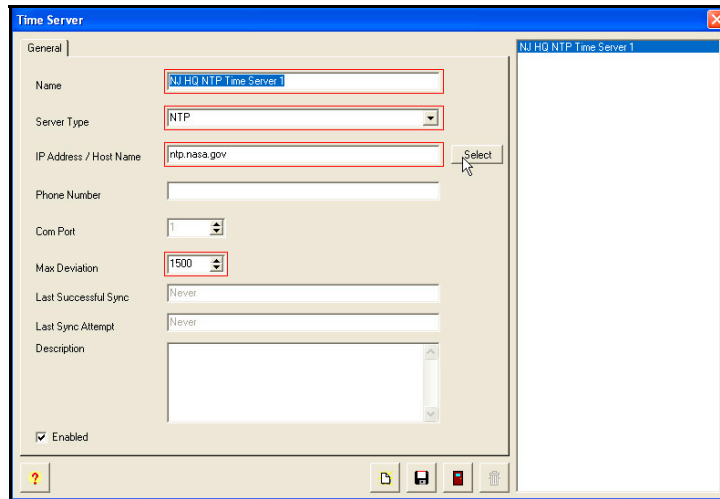


Figure 31. Create Time Server

22. Enter a Name, and select the server type from the dropdown choices of; NTP, NIST (US), NPL (UK), or PTB (DE). For NTP, click on the **Select** button and a list of suggested NTP servers will appear to choose from (see Figure 32).

For NIST, NPL, or PTB, click on the **Default #** button and a default modem phone number for that server will appear in the Phone Number field. The default modem phone numbers are only a starting, and any valid phone number can be entered in this field. Also, the Com Port field will be active to enter the desired Com Port. (When using a NIST, NPL or PTB time server, a modem and phone line connection are necessary.)

Enter the Max Deviation. The default is 1500 ms (1.5 seconds).



Figure 32. NTP Servers

23. When finished entering each new Time Server, click on the **Save** button to save the Time Server settings. When finished creating new Time Servers, click on the **Close** button to quit, and return to the Initial Wizard screen.

24. The Initial Wizard is now complete (see Figure 33). Click on the **Finish** button.

Note: The user can quit the initial wizard at any time during the step-by-step process by clicking on the **Exit** icon. However, all 4 steps must be completed with the minimum required information before the installation process is complete.



Figure 33. Initial Wizard Complete

25. A user can now login, and the ATVS program will start with the Login (see Figure 34).

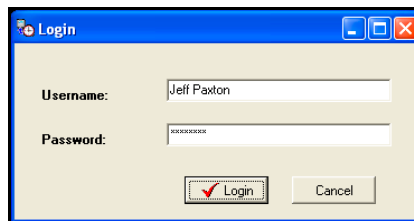


Figure 34. ATVS Login

26. Enter the correct Username and Password (previously defined in Step 1:Users), and the ATVS Config screen will appear (see Figure 35).

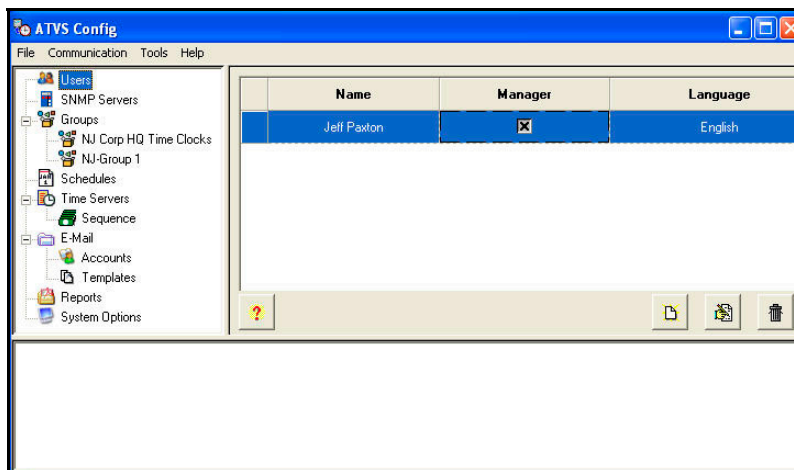


Figure 35. ATVS Config Main Screen

27. The ATVS software installation is now complete. You can remove the Amano ATVS installation disk from the CD-ROM drive.

Notes: The ATVS Scheduler and ATVS Config programs will automatically start after the installation to complete the configuration. Refer to Step 2: Schedule in order to set up the schedules, E-mail, Reports, and/or System Options in **ATVS Config** before using the program. After installation, **ATVS Scheduler** will be added to the Windows Startup Menu, so that it will automatically run as a service whenever a user logs onto Windows.

Chapter 2: ATVS Config Operation

General Information

After ATVS has been installed on a PC and the initial setup wizard completed, the ATVS Config program will automatically start.

To configure the system, you must:

- Prepare synchronization schedules.
- Verify that the installed NIC's (Network Interface Cards) in the ATVS system are recognized by ATVS and configured properly.
- Define groups that reference the locations of the installed PIX-3000xN and/or PIX-3000xNT Time Recorders (using the Wizard).
- Add and configure the devices (PIX-3000xN and/or PIX-3000xNT Time Recorders) that will be used in each group (using the Wizard).
- Assign communication parameters (IP addresses and Com ports) to each PIX-3000xN and/or PIX-3000xNT (using the Wizard).
- Assign the NTP servers that will be used to synchronize your ATVS host (using the Wizard).
- Choose the system settings, time zone, and Daylight Saving Time (DST) that are applicable to your installation (using the Wizard).

Note: Users should be reminded that this configuration usually remains unchanged after installation. Any questions can be directed to Amano's technical support.

ATVS Config Startup

At startup, ATVS will display the ATVS Startup and Login screen (see *Figure 36*).

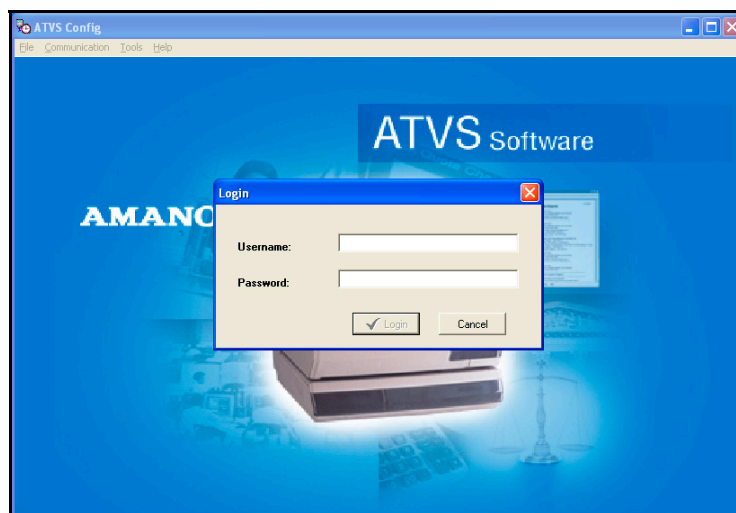



Figure 36. ATVS Startup and Login

Enter the case-sensitive Username and Password (previously defined during the Initial Wizard), then click on the **Login**  button and the ATVS Config main screen will appear (see *Figure 37*).

ATVS Config Layout

Figure 37 displays the default main view of ATVS Config screen and identifies its various sections. This view can be changed based upon the selection made from the menu selections and/or the tree view selections on the left-hand side of the screen.

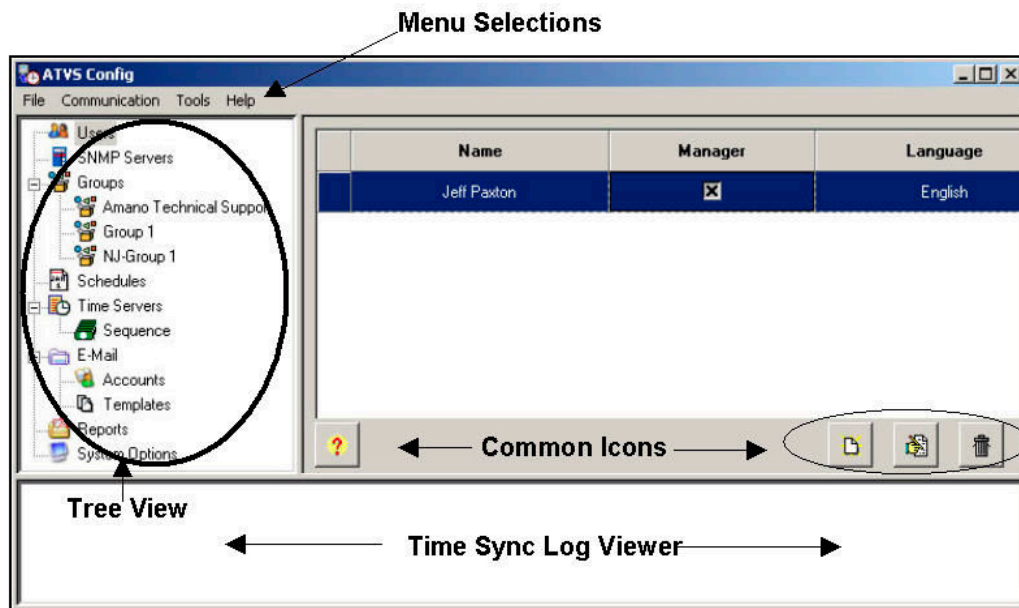


Figure 37. ATVS Main Screen Layout

ATVS Config Main Dropdown Menus

File Menu

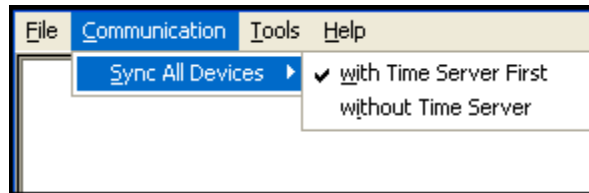
The File menu provides the following functions: The "Activate" selection allows entry of the product serial number, necessary for continued operation of the software beyond the 14-day trial period allowed during initial installation; "Register" allows you to register as a new ATVS user, "Log Off" allows you to log off the program without quitting the application; Selecting "Exit" quits the application.



Communication Menu

The Communication menu has two synchronization methods:

- Obtain Time Server time, and then sync devices
- Use the host PC's time for synchronization, not employing any recognized Time Server (generally, not the preferred method)



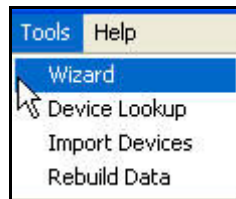
Tools Menu

The Tools menu allows you to configure the ATVS application by following a numbered step-by-step process using the "Setup *Wizard*".

The "*Device Lookup*" sub-menu selection will launch "DeviceInstaller", which can be used to find and configure devices for ATVS communications.

The "*Import Devices*" sub-menu selection will launch the Import Devices screen allowing IP addresses and/or MAC addresses to be loaded directly into the Device configuration (see Wizard Step 1.3: Devices for more information).

The "*Rebuild Data*" sub-menu selection provides the ability to rebuild the data table for the Device Report.



Help Menu

The Help menu "*About*" selection (see *Figure 38*) will provide you with the current version of ATVS that you are using. This information is required when placing a support call.

The "*Help F1*" selection provides online help.

The "*Manual*" selection will launch a PDF version of the ATVS Installation and Operation Guide (AJR-40120X).

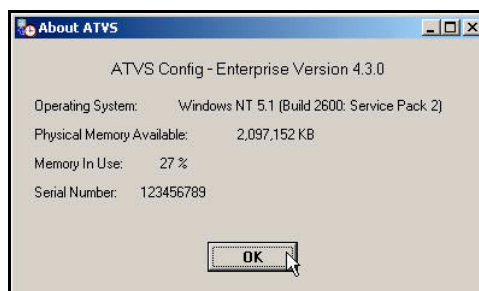
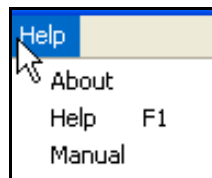














Figure 38. About ATVS













Common Buttons

Certain common functions are performed using buttons. These buttons are shown below. In the following table, the names shown in the description column explain the associated function. Within the application, hovering the cursor over a button will display the tool tip description.

Button	Description	Button	Description
	Add		Help
	Close or Exit		Delete
	Edit		Run Report
	Save		Device Lookup
	Print Report		Previous/Next Page
	Zoom In/ Zoom Out		Import Devices

Wizard Icons

Certain wizard functions are performed using icons. These icons are shown below. In the following table, the names shown in the description column explain the associated function. Hovering the cursor over an icon will display the tool tip description.

Icon	Description	Icon	Description
	Create Groups		Create Schedules
	Create Devices		Setup System Settings
	Create Time Servers		Create Users
	Create SNMP Servers		Create E-Mail Accounts
	Create E-Mail Templates		Create E-Mail Settings
	Previous Step		Next Step

Using the ATVS Config Setup Wizard

Step 1: Communication

1. From the ATVS Config screen, click on the **Tools** menu, and select the **Wizard**. The Setup Wizard screen will appear (see *Figure 39*). It is recommended to configure ATVS in the step-by-step order displayed in the Setup Wizard. The Setup Wizard will always start at Step 1: Communication.

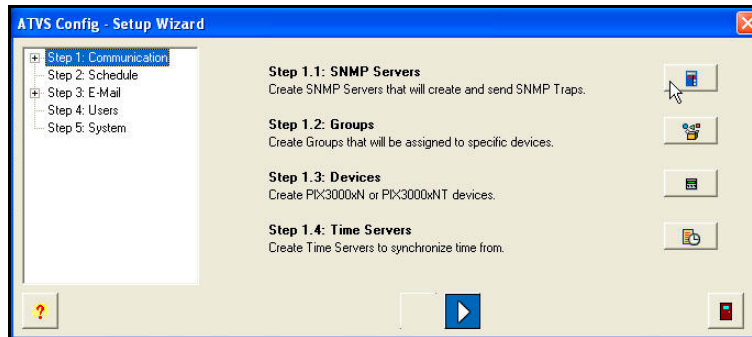



Figure 39. Setup Wizard Step 1

2. For **Step 1.1**, click on the Create SNMP Servers  icon, and the SNMP Server screen will appear (see *Figure 40*). Enter information into the required fields: Name, IP Address, Port, and Community Name.

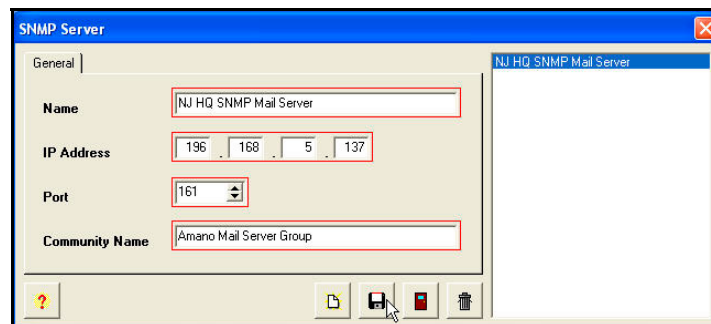





Figure 40. Create SNMP Server

Note: All fields outlined in Red should be completed.

3. When finished defining an SNMP Server, click on the **Save**  button to save your SNMP Server and return to the Setup Wizard screen. Click on the **Close**  button to quit without saving. The new SNMP Server information will be displayed to the right of the tree view list.
4. For **Step 1.2**, click on the Create Groups  icon, and the Group screen will appear (see *Figure 41*).

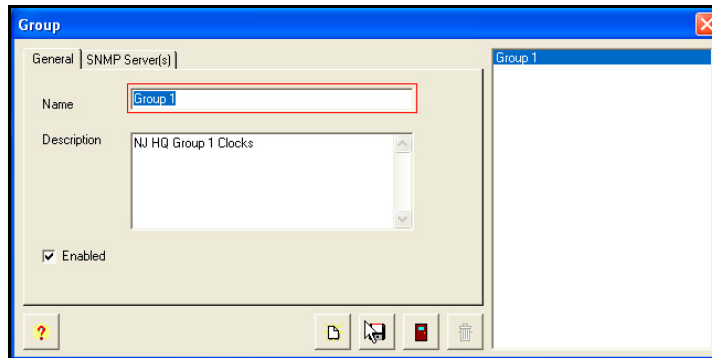




Figure 41. Create Group General Tab

Note: All fields outlined in Red should be completed.

Note: The description field will say, " This group was created from Device Import module", if it was.

5. Enter information in the required Name field, and elective Description field. Click on the **Enabled** box to enable all devices within the group. Then click on the **SNMP Server(s)** tab, and the screen will appear as shown in *Figure 42*. Next assign SNMP Servers, from the *Available* list (default status for SNMP Servers previously defined in Step 1.1), select the SNMP Servers by using the selection arrows ( or ) to move them to the *Selected* list on the right from the *Available* list on the left.

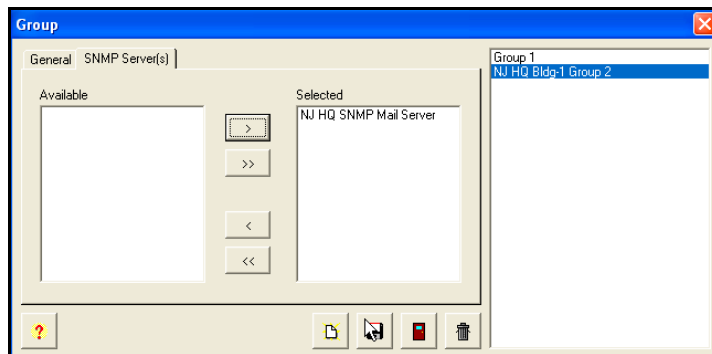


Figure 42. Group SNMP Servers Tab

6. When finished entering each new Group, click on the **Save**  button to save the Group settings. When finished creating all new groups, click on the **Close**  button to quit, and return to the Setup Wizard screen.
7. For **Step 1.3**, click on the Create Devices  icon, and the Device screen will appear (see *Figure 43*).

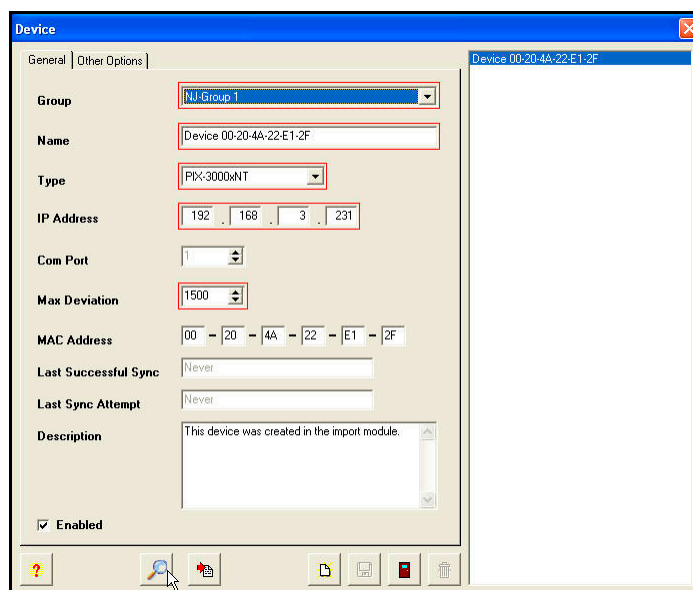



Figure 43. Create Devices General Tab

8. Select the Group from the dropdown menu (previously user defined), and enter the Name. Select the device Type from the dropdown menu (PIX-3000xN or PIX-3000xNT), and enter the IP Address and MAC Address if known (PIX-3000xNT only). If unknown, click on the **Device Lookup**  button and the DeviceInstaller will launch (see DeviceInstaller Use) to find the IP and MAC Addresses.

For PIX-3000xN's, the Com Port field will be active to enter the desired Com Port.

Enter the Max Deviation. The default is 1500 ms (1.5 seconds).

Then click on the **Other Options** tab, and the screen will appear as shown in *Figure 44*. Either use the local computer's time zone (default), or select the appropriate Time Zone from the dropdown menu. The Time Zone selected controls the Time Zone adjustment sent to the selected device. Where OATS compliance is necessary, verify that the Use Local PC Time Zone option is not checked. The Time Zone must be set to Coordinated Universal Time (UTC) UTC-5:00 Eastern.

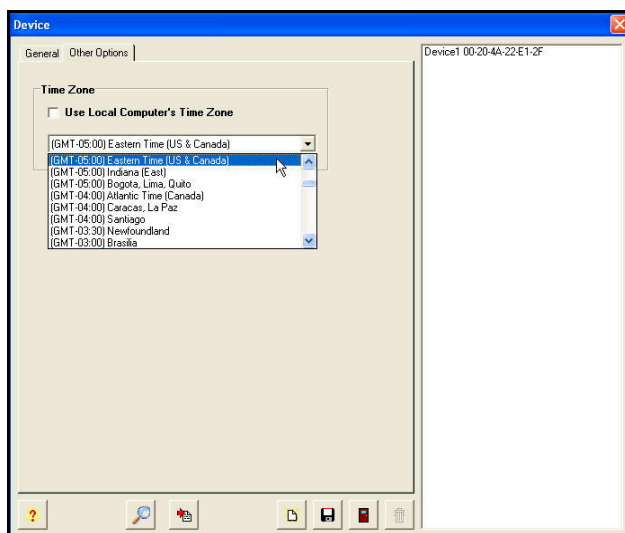





Figure 44. Device Other Options Tab

9. Enter the required information. When finished entering each new Device, click on the **Save**  button to save the Device settings. When finished creating all new devices, click on the **Close**  button to quit, and return to the Setup Wizard screen.
10. For **Step 1.4**, click on the Create Time Servers  icon, and the Time Server screen will appear (see *Figure 45*).

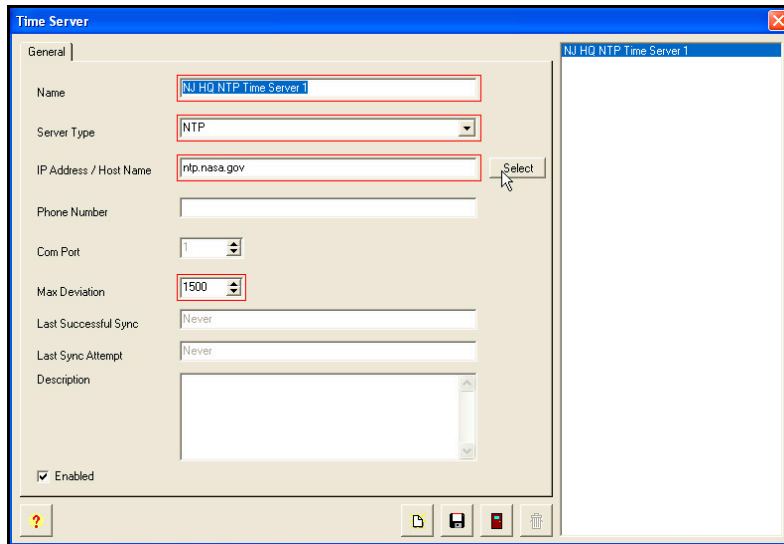





Figure 45. Create Time Server General Tab

11. Enter the required information. When finished entering each new Time Server, click on the **Save**  button to save the Time Server settings. When finished creating all new time servers, click on the **Close**  button to quit, and return to the Setup Wizard screen.

Step 2: Schedule

1. Click on the **Next Step**  button, to advance to **Step 2 : Schedule**, and the Setup Wizard screen will appear for Step 2: Schedule (see *Figure 46*).

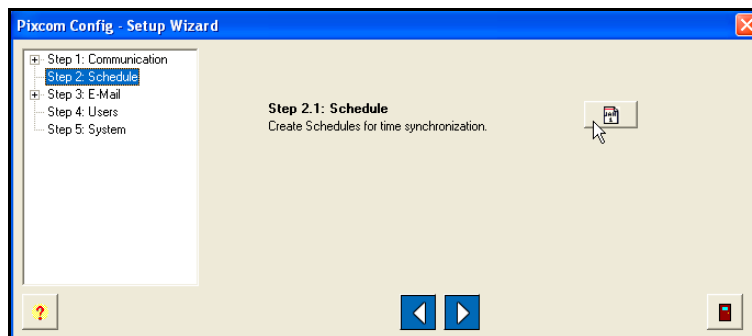



Figure 46. Setup Wizard Step 2.1 Schedule

2. For **Step 2.1**, click on the Create Schedules  icon, and the Schedule screen will appear (see *Figure 47*).

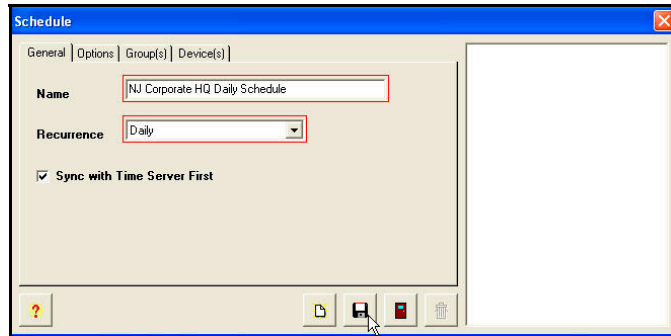


Figure 47. Schedule General Tab

The Create Schedules icon is used to setup the schedules for time synchronization and reporting. At these user-specified times, ATVS will synchronize the PIX-3000xN and PIX-3000xNT Time Recorders connected to the ATVS.

An unlimited number of schedules and events per day can be set. When creating schedules, verify that the **Sync with Time Server First** option is checked. This enables the ATVS to seek synchronization with a time server first before transmitting the time to all connected PIX-3000xN and PIX-3000xNT Time Recorders.

If no schedules are set, the system will automatically (by default) attempt to connect to an NTP server or call the Automated Computer Time Service (ACTS) every day at 3:30 am, and transmit the time to all connected PIX-3000xN and PIX-3000xNT Time Recorders.

Note: The PC running the ATVS software will always reflect the time retrieved from the time server. Therefore, the time setting on this PC time may not be the same as your local time.

If the host PC uses a version of Windows that provides its own atomic clock synchronization utility, it is recommended to disable this option, as this method is less accurate and would conflict with the more accurate timekeeping of ATVS.

3. Enter the required General field information. Select the schedule recurrence. The choices are: Daily, Weekly, Monthly, or Yearly.
4. Click on the **Options** tab, and an example of a possible screen that could appear is shown in *Figure 48*.

If **Daily** is selected, then define Every, Start Date [use calendar], Start Time [click in the field to change time], and check Run Every to set the number of minutes.

If **Weekly** is selected, then define Recur every week(s) on X day [check box for each day] or check box for All Week, Start Date [use calendar], and Start Time [click in the field to change time].

If **Monthly** is selected, then define Day X of every N month(s), Start Date [use calendar], and Start Time [click in the field to change time].

If **Yearly** is selected, then define Every X month for N date, and Start Time [click in the field to change time].

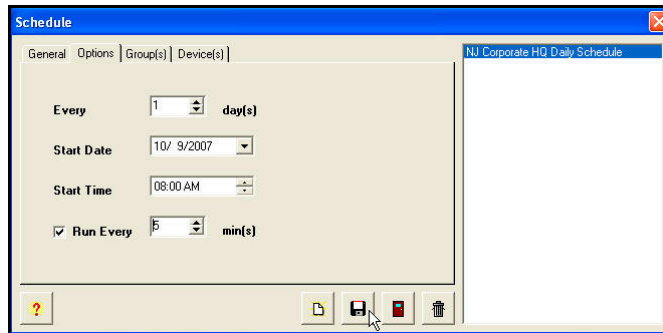




Figure 48. Schedule Options Tab

5. Enter the required Options information. Click on the **Group(s)** tab, and the screen will appear as shown in Figure 49. If desired, from the **Available** list (default status for Groups previously defined in Step 1.2), select the Group(s) by using the selection arrows ( or ) to move them to the **Selected** list on the right from the **Available** list on the left.

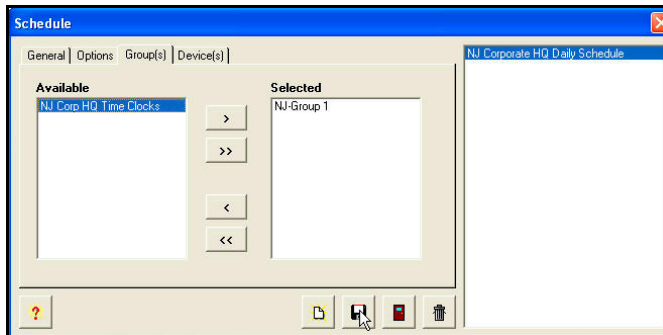




Figure 49. Schedule Group(s) Tab

6. Click on the **Device(s)** tab, and the screen will appear as shown in Figure 50. If desired, from the **Selected** list (default status for devices previously defined in Step 1.2), deselect the Device(s) by using the selection arrows ( or ) to move them from the default **Selected** list on the right to the **Available** list on the left.

Note: The devices will be automatically selected once the Groups are selected in the previous step.

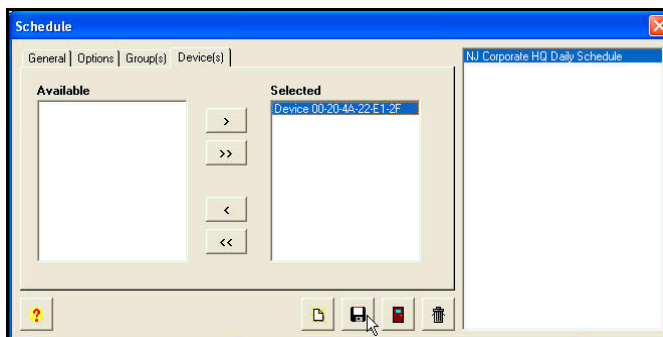





Figure 50. Schedule Device(s) Tab

-
- When finished defining a Schedule, click on the **Save**  button to save your Schedule and return to the Setup Wizard screen. Click on the **Close**  button to quit without saving. The new Schedule information will be displayed to the right of the tree view list.

Step 3: E-Mail

- Click on the **Next Step**  button, to advance to **Step 3: E-Mail**, and the Setup Wizard screen will appear for Step 3: E-Mail (see *Figure 51*).

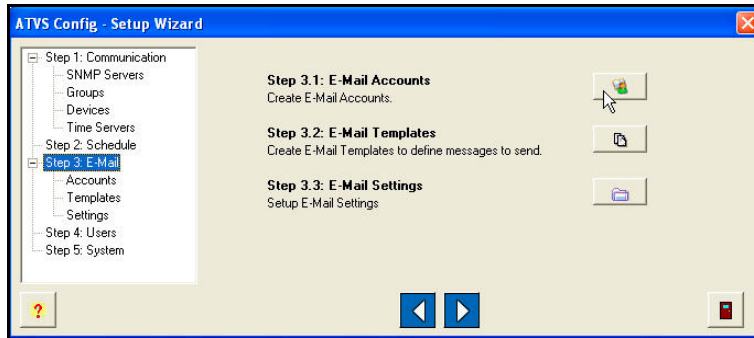



Figure 51. Setup Wizard Step 3: E-Mail

- For **Step 3.1**, click on the Create E-Mail Accounts  icon, and the E-Mail Account screen will appear (see *Figure 52*).

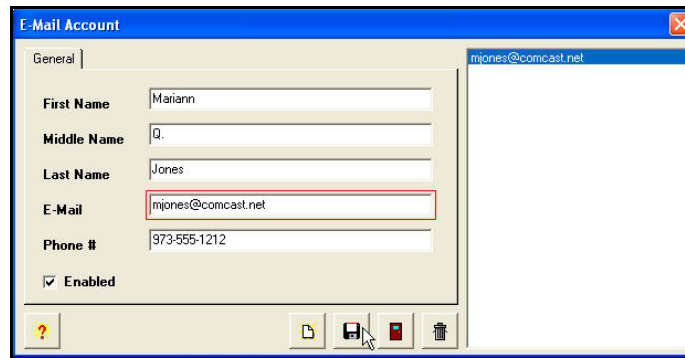


Figure 52. Create E-Mail Account

The Create E-Mail icon is used to setup the E-Mail for status report notification.

The Enabled option, when checked, will automatically send an e-mail notification the remote support or help desk that the scheduled event has been completed. For proper operation, the mail (SMTP) server must be specified in Step 1.1, and the addressees and message must be set in the following E-mail templates.

- For **Step 3.2**, click on the Create E-Mail Templates  icon, and the E-Mail Template screen will appear (see *Figure 53*).

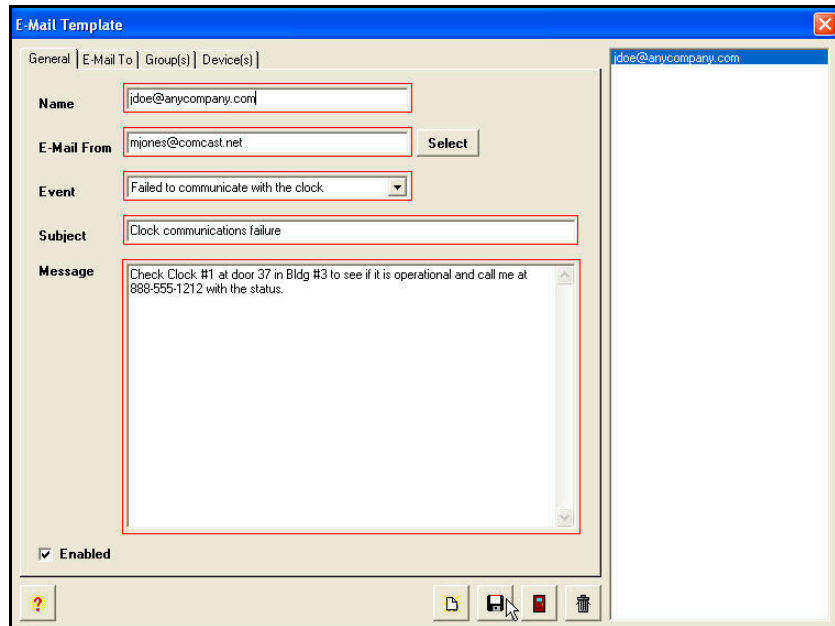


Figure 53. E-Mail Template General Tab

4. Enter the required general information; Name, E-Mail From [select address from previously defined addresses by pressing the **Select** button – see Figure 54], Event [select from dropdown list, Subject, and Message.

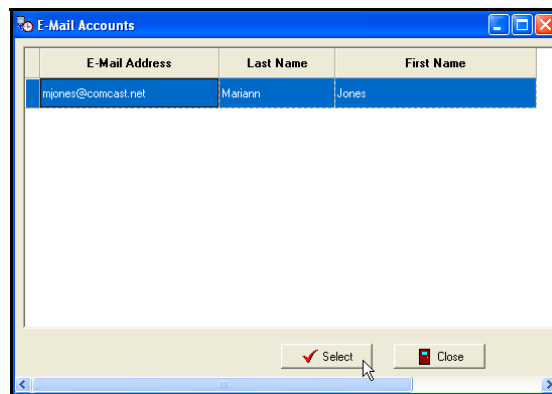




Figure 54. E-Mail Account(s) For From

5. Then click on the **E-Mail To** tab, and the screen will appear as shown in Figure 55. From the *Available* list (e-mail addresses previously defined in Step 3.1), select the desired emails by using the selection arrows ( or ) to move them to the *Selected* list on the right.

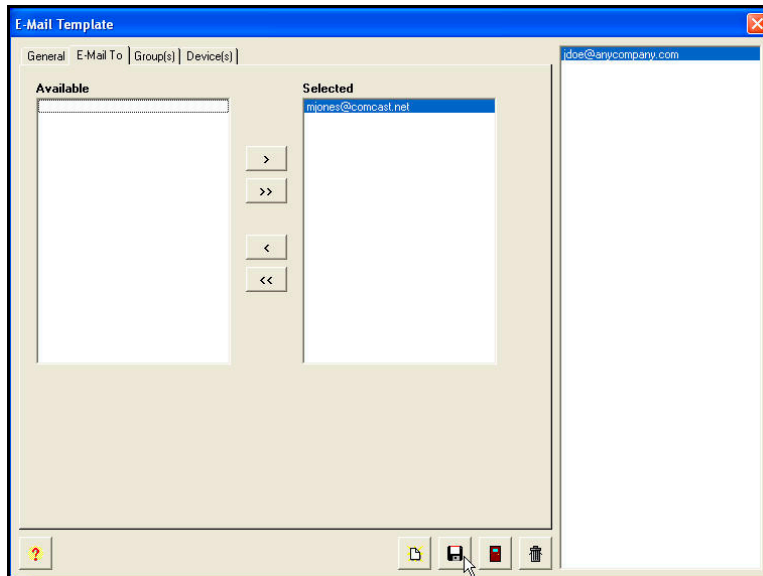


Figure 55. E-Mail Template E-Mail To Tab

6. Enter the required **E-Mail To** information. Figure 56 is an example of the ATVS system sending an e-mail notification to the designated **E-Mail To** recipient.

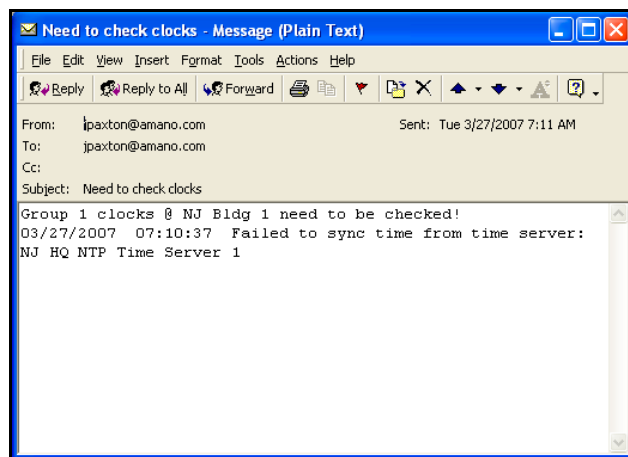




Figure 56. Example of E-Mail Notification

Then click on the **Group(s)** tab, and the screen will appear as shown in Figure 57. If desired, from the *Selected* list (default status for devices previously defined in Step 1.2), select the Group(s) by using the selection arrows ( or ) to move them from the default *Selected* list on the right to the *Available* list on the left.

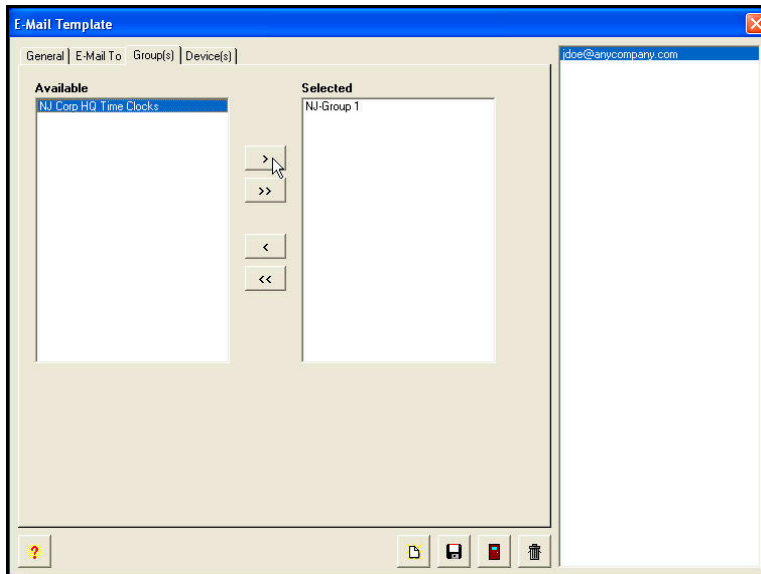




Figure 57. E-Mail Template Group(s) Tab

7. Then click on the **Device(s)** tab, and the screen will appear as shown in *Figure 58*. If desired, from the *Selected* list (default status for devices previously defined in Step 1.3), select the Device(s) by using the selection arrows ( or ) to move them from the default *Selected* list on the right to the *Available* list on the left.

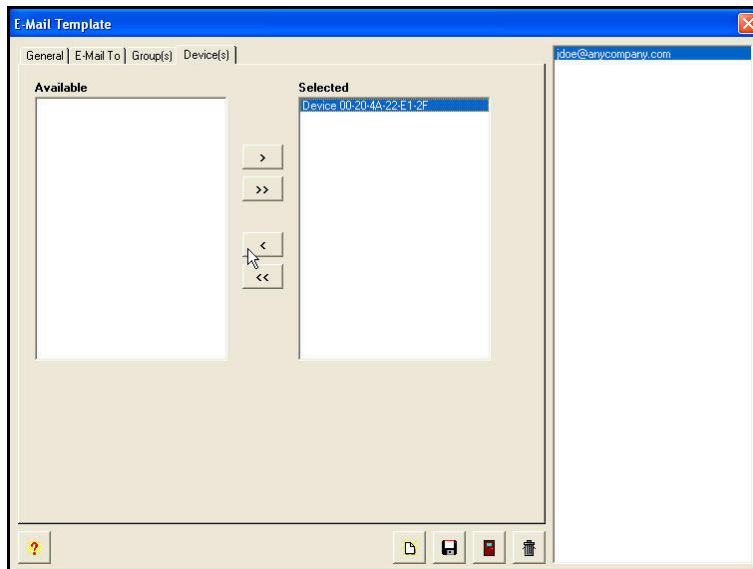





Figure 58. E-Mail Template Device(s) Tab

8. When finished defining an E-Mail account, click on the **Save**  button to save your E-Mail settings and return to the Setup Wizard screen. Click on the **Close**  button to quit without saving. The new general E-Mail information will be displayed to the right of the tree view list.

Step 4: Users

1. Click on the **Next Step**  button, to advance to **Step 4: Users**, and the Setup Wizard screen will appear for Step 4:Users (see *Figure 59*).

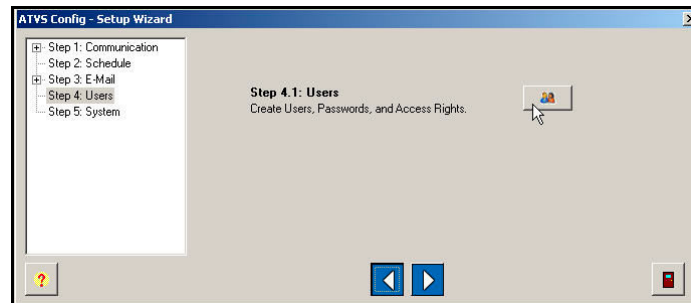



Figure 59. Setup Wizard Step 4: Users

2. For **Step 4.1**, click on the Create Users  icon, and the Users screen will appear (see *Figure 60*).

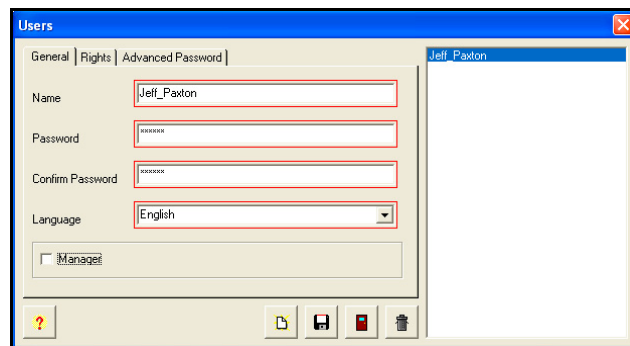




Figure 60. Users General Tab

Note: Any Users already created will appear in the pane at the window's right.

3. Enter the required general user field information. If **Manager** is not checked, click on the **Rights** tab, and the screen will appear as shown in *Figure 61*. From the *Available* list, select one or more Rights by using the selection arrows ( or ) to move them to the *Selected* list on the right. At least one right must be selected for the User to exist in the system.

Note: If Manager is checked, then the "Rights" tab will not appear as all rights will automatically be assigned to this user. This is the default setting.

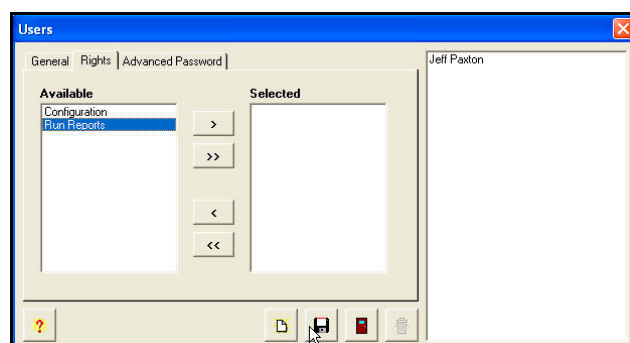


Figure 61. Users Rights Tab

- Click on the **Advanced Password** tab, and the screen will appear as shown in *Figure 62*. From the 3 choices select one of the following for the highlighted user: Never Expire, Number of Days, or Specific Date. The default is Never Expire.

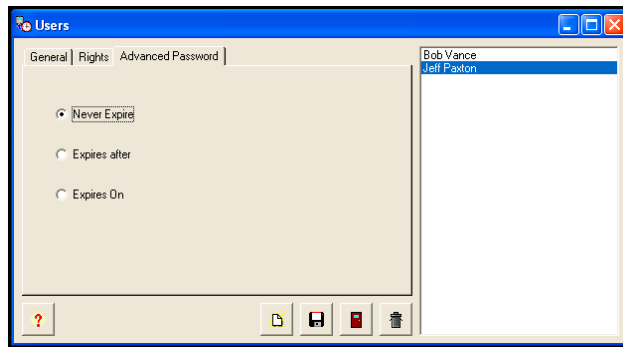





Figure 62. Users Advanced Password Tab

- When finished entering each new User, click on the **Save**  button to save the User settings. When finished creating all new Users, click on the **Close**  button to quit, and return to the Setup Wizard screen.

Step 5: System

- Click on the **Next Step**  button, to advance to **Step 5: System**, and the Setup Wizard screen will appear for Step 5: System (see *Figure 63*).

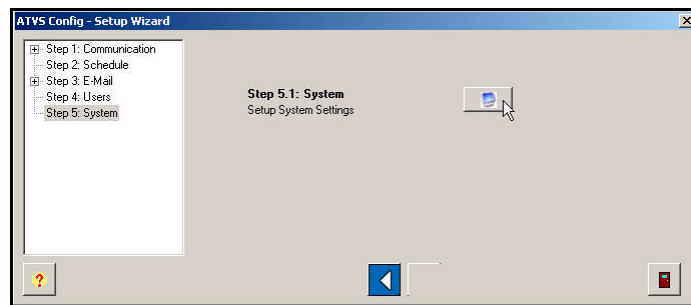


Figure 63. Setup Wizard Step 5: System

- For **Step 5.1**, click on the Setup System Settings  icon, and the System Settings will appear (see *Figure 64*).

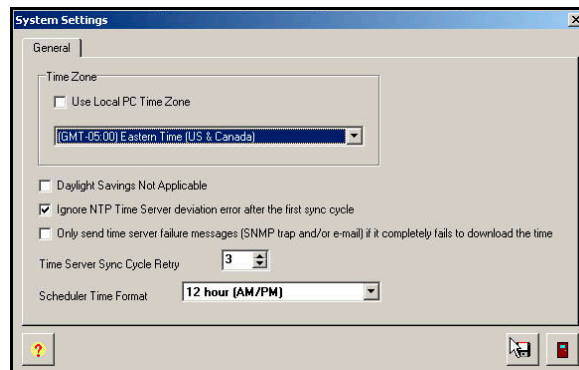



Figure 64. General System Settings


- Use the local PC time zone, or select the desired time zone, and check whether or not daylight savings is applicable. Note the Time Zone selected determines the Time Zone for only the PC on which ATVS is installed, and is independent of the Time Zone for each PIX-3000 clock connected to that PC (each PIX-3000 may have its Time Zone separately configured).


Select to **Ignore NTP Time Server deviation error after the first sync cycle**: This option should be checked if you want to send Trap/Email only for the last failed server sync attempt.

Select to **Only send Time Server failure messages [SNMP trap and/or email] if it completely fails to download the time**: This option should only be checked if you want to send Trap-Email only for all failed sync servers.

Also, set the time format [either 24 hour military, or 12 hour (AM/PM)] for the ATVS

Scheduler to display. When finished defining the System settings, click on the **Save**  button to save the System settings and return to the Setup Wizard screen. Click on the

Close  button to quit without saving.

- Click on the **Close**  button on the bottom of the Setup Wizard to Exit and finish.

Using ATVS Config

How to Create Users



- Click on the Users  icon in the tree view (see *Figure 65*), and the previously defined Users will appear to the right of the tree view.



Figure 65. Select Users

- Select the **Add**  button on the bottom of the displayed Users, and the Users screen will appear (see *Figure 66*).

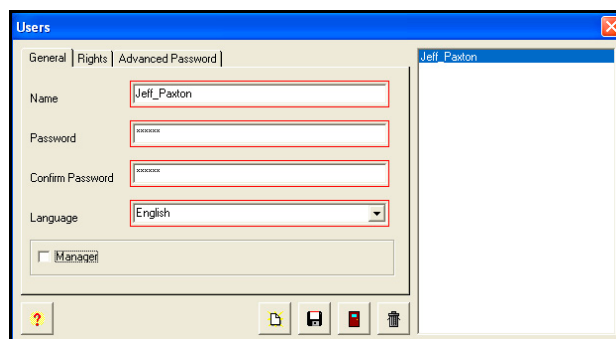




Figure 66. Users General Tab

Note: Any Users already created appear in the pane at the window's right.

3. Enter the required general user field information. If **Manager** is not checked, click on the **Rights** tab, and the screen will appear as shown in *Figure 67*. From the *Available* list, select one or more Rights by using the selection arrows ( or ) to move them to the *Selected* list on the right. At least one right must be selected for the User to exist in the system.

Note: If Manager is checked, then the "Rights" tab will not appear as all rights will automatically be assigned to this user. This is the default setting.

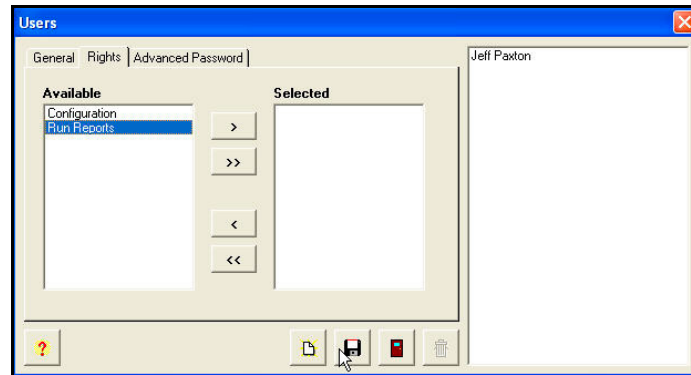


Figure 67. Users Rights Tab

4. Click on the **Advanced Password** tab, and the screen will appear as shown in *Figure 68*. From the 3 choices select one of the following for the highlighted user: Never Expire, Number of Days, or Specific Date. The default is Never Expire.

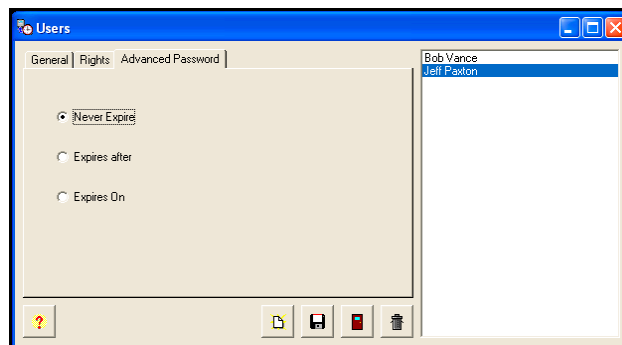





Figure 68. Users Advanced Password Tab

5. When finished entering each new User, click on the **Save**  button to save the User. When finished creating all new Users, click on the **Close**  button to quit.

How to Delete Users

1. To delete an User in ATVS Config, click on Users in the tree view (see *Figure 65*).
2. Select the desired User from the list, and click on the **Delete**  button. A dialog box will appear to confirm the deletion (see *Figure 69*).

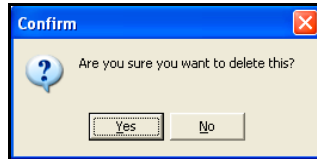





Figure 69. Confirm Deletion Dialog

3. Clicking on the **Yes** button will delete the selected User.

How To Modify Users

1. Select a User from the list (see *Figure 65*), and double-click on it, or click on the **Edit**  button.
2. Type in the modified information (see How Create a User) for the User and click on the **Save**  button. The modified User will be displayed in the tree view list.

How to Create an SNMP Server

1. Click on the SNMP Servers  icon in the tree view (see *Figure 70*), and the previously defined SNMP Servers will appear to the right of the tree view.

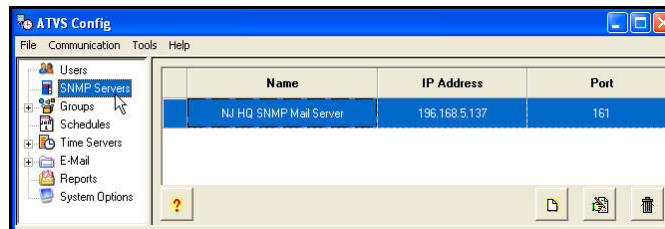



Figure 70. Select SNMP Servers

2. Select the **Add**  button on the bottom of the displayed SNMP Servers, and the SNMP Server screen will appear (see *Figure 71*). Enter information into the required fields: Name, IP Address, Port, and Community Name.

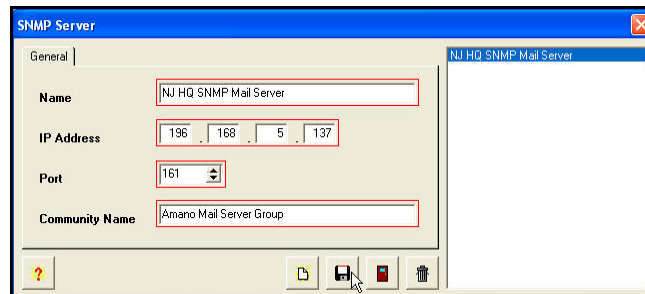





Figure 71. Create SNMP Server

Note: All fields outlined in Red should be completed.

-
- When finished defining an SNMP Server, click on the **Save**  button to save your SNMP Server, or click on the **Close**  button to quit without saving. The new SNMP Server information will be displayed to the right of the tree view list.

How to Delete an SNMP Server

- To delete an SNMP Server in ATVS Config, click on SNMP Servers in the tree view (see *Figure 70*).
- Select the desired SNMP Server from the list, and click on the **Delete**  button. A dialog box will appear to confirm the deletion (see *Figure 72*).

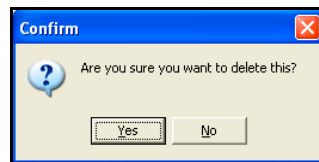




Figure 72. Confirm Deletion Dialog

- Clicking on the **Yes** button will delete the selected SNMP Server.

How To Modify an SNMP Server

- Select an SNMP Server from the list (see *Figure 70*), and double-click on it, or click on the **Edit**  button.
- Type in the modified information (see How Create an SNMP Server) for the SNMP Server and click on the **Save**  button. The modified SNMP Server will be displayed in the tree view list.

How to Create A Schedule


The Schedules icon is used to setup the schedules for time synchronization and reporting. At these user-specified times, ATVS will synchronize the PIX-3000xN and PIX-3000xNT Time Recorders connected to the ATVS.

An unlimited number of schedules and events per day can be set. When creating schedules, verify that the **Sync with Time Server First** option is checked. This enables the ATVS to seek synchronization with a time server first before transmitting the time to all connected PIX-3000xN and PIX-3000xNT Time Recorders.

If no schedules are set, the system will automatically (by default) attempt to connect to an NTP server or call the Automated Computer Time Service (ACTS) every day at 3:30 am, and transmit the time to all connected PIX-3000xN and PIX-3000xNT Time Recorders.

Note: The PC running the ATVS software will always reflect the time retrieved from the time server. Therefore, the time setting on this PC time may not be the same as your local time.

If the host PC uses a version of Windows that provides its own atomic clock synchronization utility, it is recommended to disable this option, as this method is less accurate and would conflict with the more accurate timekeeping of ATVS.

1. Click on the Schedules  icon in the tree view (see *Figure 73*), and the previously defined Schedules will appear to the right of the tree view.

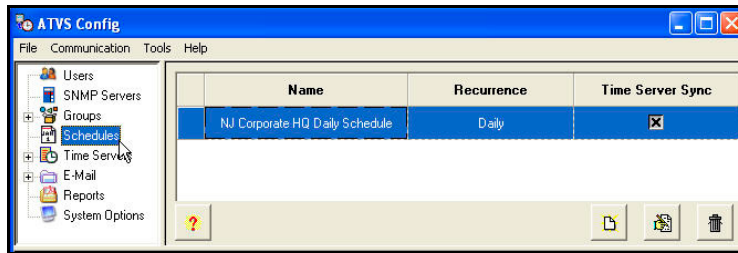



Figure 73. Create Schedule

2. Select the **Add**  button on the bottom of the displayed Schedules, and the Schedule screen will appear (see *Figure 74*).
3. Enter the required General field information. Select the schedule recurrence. The choices are: Daily, Weekly, Monthly, or Yearly.

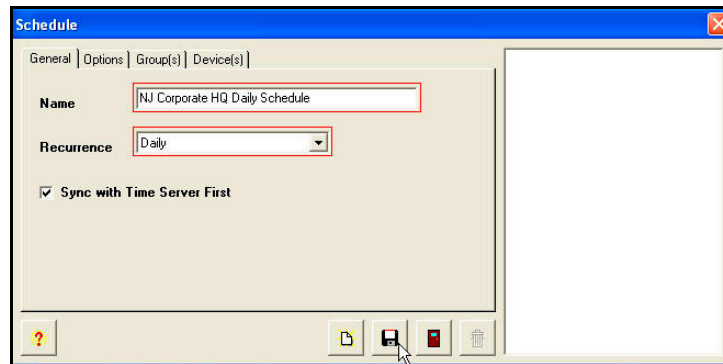


Figure 74. Schedule General Tab

4. Click on the **Options** tab, and an example of a possible screen that could appear is shown in *Figure 75*.

If **Daily** is selected, then define Every, Start Date [use calendar], Start Time [click in the field to change time], and check Run Every to set the number of minutes.

If **Weekly** is selected, then define Recur every week(s) on X day [check box for each day] or check box for All Week, Start Date [use calendar], and Start Time [click in the field to change time].

If **Monthly** is selected, then define Day X of every N month(s), Start Date [use calendar], and Start Time [click in the field to change time].

If **Yearly** is selected, then define Every X month for N date, and Start Time [click in the field to change time].

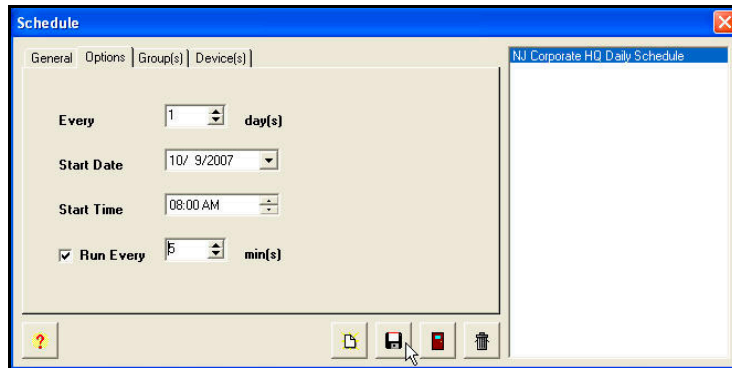




Figure 75. Schedule Options Tab

5. Enter the required Options information. Click on the **Group(s)** tab, and the screen will appear as shown in Figure 76. If desired, from the **Available** list (default status for any Groups previously defined), select the Group(s) by using the selection arrows ( or ) to move them to the **Selected** list on the right from the **Available** list on the left.

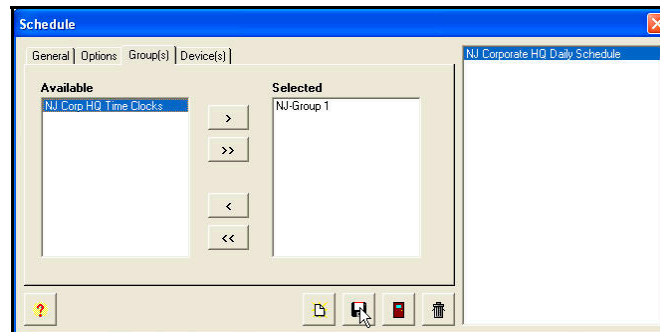




Figure 76. Schedule Group(s) Tab

6. Click on the **Device(s)** tab, and the screen will appear as shown in Figure 77. If desired, from the **Selected** list (default status for devices previously defined), deselect the Device(s) by using the selection arrows ( or ) to move them from the default **Selected** list on the right to the **Available** list on the left.

Note: The devices will be automatically selected once the Groups are selected.

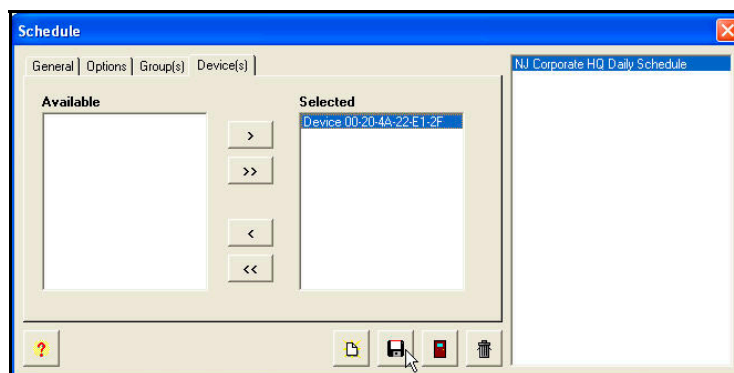




Figure 77. Schedule Device(s) Tab

-
- When finished defining a Schedule, click on the **Save**  button to save your Schedule.

Click on the **Close**  button to quit without saving. The new Schedule information will be displayed to the right of the tree view list.

How to Delete A Schedule

- To delete a Schedule in ATVS Config, click on Schedules in the tree view (see *Figure 78*).

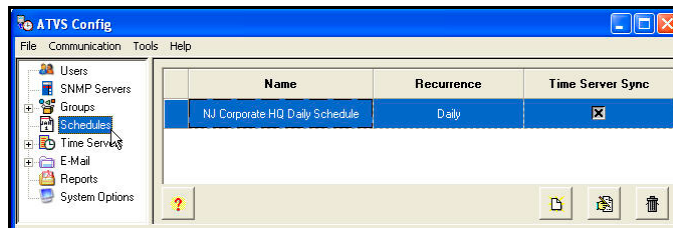



Figure 78. Select Schedules From Tree View

- Select the desired Schedule from the list, and click on the **Delete**  button. A dialog box will appear to confirm the deletion (see *Figure 79*).

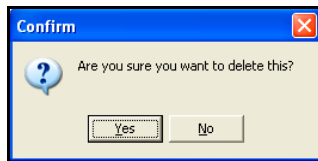




Figure 79. Confirm Deletion Dialog

- Clicking on the **Yes** button will delete the selected Schedule.

How To Modify a Schedule

- Select a Schedule from the list (see *Figure 78*), and double-click on it, or click on the **Edit**  button.
- Type in the modified information (see How to Create A Schedule) for the Schedule and click on the **Save**  button. The modified Schedule will be displayed in the tree view list.

How to Add Groups and Devices

A Group represents a collection of Devices (PIX-3000xN/PIX-3000xNT Time Recorders) typically within a geographical area, whether that area is a floor, office, or region. Any Device within a Group may be in one Group, and one Group only. Groups and Devices can be added and defined from the ATVS Config tree view (see *Figure 80*).

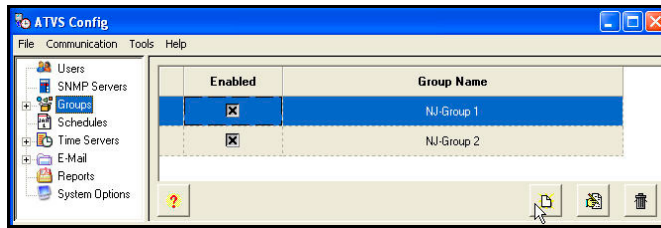



Figure 80. Select Groups From Tree View

How to Add a PIX-3000xNT to the System

1. Add and define a Group.
2. Add a Device to the Group.
3. Assign a Network Interface Card (NIC) to each Device.
4. Configure communication parameters (IP Addresses and Com Ports) for each Device.

To Add a Group from ATVS

1. Click on the Groups icon in the tree view (see Figure 80), and the previously defined groups will appear to the right of the tree view.
2. Select the **Add**  button on the bottom of the displayed Groups, and the Group screen will appear (see Figure 81).

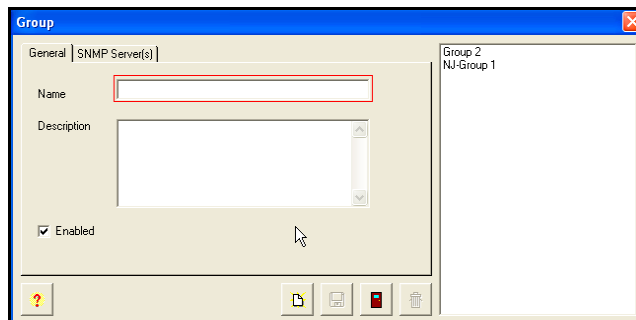




Figure 81. Groups General Tab

3. To enable all the Devices in the Group, click on the **Enabled** checkbox.
4. Enter information into the required Name field, and elective Description field. Click on the **Enabled** box to enable all devices in the group. Then click on the **SNMP Server(s)** tab, and the screen will appear as shown in Figure 82. Next assign SNMP Servers, from the *Available* list (default status for SNMP Servers previously defined), select the SNMP Servers by using the selection arrows ( or ) to move them to the *Selected* list on the right from the *Available* list on the left.

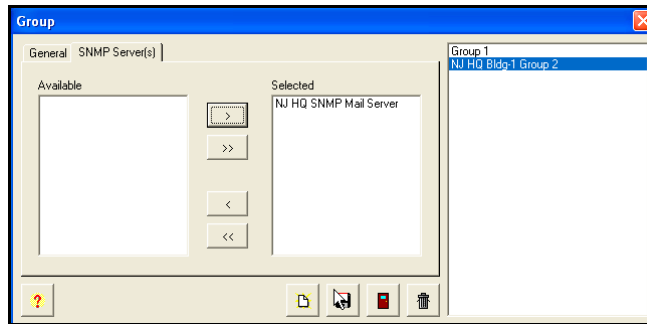







Figure 82. Groups SNMP Servers Tab

- When finished entering each new Group, click on the **Save**  button to save the Group settings. When finished creating all new Groups, click on the **Close**  button to quit, and return to the Groups tree view.

How To Modify a Group

- Select a Group from the list, and double-click on it, or click on the **Edit**  button.
- Type in the new name for the Group and click on the **Save**  button. The renamed Group will be displayed in the tree view list.

How To Delete a Group

- Select a Group from the Groups list, and click on the **Delete**  button.
- A dialog box will appear to confirm the deletion (see *Figure 83*). Click on the **Yes** button.

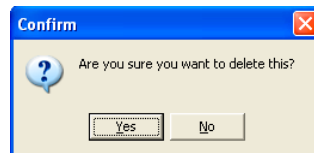




Figure 83. Confirm Deletion

How To Add a Device to the Group

- Click on the Groups icon in the tree view, and then expand the Groups list by clicking in the tree view on the **+**. All previously defined groups will appear.
- Select a Group from the expanded list and click on the **Add**  button for the Device screen to appear (see *Figure 84*).
- Enter a **Name** for the device that describes it in some meaningful way.
- From the **Type** dropdown list, select a PIX-3000xN or PIX-3000xNT.
- If selecting a PIX-3000xNT device, enter its **IP Address**. If the IP address is unknown, select the **Device Lookup**  button to launch the DeviceInstaller program to search for IP devices. See Importing Device IP/MAC Address for more information on the DeviceInstaller.
- For the PIX-3000xN, select the desired **Com Port** from the dropdown list provided.

7. Enter in the **Max Deviation** that is acceptable to synchronize the Device. The maximum deviation is determined by the latency of the network. For this reason it should be set to a minimum value of 400 ms, and adjusted accordingly to a higher number (default is 1500 ms).
8. If you wish to add comments or notes on the device, enter them in the **Description** field.
9. Select whether or not the device is **Enabled** by checking the box. The default is enabled.

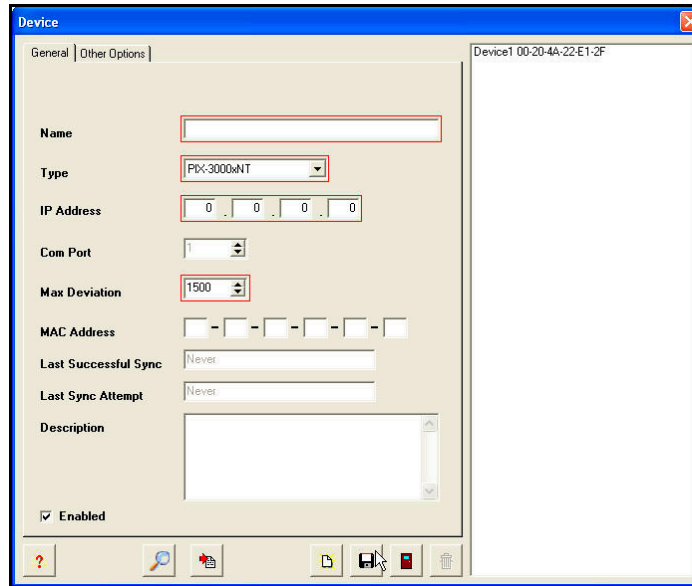


Figure 84. Adding a Device

10. Then click on the **Other Options** tab, and the screen will appear as shown in *Figure 85*. Either use the local computer's time zone (default), or select the appropriate Time Zone from the dropdown menu. The Time Zone selected controls the Time Zone adjustment sent to the selected device. Where OATS compliance is necessary, verify that the Use Local PC Time Zone option is not checked. The Time Zone must be set to Coordinated Universal Time (UTC) UTC-5:00 Eastern.

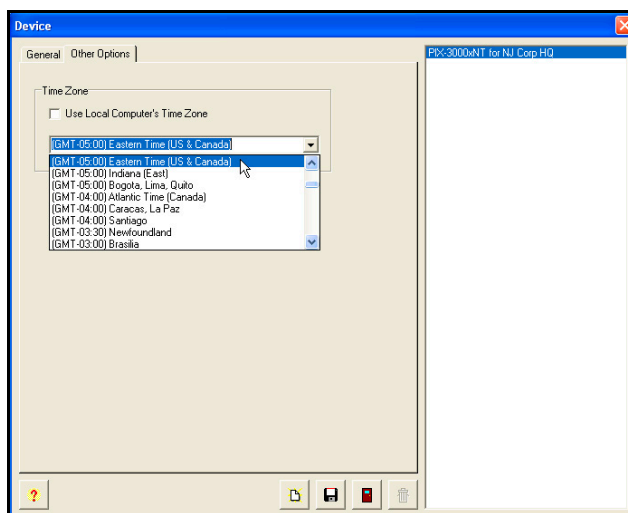






Figure 85. Device Other Options Tab

-
11. When finished entering each new Device, click on the **Save**  button to save the Device settings. When finished creating all new Devices, click on the **Close**  button to quit, and return to the Groups screen.

How To Rename a Device

1. Click on the Groups icon in the tree view, and then expand the Groups list by clicking in the tree view on the **+**. All previously defined groups will appear.
2. Select a Group from the expanded list, double-click on it, or click on the **Edit**  button, and the Device screen will appear.
3. Type in the new **Name** for the Device and click on the **Save**  button. The renamed Device will appear to the right of the Group.

How To Delete a Device

1. Click on the Groups icon in the tree view, and then expand the Groups list by clicking in the tree view on the **+**. All previously defined groups will appear.
2. Select a Group from the expanded list by clicking on it to highlight the desired Device for that group (see *Figure 86*).

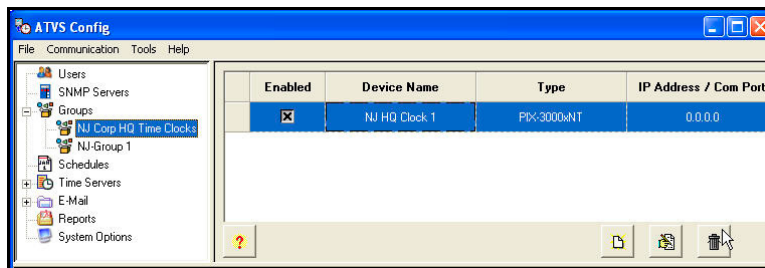



Figure 86. Deleting a Device



3. Click on the **Delete**  button. A confirmation dialog message for deletion will appear, and click **Yes** to confirm deletion.

Device Setup and Configuration

Before performing device setup and configuration procedure, you must:

1. Verify that the device (and Ethernet board) is powered and attached to a network via Ethernet CAT5 cabling.
2. Verify that the IP Address assigned to the device is valid.
3. Obtain the serial number of the Ethernet board installed in the device. This number is located on the label affixed to PIX-3000xNT box.

Time Servers

The **Time Server** selection allows you to select up to ten NTP, NIST, NPL, or PTB time servers to synchronize the ATVS Host. For example, select NTP as the server type and click on the  button to see a list of NTP servers (see *Figure 87*). Select the desired time server from the list, and click on the  button. Click the **Close** button when done.

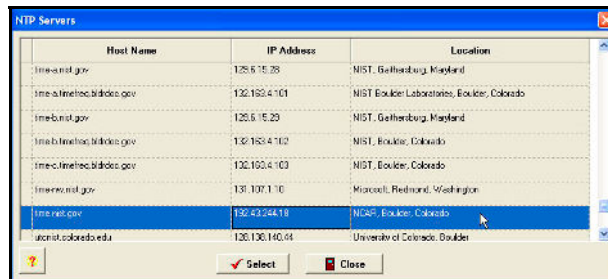


Figure 87. NTP Servers

Note: The ATVS system time must be synchronized with an NTP Server or ACTS before running ATVS.

How To Add Time Servers

1. Click on the Time Servers icon in the tree view (see *Figure 88*), and all previously defined time servers will appear to the right.

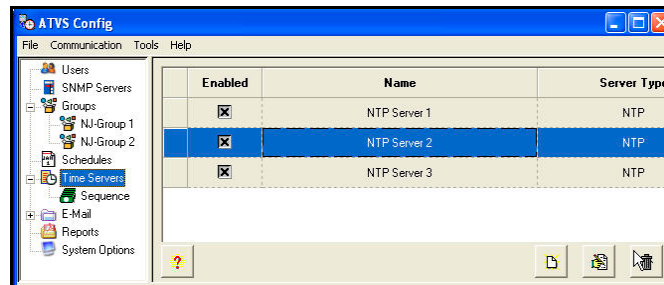


Figure 88. Selecting a Time Server

2. Click on the  button, and the Time Server screen will appear (see *Figure 89*).

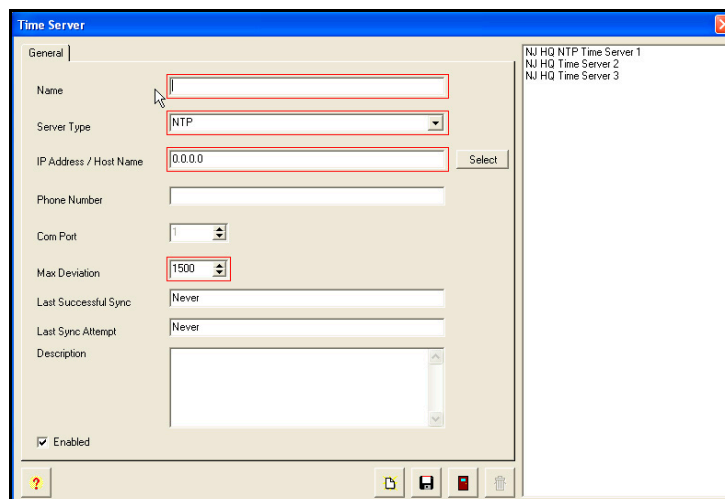





Figure 89. Adding a Time Server

3. Place a check in the **Enabled** checkbox to enable the NTP server.
4. Enter a **Name**, and select the **Server Type** from the dropdown. The server type choices are: NTP, NIST (US), NPL (UK), or PTB (DE). For NTP, click on the  button and a list of NTP servers will appear to choose from (see the following figure).
For NIST, NPL, or PTB, click on the  button and the default modem phone number for the server will appear in the **Phone Number** field. Also, the Com Port field will be active to enter the desired **Com Port**.
5. Enter in the **Max Deviation** that is acceptable to synchronize the ATVS Host. The default value is 1.5 seconds or 1500 ms.
6. The **Last Successful Sync** and **Last Sync Attempt** are read-only fields that display the successful sync and last sync attempt of the schedule. The **Description** field enables you to type in comments or remarks about the server.
7. To save these Time Server settings click on the **Save**  button. The updated Time Server information will be displayed to the right of the tree view list (see "Deleting Time Servers" figure for an example).

How To Delete a Time Server

1. Click on the Time Server icon in the tree view, and all previously defined time servers will appear. Also, a time server can be selected from the list on the right in the time server screen.
2. Select a time server from the expanded list by clicking on it to highlight the desired time server (see *Figure 90*).

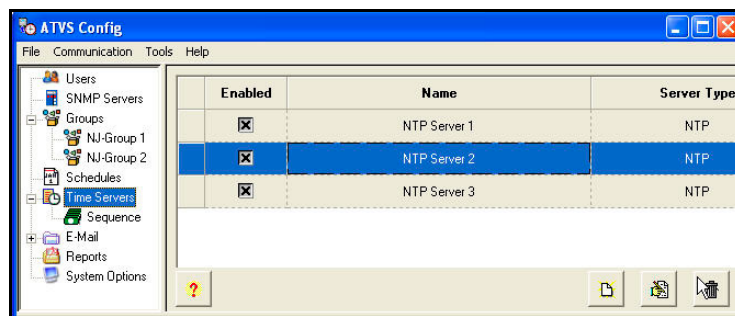



Figure 90. Deleting Time Server

3. Click on the **Delete**  button, and a confirmation dialog message for deletion will appear. Click **Yes** to confirm deletion.

How To Define the Time Server Sequence

1. Click on the Time Servers icon in the tree view (see above figure), and then expand the Time Servers list by clicking in the tree view on the +. All previously defined time servers will appear.
2. Click on the Sequence icon in the tree view to display the time Servers in sequence (see *Figure 91*).

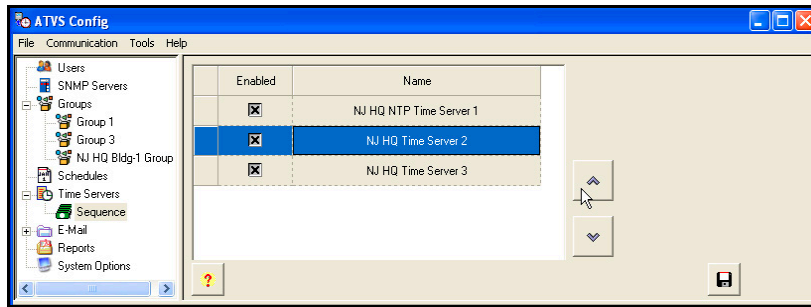






Figure 91. Time Server Sequence

3. Define the sequence order by selecting a time server and using the up  and down  move arrows.
4. To save this Sequence setting click on the **Save**  button.

General System Options

The system settings for ATVS are located in System Options (see *Figure 92*). These settings include Time Zone, DST, NTP Time Server Sync Cycle Retry number (# of retries for a sync failure), option to send SNMP Trap/Email for failed server sync attempt(s), and Scheduler Time Format [12 hour AM/PM or Military].

To modify System Options, click on the System Options icon in the tree view, enter the new information. To save the modified System Options settings click on the **Save**  button.

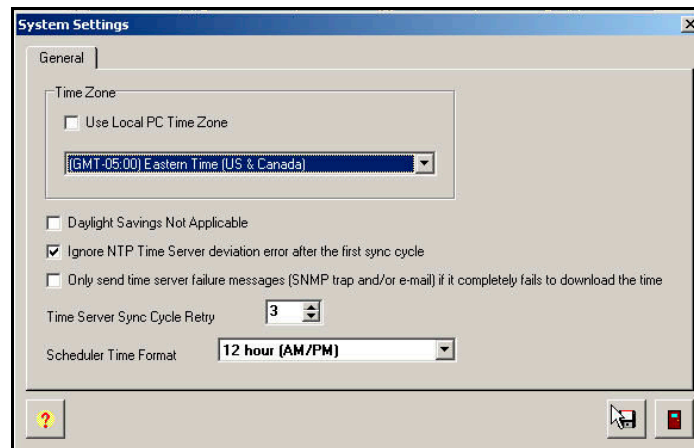


Figure 92. System Options

Time Zone

Use Local PC Time Zone: This option should only be checked in areas where OATS compliance is not important, but sync to local time is.

However, for OATS compliance, verify that the **Use Local PC Time Zone** option is not checked. The Time Zone must be set to Coordinated Universal Time (UTC) **UTC -5:00 Eastern**.

Daylight Savings Time Not Applicable: This option should only be checked in areas where DST is not used, and OATS compliance is not required.


Ignore NTP Time Server deviation error after the first sync cycle: This option should be checked if you want to send Trap/Email only for the last failed server sync attempt.

Only send Time Server failure messages [SNMP trap and/or email] if it completely fails to download the time: This option should only be checked if you want to send Trap-Email only for all failed sync servers.

Scheduler Time Format: From the dropdown menu select either 24 hour military, or 12 hour (AM/PM).

General E-Mail Settings

The E-Mail settings for ATVS are located in E-Mail. These settings include SMTP Server Name, Port, Authentication required [Username and Password], and whether or not secure connection (SSL) is required.

To modify general E-Mail settings, click on the **E-Mail** icon in the tree view (see *Figure 93*), and enter the new information. To save the modified general e-mail settings click on the **Save**  button.

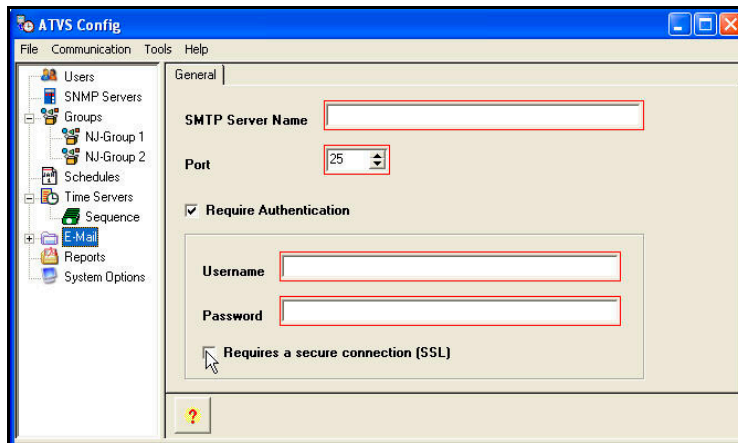


Figure 93. General E-Mail Settings

How To Delete E-Mail Account and/or Template

1. Click on the E-Mail icon in the tree view, and then expand the E-Mail list by clicking in the tree view on the **+**. All previously defined e-mail accounts and templates will appear when you click on the **Accounts** or **Templates** icon in the tree view.
2. Select an E-Mail **Account** or **Template** from the expanded list by clicking on it to highlight the desired account or template for the e-mail notification (see *Figure 94* and *Figure 95*).

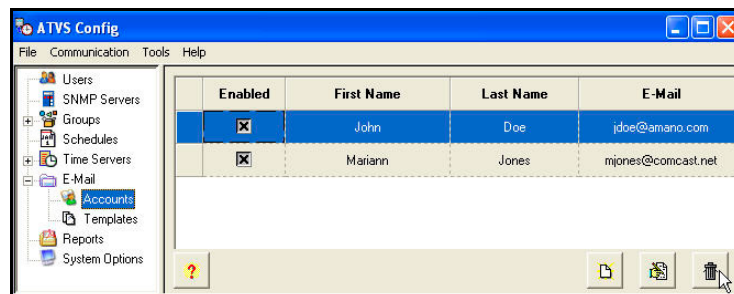


Figure 94. Deleting E-Mail Account

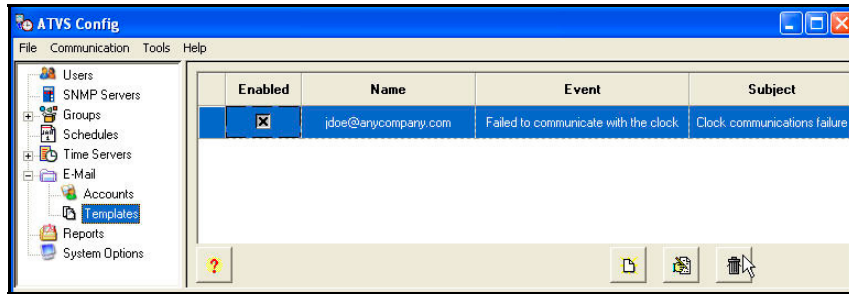



Figure 95. Delete E-Mail Template

3. Click on the **Delete**  button, and a confirmation dialog message for deletion will appear. Click **Yes** to confirm deletion.

How To Add E-Mail Account and/or Template

1. Click on the Accounts or Templates icon in the tree view (see *Figure 94* and *Figure 95*), and all previously defined E-Mail Accounts or Templates will appear to the right of the icon.
2. Click on the **Add**  button, and the E-Mail Account or E-Mail Template screen will appear depending on which was selected (see *Figure 96* and *Figure 97*).

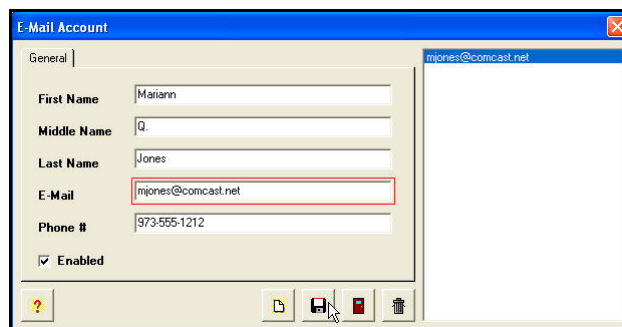


Figure 96. Add E-Mail Account

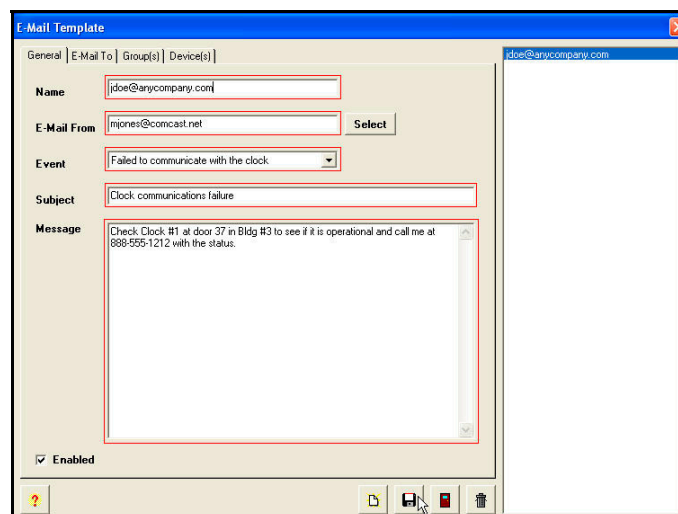


Figure 97. Add E-Mail Template

In the E-Mail Account screen, the **E-Mail To** field is where the e-mail notification from ATVS will be sent.

In the E-Mail Template screen, the **From E-Mail** field is the From e-mail on the notification (i.e., a clock failed to sync message sent) e-mail sent by the ATVS. The **Message, Event, and Time Server Name** information will appear in the e-mail. Also, the **Subject** field will be included. See the following example figure.

3. Place a check in the **Enabled** checkbox in the E-Mail Account screen to enable that e-mail account for use.
4. Place a check in the **Enabled** checkbox in the E-Mail Template screen to enable that e-mail template for use.
5. For the E-Mail Template, enter a **Name**, select the **From E-Mail** from the dropdown, and select the **Event** from the dropdown. Enter the **Subject** (see *Figure 98* for an example e-mail notification sent by ATVS) and desired **Message**.

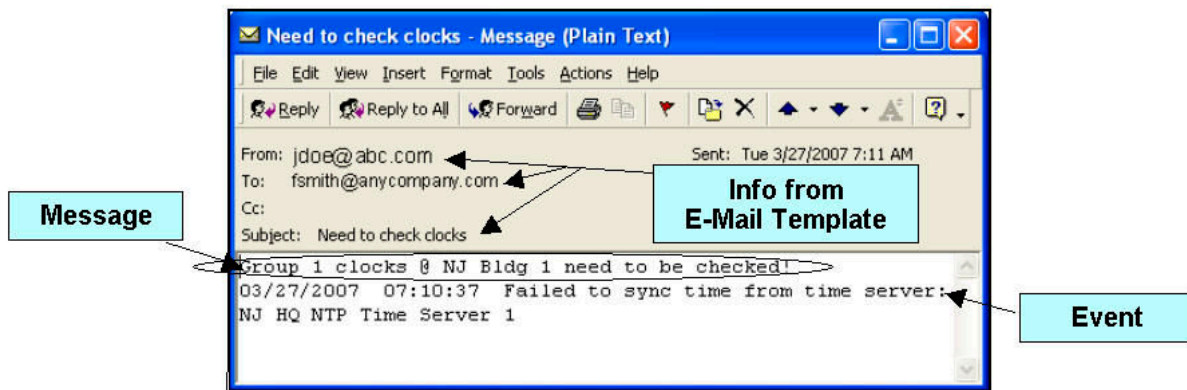




Figure 98. Example of E-Mail Notification

6. To save these E-Mail Account and E-Mail Template settings click on the **Save**  button. The updated E-Mail Account and Template information will be displayed to the right of each tree view list (see "E-Mail Account List" *Figure 94* for an example).

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Chapter 3: ATVS Scheduler Operation

The ATVS Scheduler **runs as a service** for the ATVS Enterprise Edition software. The ATVS Scheduler window consists of two tabs: **Actions** and **Previous Action Log**.

To start the ATVS Scheduler, click on the ATVS Scheduler  icon and the ATVS Scheduler screen will appear (see *Figure 99*).

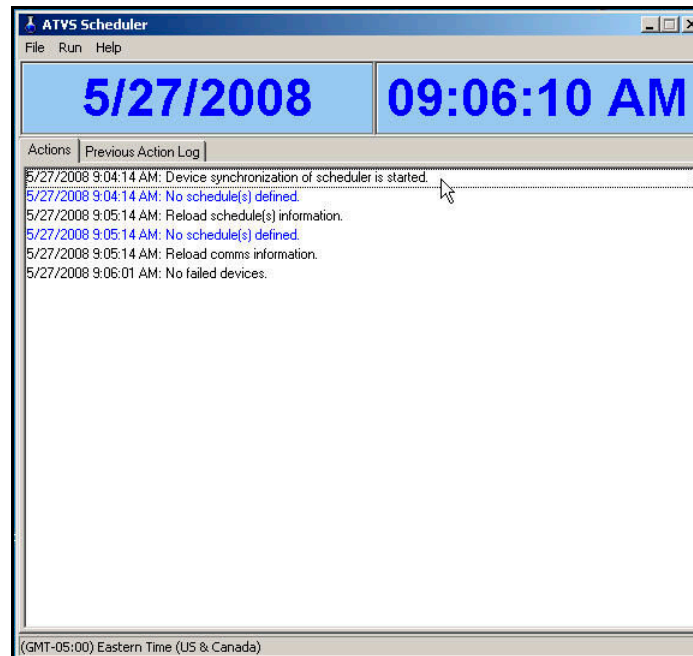


Figure 99. ATVS Scheduler

At startup, the ATVS Scheduler will check each device and verify the assigned NIC IP Address. If the NIC IP Address is invalid, an error message will appear in the Actions Log stating that the device does not have a valid IP Address.

To correct this you must open the ATVS Config program by clicking on the ATVS  icon.

Click on the **Tools** Menu in ATVS Config, and select the sub-menu Device Lookup, which will launch DeviceInstaller (see DeviceInstaller Use). From DeviceInstaller you have to either assign another NIC to the affected device(s), or re-enter the IP address of the NIC in question.

Actions Log

The **Actions** tab functions as a real-time monitor of actions performed by the ATVS Host.

As each action is performed, its description with date and time is displayed as a line item. When completed, the next scheduled action to occur is listed with the date and time. For an explanation of the events recorded, click on the **Help** button or refer to Action Log Messages for a complete listing of messages.

Note: A message in the actions log in **blue** indicates a warning, while a message in **red** indicates a failed task (see figure).

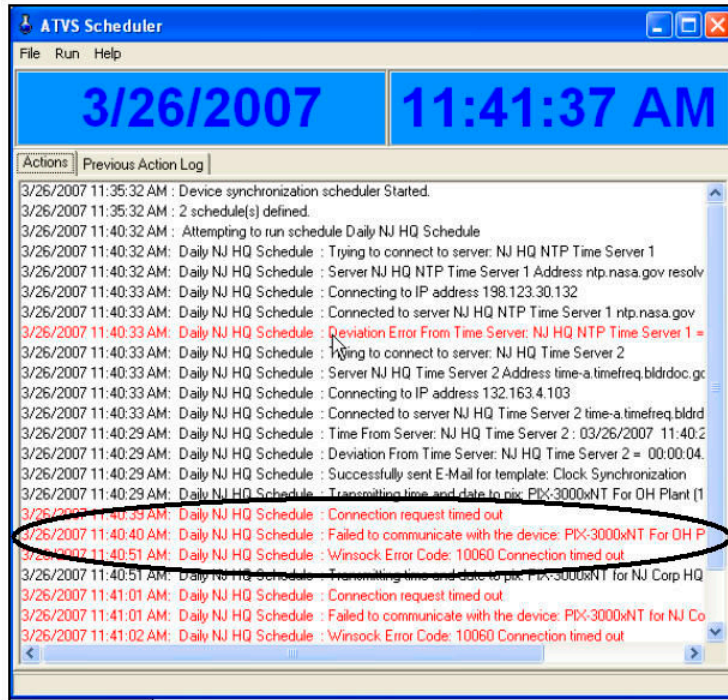


Figure 100. ATVS Scheduler Actions Log

These messages will continue to be displayed on the screen for up to 200 scrollable lines, at which time the system will automatically save them to a database. A database is created for every day ATVS is run, and then archived by the system. Previous databases can be viewed on screen in the **Previous Action Log** tab or by using ATVS Reports.

From the menu click on **File**, and select **Clear** to clear the currently displayed Actions Log.

The system can be operated manually through the use of the menu selections. This will attempt to obtain the correct time from an NTP server or NIST-ACTS before the devices are synchronized. This is accomplished by using the **Previous Failed Sync** sub-menu selection from the **Run** menu in ATVS Scheduler (see Figure 101).

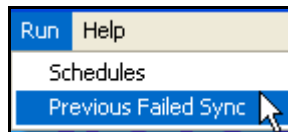


Figure 101. Run Menu in ATVS Scheduler

After selecting "Previous Failed Sync", click on the devices you want to sync and then click on the **Sync** button (see Figure 102).

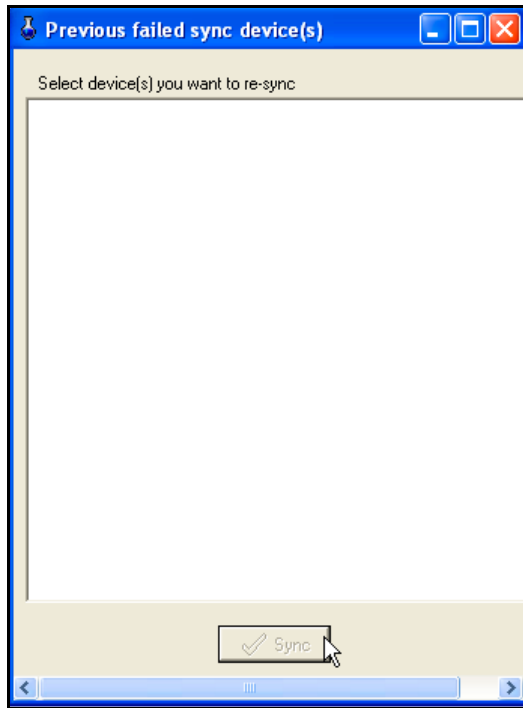



Figure 102. Sync Previously Failed Sync Device(s)

From the **Run** menu select **Schedules** from ATVS Scheduler (see Figure 103), select a schedule(s) [previously defined], and click on the Run  button to execute that schedule(s).

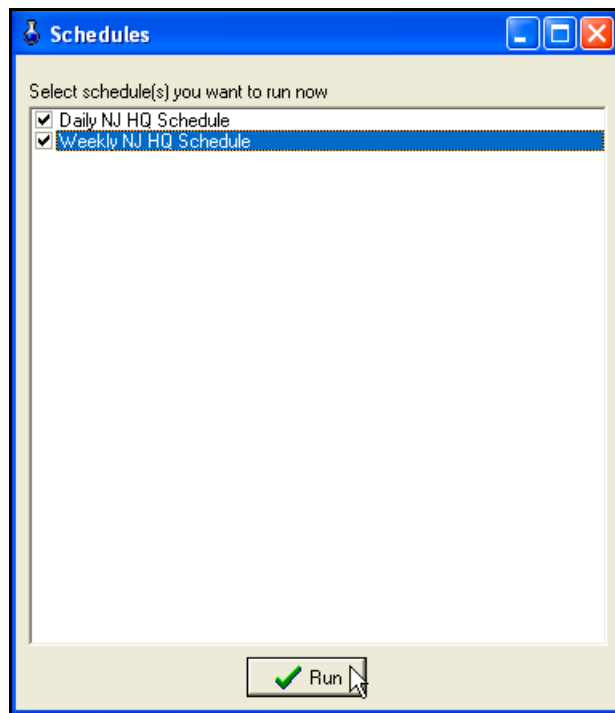


Figure 103. Run Schedules From ATVS Scheduler

Previous Action Log

The **Previous Action Log** tab allows you to access the database generated when the **Action Log** is automatically saved. A database is generated every day ATVS is run.

From the menu click on **File**, and select **Clear** (see *Figure 104*) to clear the currently displayed Previous Action Log (see *Figure 104*).

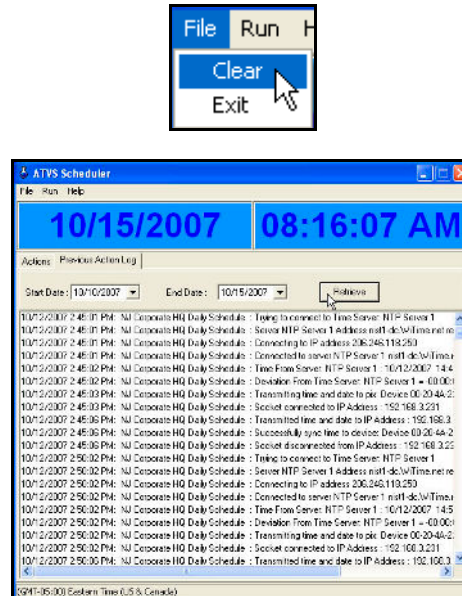


Figure 104. Previous Action Log

To retrieve a **Previous Action Log**, enter a start and end date in the appropriate fields and click on the **Retrieve** button. If the database exists, its contents will be displayed (see *Figure 104*). For an explanation of the events recorded in the database, click on the **Help** button or refer to Action Log Messages for a complete listing of messages. Click on **Help** menu and select **About** (see *Figure 105*) for the ATVS Scheduler version.

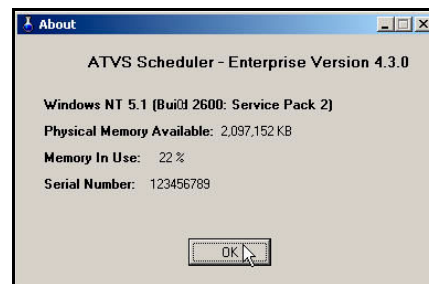
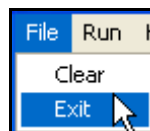


Figure 105. ATVS Scheduler About

Exiting The Program

From the **File** menu, click on **Exit** to close the ATVS Scheduler window. However, ATVS Scheduler will still be running as a service in the background for the Enterprise version.



Chapter 4: DeviceInstaller Use

DeviceInstaller can be used to find and or configure devices for ATVS. To launch DeviceInstaller from ATVS Config click on the **Tools** menu, and then select the **Device Lookup** sub-menu. *Figure 106* shows the DeviceInstaller main menu.

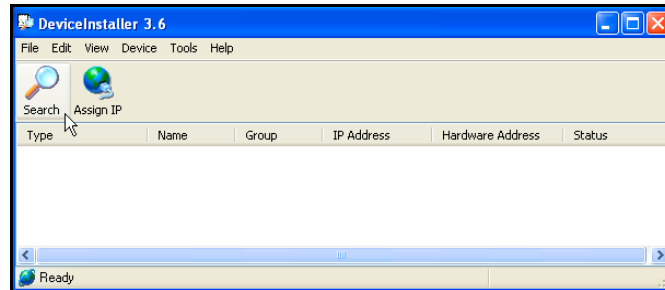




Figure 106. DeviceInstaller Main View

Click on the Magnifying glass  to use the search tool to locate PIX-3000xNT IP addresses. The hardware/MAC address will be required and this can be obtained on the PIX-3000xNT from a label on the Time Recorder.

Importing Device IP/MAC Address

1. The DeviceInstaller can also be launched from ATVS Config application by going to the Groups icon in the tree view, and then expanding the Groups list by clicking in the tree view on the **+**. All previously defined groups will appear.
2. Select a Group from the expanded list and click on the **Add**  button. The Device screen will appear (see *Figure 107*).

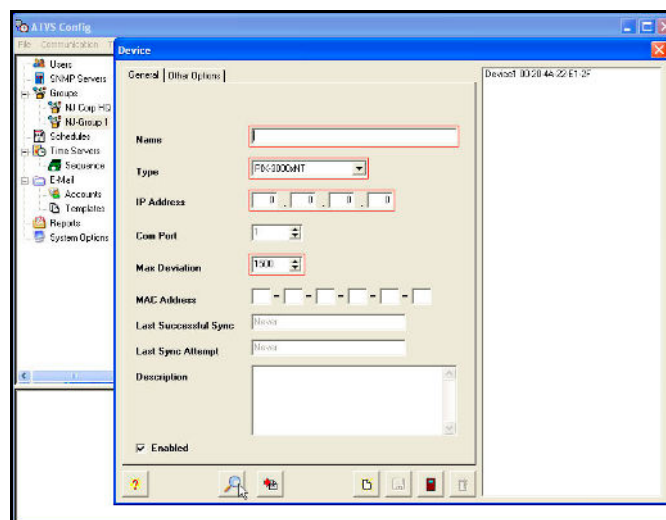



Figure 107. Device Search

3. From the Device screen, click on the **Device Lookup**  button, and the DeviceInstaller will launch.

- From the DeviceInstaller, click on the Magnifying glass  to use the search tool to locate the PIX-3000xNT IP/Mac addresses. *Figure 108* shows an example of a search.

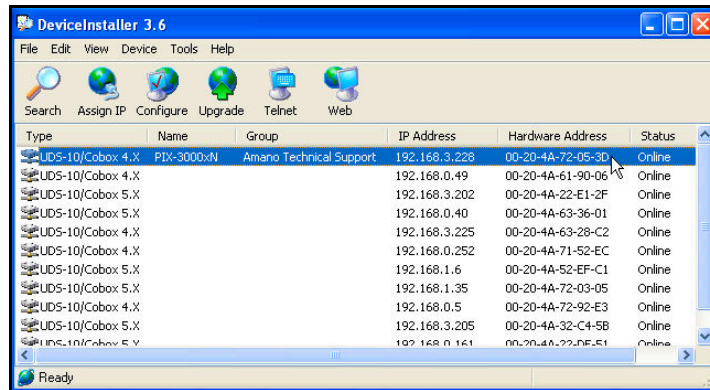


Figure 108. DeviceInstaller Search Results Example

- Any devices that are detected here may be imported. If you wish to define a specific group for the device to be imported into, double-click on the device and the Configure Device screen will appear (see *Figure 109*).

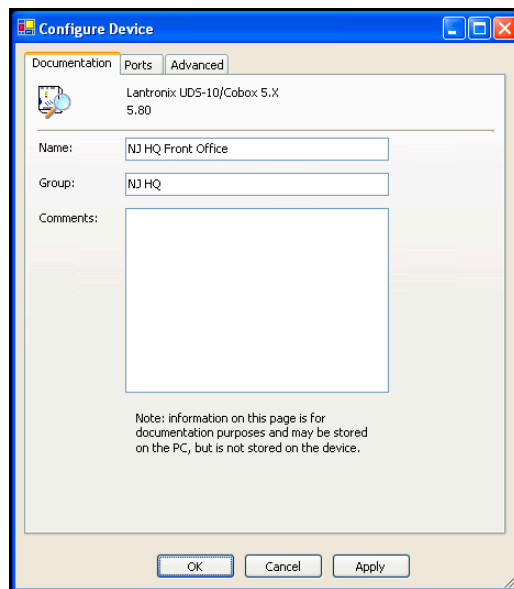


Figure 109. Configure Device

- The *Configure Device* screen allows you to define a name and **Group** for the device. Defining a Group here provides the DeviceInstaller import utility with the necessary information to install the device into the specified Group. To specify a Group, enter the Group name exactly as it appears in the Groups menu in ATVS Config. When done, select **OK**.

Update the Group for all devices you wish to define. All pre-defined devices will appear in the DeviceInstaller grid (see *Figure 110*) with the Group defined in the Group heading.

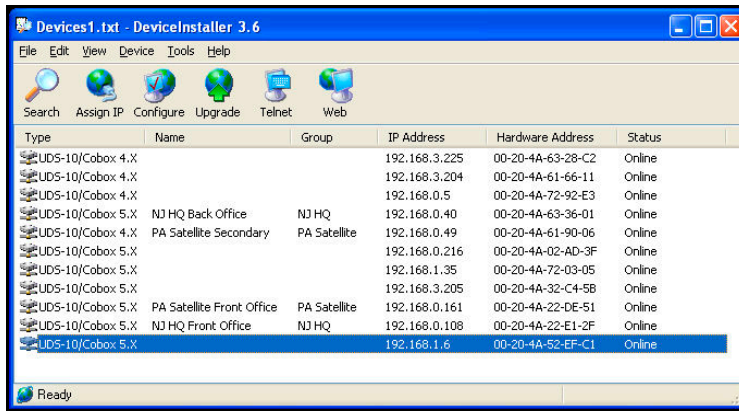


Figure 110. DeviceInstaller Grid Results Example

If no group is specified, each device imported will automatically be installed to a default group. If the group associated to a device needs to be changed at a later time, please refer to the section *Moving a Device to Another Group*.

7. Click on **File** and select the **Save As** sub-menu (see Figure 111).

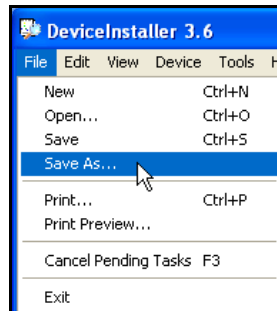


Figure 111. DeviceInstaller File Menu

8. From the **Save As** dialog (see Figure 112) select a destination folder [Save in:] and File name. Click the **Save** button and a text file with the IP search results will be saved.

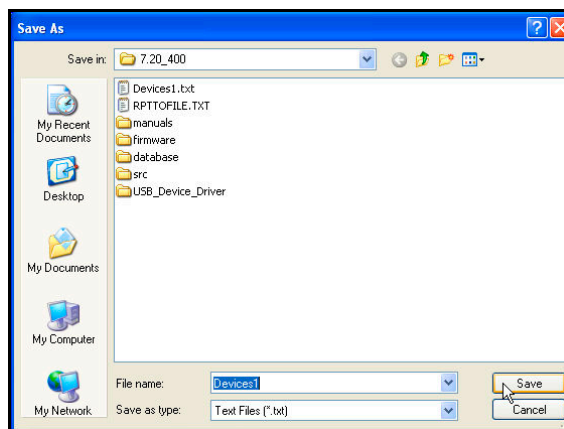





Figure 112. Save As Dialog

9. Close the DeviceInstaller, and from the Device screen click on the **Import Devices**  button and a blank Import Devices screen will appear. Click alongside the Import File Location on the **Browse**  button and navigate to the saved Devices txt file from the previous step. Once the file is selected, click on the **Open** button and the path for the text file with the IP search results will appear in the "Import File Location" field. Click on the Load File  Load button and the device information will appear on the Import Devices screen (see).

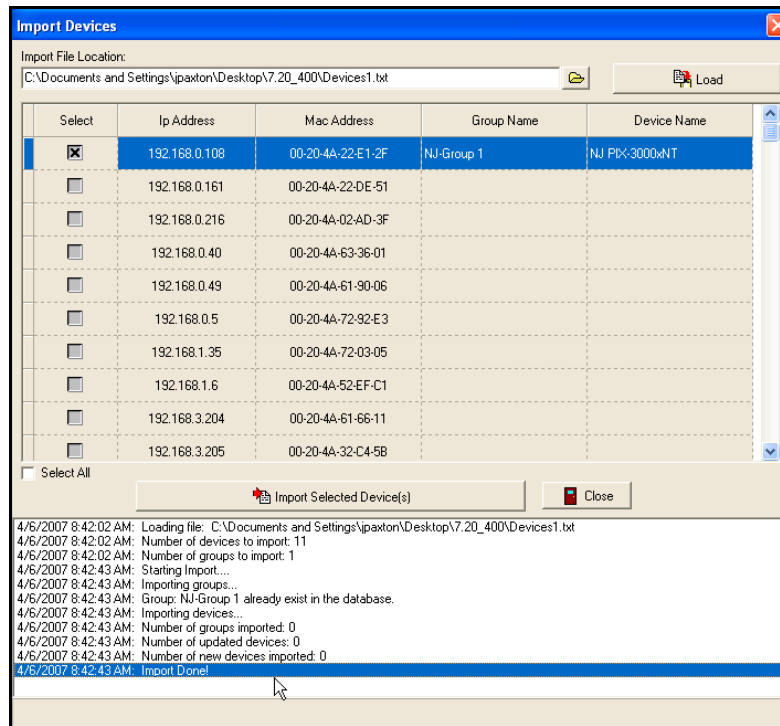






Figure 113. Import Devices Example

10. Select the desired device to import (load) by clicking in the "Select" box, and click on the **Import Selected Device(s)**  button and the dialog "Are you sure you want to import these devices?" will appear. Click on **Yes** to import the device(s). The status display on the bottom of the Import Devices screen will show the device import transaction (see above figure for an example).

Note: The Description field on the Device screen will be auto populated with the text; " *This device was created in the import module.*" If the Import Module is used to create the device.

11. When finished importing Devices, click on the **Close**  button to quit, and return to the Device screen.
12. When finished entering each new Device, click on the **Save**  button to save the Device settings. When finished creating all new Devices, click on the **Close**  button to quit, and return to the Device listing screen (tree view).

Moving a Device to Another Group

1. Click on the Groups icon in the tree view, and then expand the Groups list by clicking in the tree view on the + to list devices. All previously defined groups and associated devices will appear (see *Figure 114*). To the right of the Groups shown in the tree view will be a list of the devices connected to that group.

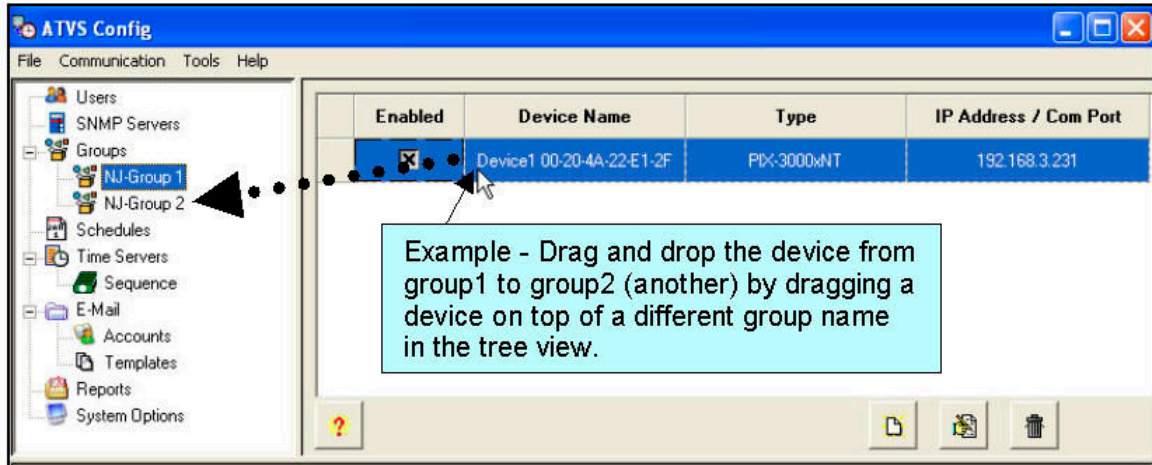


Figure 114. Drag and Drop a Device

2. To move a device, select a device from the expanded list by clicking on it, hold down the mouse button, and drag-n-drop the device on top of the group in the tree view on the left that you want to move it to (see above figure).

Note When a device is imported using the importing procedure a group name will automatically be created. If this occurs, it might be necessary to move a device to the desired group name. If a blank group (non-desired) group remains, move up in the tree view to the group level and delete it.

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Chapter 5: ATVS Reports

ATVS Reports enables the user to generate, view, save the report file, and print reports containing:


- Device settings.
- Device synchronization schedules by Schedule or by day of the week.
- Time sources (NTP servers and dial-up services).
- The transaction log by specific date or date range.
- The status and condition of each Device in the system.

Figure 115 shows an example of what the reports listing looks like after clicking on the Reports icon from the tree view.



Figure 115. ATVS Config Reports

How To Create a Report

1. Click on the Reports icon in the tree view, and any previously defined Reports will appear.
2. Click on the **Add**  button, and the blank Report Profile screen will appear (see Figure 116).

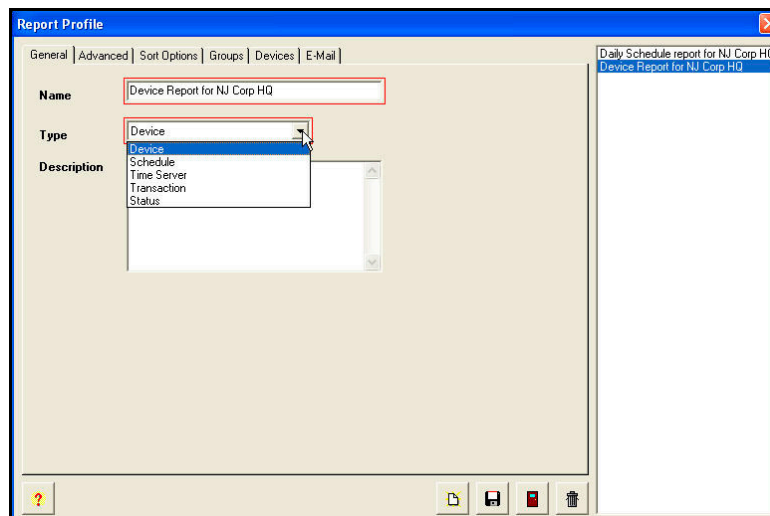


Figure 116. Creating A Report Profile

3. Enter a **Name**, and select the report **Type** from the dropdown list. The report type choices are; Device, Schedule, Time Server, Transaction, or Status.
4. The **Description** field allows the user to type comments or remarks about the report. Click on the **Advanced** tab, and a screen may appear as shown in *Figure 117*.

Note: The Advanced tab screen selections will vary depending on the report type selected.

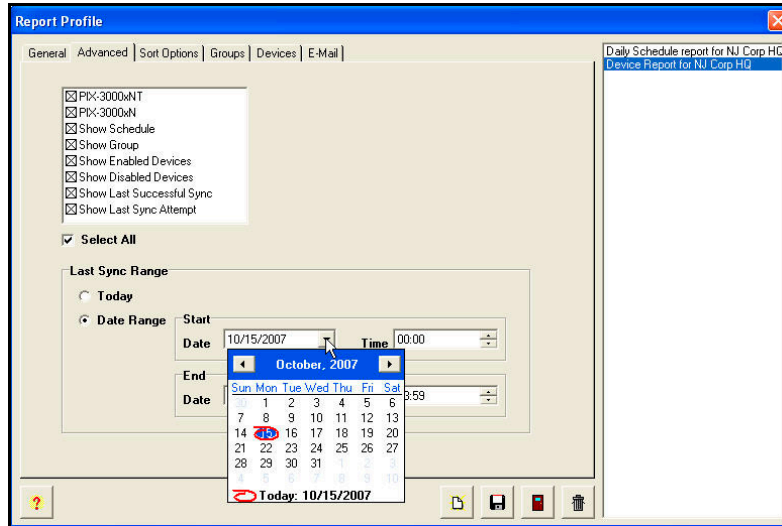


Figure 117. Report Profile Advanced Tab

5. Individually select the desired item(s) to show, or click on Select All.
6. Define the **Last Sync Range** by clicking on Today, or Date Range. Then click on the **Sort Options** tab, and the screen will appear as shown in *Figure 118*.

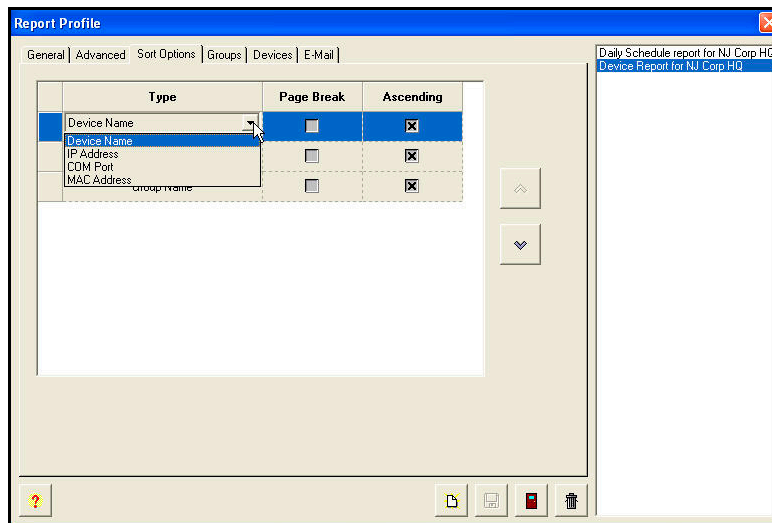




Figure 118. Report Profile Sort Options Tab

7. Define the sort/filter options by clicking on Device Name and selecting from the dropdown list: Device Name, IP Address, Com Port, or MAC Address. Also, define the sequence report filter order by selecting a type and using the up  or  down move arrows. Then click on the **Groups** tab, and the screen will appear as shown in *Figure 119*.

Note: The Sort Options tab will not be present for Status and Transaction Reports.

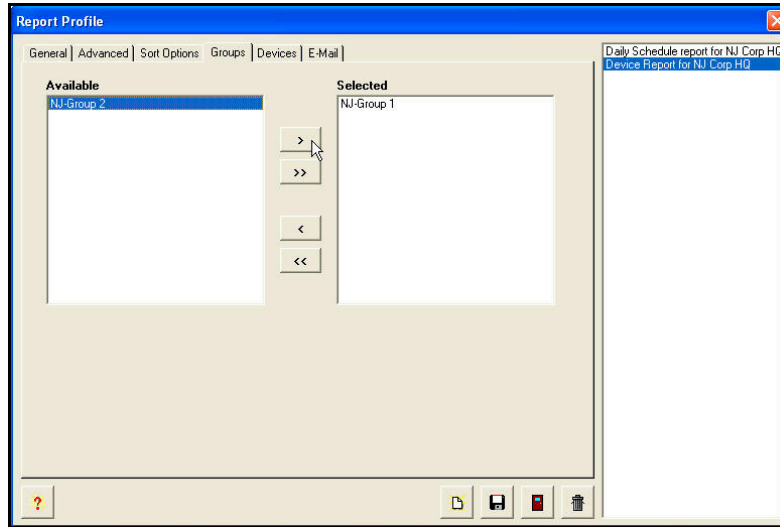






Figure 119. Report Profile Groups Tab

8. If desired, from the Available list (default status for Groups previously defined), select the Group(s) by using the selection arrows ( or ) to move them to the Selected list on the right from the Available list on the left.

Note: This tab will not be present for Schedule, Time Server, and Transaction Reports.

9. Then click on the **Devices** tab, and the screen will appear as shown in Figure 120. If desired, from the Selected list (default status for devices previously defined), deselect the Device(s) by using the selection arrows ( or ) to move them from the default "Selected" list on the right to the "Available" list on the left.

Note: The devices will be automatically selected once the Groups are selected in the previous step. The Devices tab will not be present for Schedule, Time Server, and Transaction Reports.

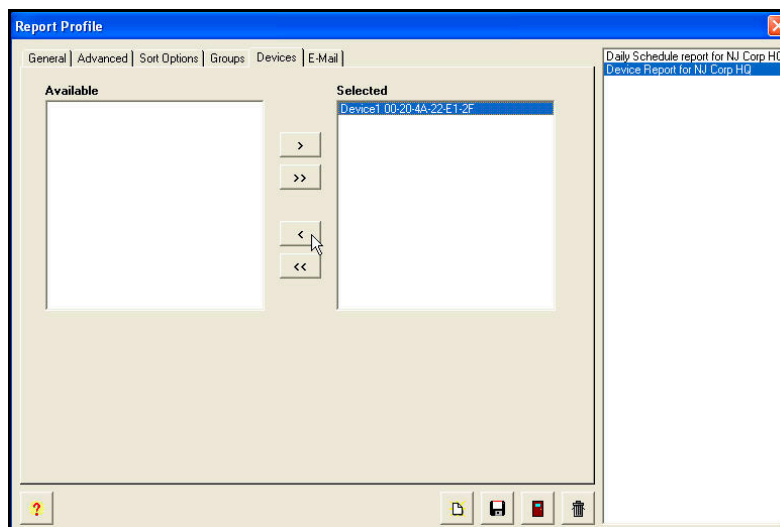




Figure 120. Report Profile Devices Tab

10. Then click on the **E-Mail** tab, and the screen will appear as shown in . If desired, from the Available list (default status for E-Mail accounts previously defined), select the **E-Mail To** by using the selection arrows ( or ) to move them to the "Selected" list on the right from the "Available" list on the left.

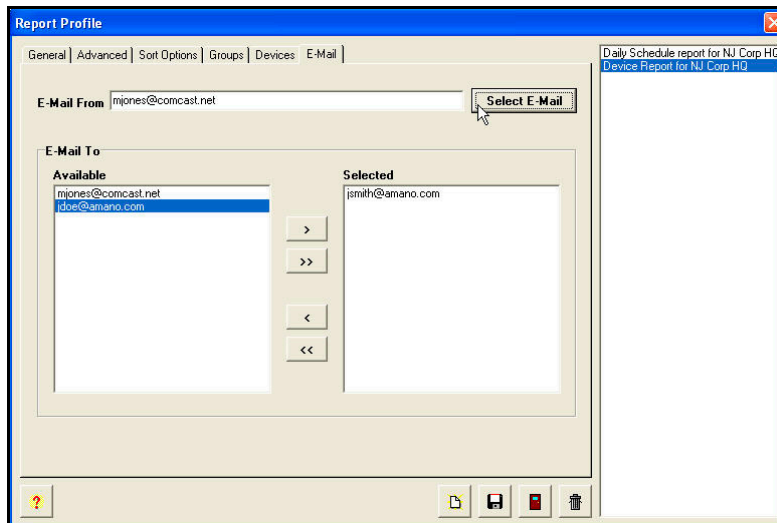


Figure 121. Report Profile E-Mail Tab

Use the **Select E-Mail** button to choose an e-mail address for the **E-Mail From** address (see Figure 122).

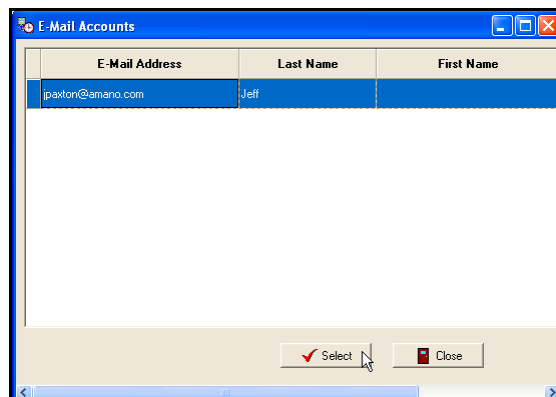




Figure 122. Selecting E-Mail Account

11. When finished with defining the report profile, click on the **Save**  button to save your report profile settings and return to the Reports screen. Click on the **Close**  button to quit without saving. The new Report Profile information will be displayed to the right of the tree view list (see Figure 115).

How To Run a Report

1. Click on the Reports icon in the tree view, and all previously defined Reports will appear.
2. Select a report from the list on the right by clicking on it to highlight the desired report (see Figure 123).

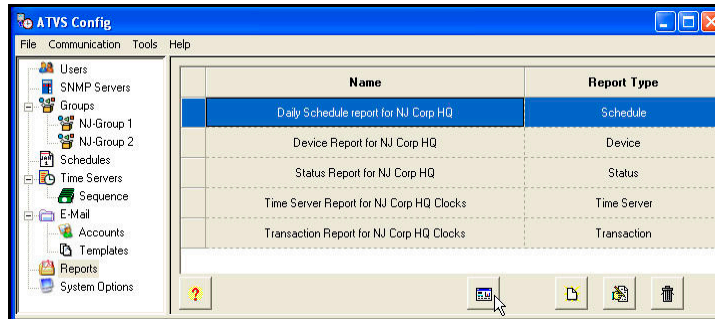





Figure 123. Selecting an ATVS Report

3. Click on the **Run Report**  button and the report will be created and/or formatted based upon the previously defined report/filter criteria. See later in this section for descriptions of the five available report types.

How To Print a Report

1. Click on the Reports icon in the tree view, and all previously defined Reports will appear.
2. Select a report from the list on the right by clicking on it to highlight the desired report (see Figure 123).
3. Click on the **Run Report**  button and the report will be created and/or formatted based upon the previously defined report/filter criteria. See later in this section for descriptions of the five available report types.
4. From the top of the report screen, click on the **Print Report**  button, and the Windows print dialog screen will appear (see Figure 124).

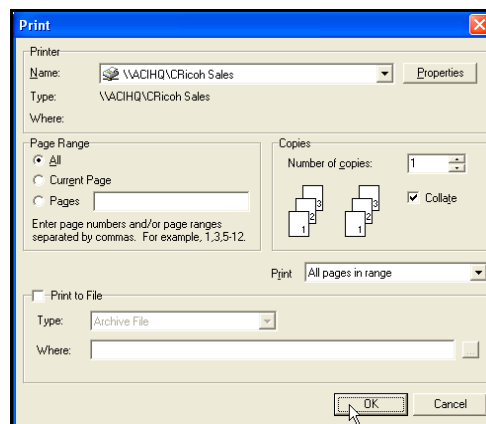


Figure 124. Windows Print Dialog

How To Create a Report File

Follow the preceding procedure for printing a report.

1. When the Windows Print dialog window appears (see Figure 124) click **Print to File** (see Figure 125).

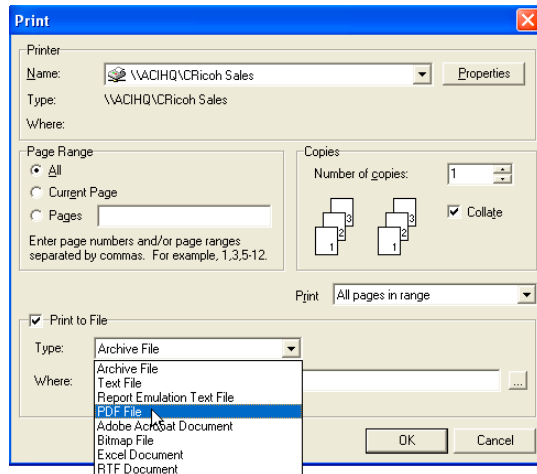



Figure 125. Select File Type

2. Select the desired **Format** from the dropdown list. The report format choices are; PDF, Word (RTF for Word), Excel, or Image.
3. Click on the Browse  button to select the file destination, and the **Save As** dialog will appear (see Figure 126).

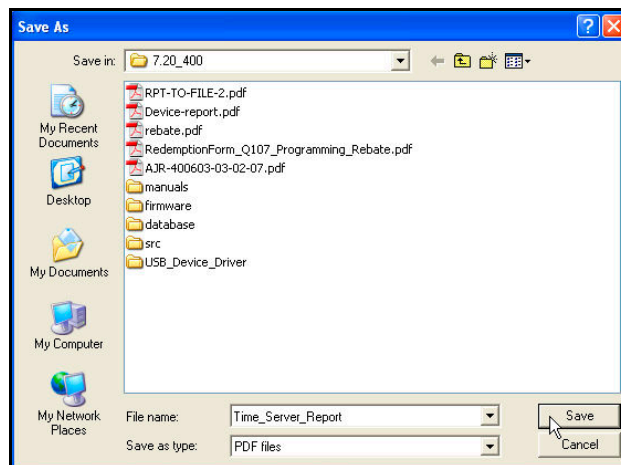





Figure 126. Windows Save As Dialog

4. Enter a file name, select a file type, and click on the **Save** button. The Print dialog screen will appear again. Click on the **Ok** button and the file will be created in the defined destination.

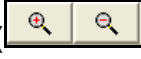

How To Delete a Report Profile

1. Click on the Reports icon in the tree view, and all previously defined Reports will appear.
2. Select a report from the list on the right by clicking on it to highlight the desired report.
3. Click on the **Delete**  button. A confirmation dialog message for deletion will appear; click **Yes** to confirm deletion.

How To Modify a Report Profile

1. Select a Report from the list, and double-click on it, or click on the **Edit**  button.
2. Type in the new information for the Report Profile and click on the **Save**  button. The redefined Report Profile will be displayed in the tree view list.

How To Navigate a Report


To navigate through any generated report use the Zoom In/Zoom Out () buttons and/or First/Previous/Next/Last Page () buttons.

To print a generated report use the **Print Report**  button. See *Figure 127* for a report example. Reports will be generated (formatted) based upon the filter criteria selected in the Sort Options of the report profile.

To quit a generated report use the **Close**  button and return back to the reports list screen.

Reports will be generated (formatted) based upon the filter criteria selected in the Sort Options of the report profile.

Device Report

To generate a report, select a device report from the reports list and click on the **Run Report**  button. This report can be sorted by Device Name, IP Address, Com Port, or MAC Address. If desired, this report can be formatted with page breaks, and in ascending order. *Figure 127* is an example of a displayed Device Report.

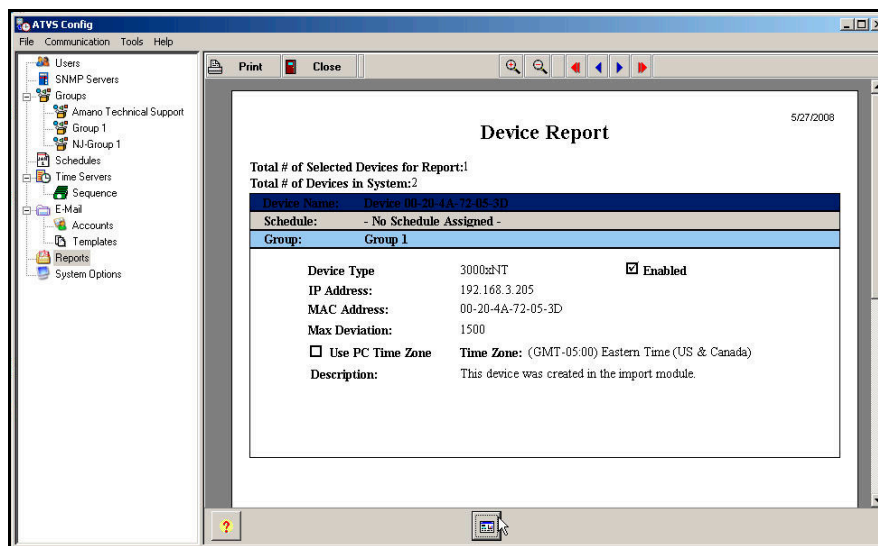


Figure 127. Device Report Example

Note: As a convenience feature, the Device Report will also list on the top the **total number of devices selected for the report** and the **total number of devices in the system**.

Schedule Report

This report displays the Device Synchronization Schedules. This report can be generated for the following schedule types: Daily, Weekly, Monthly, or Yearly. This report can be formatted with or without page breaks, and in ascending/descending order. *Figure 128* is an example of a displayed Schedule Report.

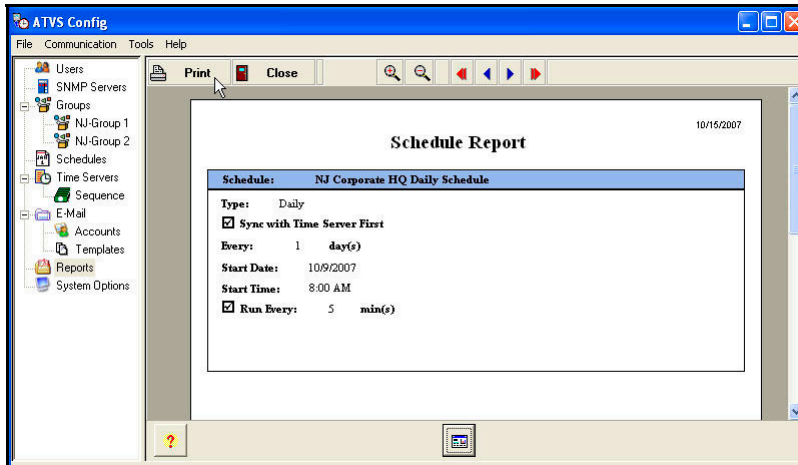


Figure 128. Schedule Report Example

Time Server Report

When selected, this option will generate a report containing any or all the time sources, NTP servers and dial-up services, in the database. This report can show the following server types: NIST, NTP, NPL, PTB, Enabled, Disabled, last successful sync, and/or last sync attempt. A report can be generated for today or a date range with starting and ending date and time.

This report can be formatted with or without page breaks, and in ascending/descending order. Additional sorting/filtering can be performed by: Time Server Name, IP Address/Host Name, Telephone Number, and Com Port. *Figure 129* is an example of a displayed Time Server Report.

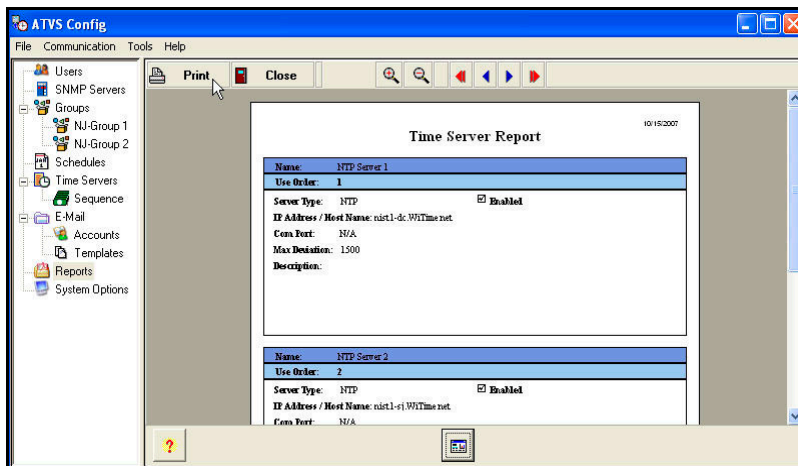


Figure 129. Time Server Report Example

Transaction Report

The Transaction Log Report is used to generate a report of a log based on a specific date (today) or a date range (Log Report) with a starting and ending date and time. *Figure 130* is an example of a displayed Transaction Report.

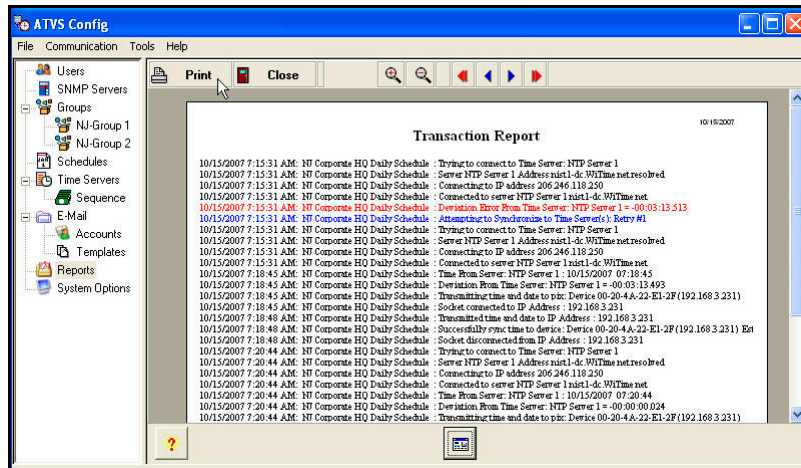




Figure 130. Transaction Report Example

Status Report

A Status Report is a simple way of checking the status of each Device in your system. To generate a report, select a group or groups from the Available Events list and click on the  or  buttons to move them to the Selected Events list. The choices for events are: failed to sync with the time server, failed to communicate with the clock, and successful synchronization. Select the Groups to run the report(s) for, and the Devices assigned to those Groups will automatically be selected. *Figure 131* is an example of a displayed Status Report.

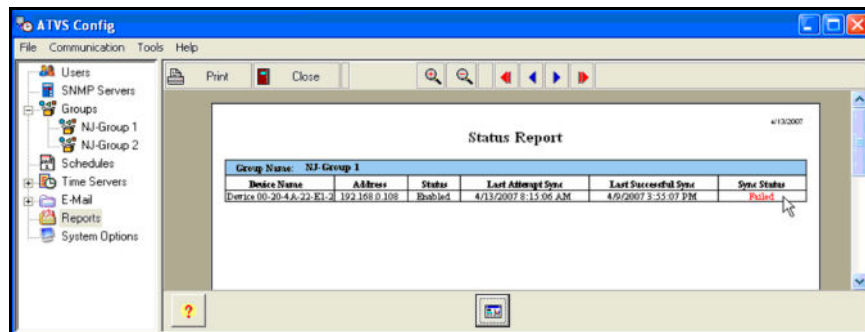


Figure 131. Status Report Example

Note: In a report, if a Device had failed synchronization, the word “Failed” will be in the Sync Status column in red.

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Chapter 6: Action Log Messages

Unless otherwise specified, the messages listed will appear in the status section when either a Actions or Previous Actions Log is selected. To see these messages startup the ATVS Scheduler. *Figure 132* is an example of the ATVS Scheduler.

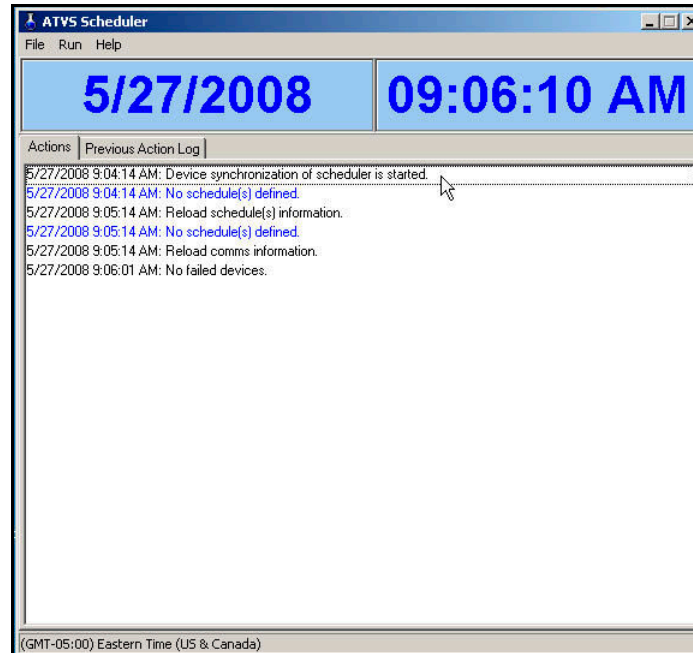
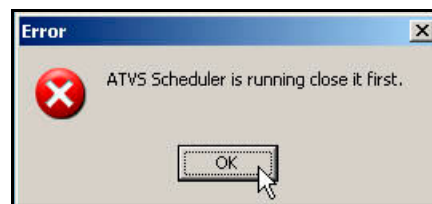


Figure 132. ATVS Scheduler

Note: The ATVS Scheduler can not run at the same time as ATVS. The following error message will appear if it is running when ATVS is started:



Startup and Shut Down Messages

Initialize Initiated...

Date Time: Device synchronization scheduler started.

xxx Actions Scheduled

Date Time: Number of schedules defined.

Action List [xxx]. Time = MM/DD/YYYY hh:mm:ss message1, message2

Date Time: Attempting to run schedule.

Initialize Succeeded.

Configuration initialization completed.

Network Time Synchronization Messages

Trying to connect to server #xx

Where xx is the Server Name. ATVS is attempting to connect to the specified NTP server.

Time From Server #xx

Where xx is the Server Name. ATVS received time information from the specified NTP server.

Deviation From Time Server xx = HH:MM:SS.SSS

Where xx is the Server Name and HH:MM:SS.SSS is the time deviation between the ATVS Host and the NTP server. When the time is received from the NTP server, it is compared with the ATVS Host. If the difference between the two is greater than the Maximum Deviation, the NTP server time is considered incorrect.

Connecting to IP Address XXX.XXX.XXX.XXXX

Where XXX.XXX.XXX.XXX is the IP Address. ATVS is in-process of connecting to the specified NTP server. (Detailed Activity Logging only)

Connected to server xx NNN

Where xx is the Server Name and NNN is the server name. ATVS has successfully connected to the specified NTP server. (Detailed Activity Logging only)

Attempting to synchronize to the Time Server(s): Retry #xx.

Where xx is the number of retry. No time data was received from seven out of ten NTP servers in the first time through the cycle.

Could not resolve server xx host Server Location: XXX.XXX.XXX.XXXX

Where xx is the Server Name and XXX.XXX.XXX.XXX is the IP Address or Host Name. The IP Address entered for the NTP server is incorrect, or the DNS translation option is not enabled. (Detailed Activity Logging only)

Could not receive information from server xx, XXX.XXX.XXX.XXXX

Where xx is the Server Name and XXX.XXX.XXX.XXX is the IP Address or Host Name. No time data was received from the NTP server. The system will attempt to make five connections until successful. (Detailed Activity Logging only)

Deviation Error From Time Server :xx

Where xx is the Server Name. When the time is received from the NTP server, it is compared with the ATVS Host. If the difference between the two is greater than the Maximum Deviation, the NTP server time is considered incorrect.

Failed to sync due to Timeout Error from Time Server : xx

Where xx is the Server Name. No connection was established with the NTP server due to a network or server failure.

Failed to sync due to Invalid Host from Time Server xx

Where xx is the Server Name. The IP Address entered for the NTP server is incorrect, or the DNS translation option is not enabled.

Did not receive enough data from Time Server xx, XXX.XXX.XXX.XXXX

Where xx is the Server Name and XXX.XXX.XXX.XXX is the IP Address or Host Name. No time data was received from the NTP server. The system will attempt to make five connections until successful.

NIST ACTS Messages

Preparing to dial out

The system is initializing modem to dial NIST.

Dialing

The system is dialing the NIST telephone number.

Connection established

Connection between ATVS Host and NIST succeeded.

Time from XXXXX : MM/DD/YYYY hh:mm:ss:nnn

NIST time/date data successfully received from ACTS.

Deviation from XXXXX = hh:mm:ss:nnn

Time difference between ATVS Host and ACTS.

Redialing

Redialing NIST telephone number.

The configured device is not functioning

The Com port does not exist or is invalid on this system.

The configured modem connection is invalid

The Com port the modem is set to is not functioning.

Could not receive correct information

Connection was established but ATVS did not receive correct information. System will automatically redial to NIST in five minutes.

Could not communicate with modem

Modem may not be connected, powered on or it is not responding to the application.

Could not connect to XXXXX modem

Could not connect to specified modem.

PIX Transmission Messages

Starting Communication

Device synchronization initiated.

Transmitting time and date to pix Name : XXXXXXXX (xxx.xxx.xxx.xxx)

Transmitting time and date to Device via IP Address xxx.xxx.xxx.xxx.

Successfully sync time to Device: XXXXXXXX (xxx.xxx.xxx.xxx) Est. Latency = xxx (ms)

or

Successfully sync time to Device: XXXXXXXX via Com X

Where X is the Com Port #. Where XXXXXXXX is the Device Name, xxx.xxx.xxx.xxx is its IP Address, xxx is the Estimated Latency of the network and x is the Com Port number. Synchronization with the Device was successful.

Failed to communicate with Device XXXXXXXX (xxx.xxx.xxx.xxx)

Where XXXXXXXX is the Device Name and its IP Address is xxx.xxx.xxx.xxx. This occurs when the IP Address entered for the specified Device does not exist, is incorrect, or the Device is not functioning.

Connection request timed out

No connection was established between the ATVS Host and the specified Device due to an invalid IP address, network failure, or the Device is not functioning.

Send timed out

The IP Address entered for the specified Device does not exist, incorrect, or the Device is not functioning.

Transmitting time and date to pix xx x

Where x is the Com Port number, and xx is the Device Name.

Send Succeeded COMx

(Look on previous page for send succeeded for Com Port).

Where x is the Com Port number. Broadcast to Com Port x was successful.

Failed to sync time to Device xxxxxxxx via Com x.

Where x is the Com Port number and xxxxxxxx is the Device Name. Broadcast to Com Port X has failed, and XXXXXXXX is Device Name.

The configured RS-485 connection is invalid

The Device attached to the system is not functioning.

Invalid Com Port setting. The Com Port does not exist on the system or it cannot be open.

The Device attached to the system is not functioning

The IP Address entered for the specified Device is incorrect, does not exist, incorrect, or the Device is not functioning.

Connection request timed out

No connection was established between the ATVS Host and the specified Device due to an invalid IP address, network failure, or the Device is not functioning.

Winsock Error Code: xxxx: XXXXXXXX

Where xxxx is the Winsock Error Code and XXXXXXXX is the Winsock Error. Typically, this error will occur if there is a wiring problem or the Device is not functioning.

General and Other Messages

Successfully sent E-mail : x

E-mail was successfully sent by recipient. x is E-mail template name.

Failed to send E-mail : x

The ATVS Host was unable to send e-mail. x is E-mail template name.

Troubleshooting

The basic guidelines for troubleshooting error or failure messages are as follows:

- Check all electrical connections, and verify that all computer ports and Devices are properly configured and functioning.
- Verify that the specified IP/Mac Addresses are entered correctly and enabled.
- Consult the PIX-3000x Operation Manual for more details on clock operation.



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