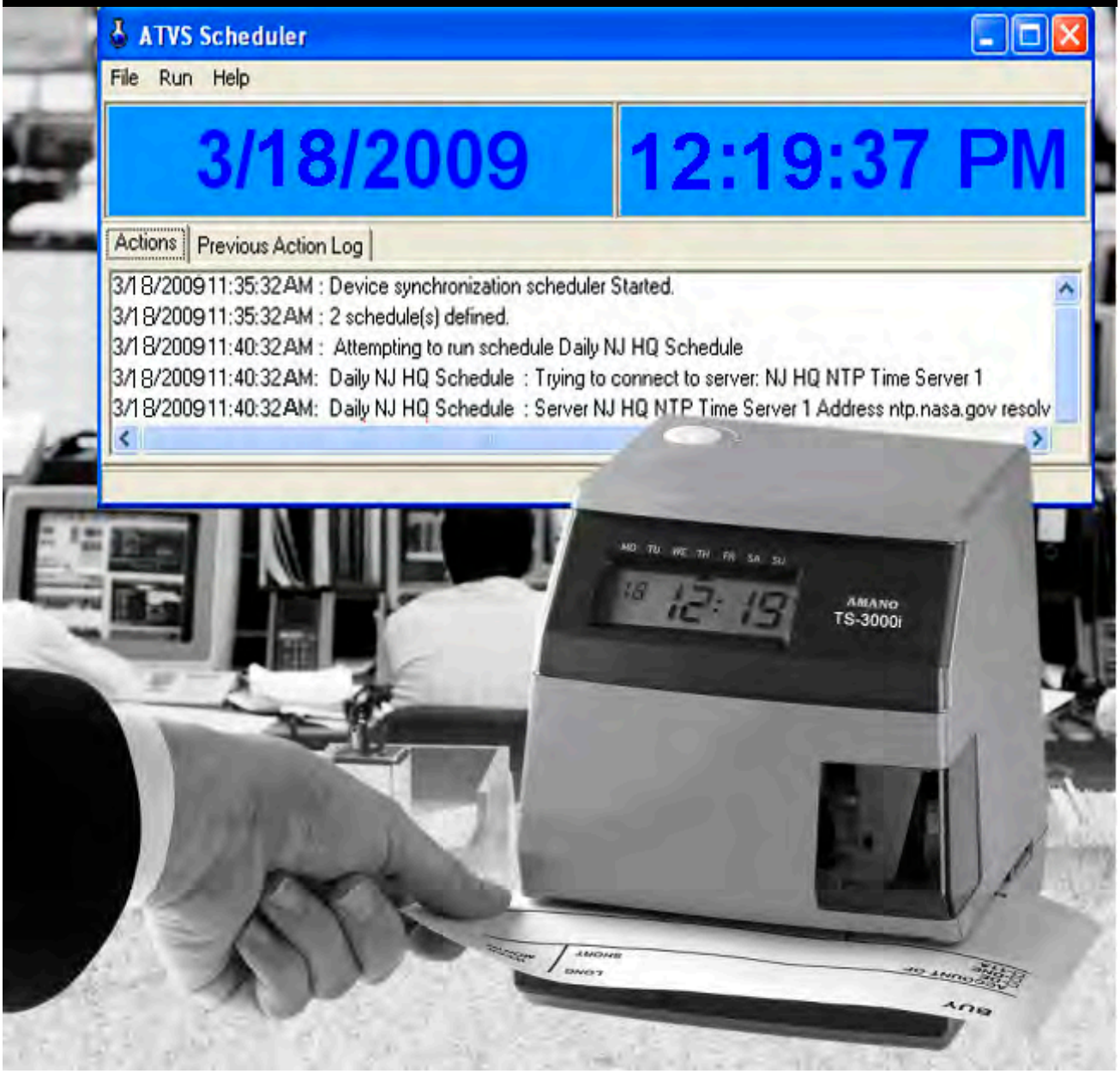
AMANO®

ATVS

Amano Time Validation System

Installation and Operation Guide

Version 5.2



Thank you…

for purchasing another fine product from
Amano Cincinnati, Inc.

Proprietary Notice

Amano Cincinnati, Inc. reserves the right to make equipment changes and improvements that may not be reflected in this document. Portions of this document may have been updated to include the latest hardware or firmware version, if applicable.

We recommend that this document be read in its entirety before any attempt is made to operate the equipment.

For more information about Amano's complete line of time products, visit our web site at:

www.amano.com/time

Trademarks

Disclaimer

This Installation and Operation Guide has been carefully prepared, but Amano assumes no liability for errors and/or omissions. If you should find any errors or unclear information, please contact your Amano dealer, or ACI.

Table of Contents

Chapter 1: Introduction and Installation 1-1
- How This Manual is Organized 1-1
- Introduction – What is ATVS? 1-1
- What is OATS Compliance? 1-2
  - ATVS Software Features 1-2
  - ATVS Benefits 1-3
  - ATVS Typical User/Market 1-3
  - PIX-3000xN/PIX-3000xNT/TS-3000i Hardware Features 1-3
  - ATVS Requirements 1-3
  - ATVS General Information 1-4
- ATVS Installation Guide 1-5
  - ATVS Initial Software Installation 1-5
  - ATVS Software Activation 1-9
  - ATVS Initial Configuration 1-11

Chapter 2: ATVS Config Operation 2-1
- General Information 2-1
  - ATVS Config Startup 2-1
  - ATVS Config Layout 2-2
  - ATVS Config Main Dropdown Menus 2-2
  - Common Buttons 2-4
  - Wizard Icons 2-4
- Using the ATVS Config Setup Wizard 2-5
- Using ATVS Config 2-17
  - How to Create Users 2-17
  - How to Delete Users 2-19
  - How To Modify Users 2-19
  - How to Create an SNMP Server 2-19
  - How to Delete an SNMP Server 2-20
  - How To Modify an SNMP Server 2-20
  - How to Create A Schedule 2-21
  - How to Delete A Schedule 2-23
  - How To Modify a Schedule 2-24
  - How to Add Groups and Devices 2-24
  - How To Modify a Group 2-25
  - How To Delete a Group 2-25
  - How To Add a Device to the Group 2-25
  - How To Rename a Device 2-27
  - How To Delete a Device 2-27
  - Device Setup and Configuration 2-28
  - Time Servers 2-28
  - How To Add Time Servers 2-28
  - How To Delete a Time Server 2-29
  - How To Define the Time Server Sequence 2-30
  - General System Options 2-30
  - General E-Mail Settings 2-31
  - How To Delete E-Mail Account and/or Template 2-32
  - How To Add E-Mail Account and/or Template 2-33

Table of Contents (Continued)

Chapter 3: ATVS Scheduler Operation 3-1
Actions Log 3-1
Previous Action Log 3-4
Exiting The Program 3-4

Chapter 4: Importing TS-3000i & PIX-3000xNT into ATVS 4-1
Importing Device IP/MAC Address 4-2
Moving a Device to Another Group 4-10

Chapter 5: ATVS Reports 5-1
How To Create a Report 5-1
How To Run a Report 5-4
How To Print a Report 5-5
How To Create a Report File 5-5
How To Delete a Report Profile 5-6
How To Modify a Report Profile 5-7
How To Navigate a Report 5-7
Device Report 5-7
Schedule Report 5-8
Time Server Report 5-8
Transaction Report 5-9
Status Report 5-9

Chapter 6: Action Log Messages 6-1
Startup and Shut Down Messages 6-1
Network Time Synchronization Messages 6-1
NIST ACTS Messages 6-3
PIX Transmission Messages 6-3
General and Other Messages 6-4
Troubleshooting 6-5

Chapter 1: Introduction and Installation

The ATVS application is available 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. ATVS enterprise software now works with the Amano TS-3000**i**® Automatic TimeSync Web clock to provide an easy-to-use auto discovery feature for connecting and importing the TS-3000**i** clocks into ATVS with a BaseT 10/100 communication speed.

ATVS enterprise software continues to work with both the Amano PIX-3000xNT and PIX-3000xN time stamps. Each PIX-3000xNT has an internal NIC and is given an IP address for synchronization over your network. The ATVS Enterprise 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 BaseT 10 communication speed, with network connectivity back to the single ATVS software installation. The TS-3000**i**, PIX-3000xNT, and PIX-3000xN can co-exist on the same server to provide centralized reporting for all these devices.

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 the configuration created by 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 **A**mano **T**ime **V**alidation **S**ystem (ATVS) time synchronization software works in conjunction with one or of the TS-3000**i**, PIX-3000xNT, PIX-3000xN TimeSync clocks. The software and time clock combination may communicate by way of TCP/IP or Serial RS485 connection.

The TS-3000**i** and PIX-3000-series TimeSync clocks communicate by:

- TS-3000**i** clocks with Digi via Ethernet TCP/IP network connection (with unique Auto-Discovery)
- PIX-3000xNT clocks with NIC card via Ethernet TCP/IP network connection
- PIX-3000xN clocks with Serial RS485 direct 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 the National Institute of Standards and Technology (NIST) Network Time Protocol (NTP) 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 Amano TimeSync devices.

What is OATS Compliance?

The Amano TS-3000**i**, PIX-3000xN, and PIX-3000xNT TimeSync clocks, when used in conjunction with ATVS software, have been specially designed by Amano to be in compliance with the Financial Industry Regulatory Authority (FINRA) Order Audit Trail System (OATS) rule 7430 (formerly NASD OATS Rule 6953 & NYSE Rule 132A), Synchronization of Member Business Clocks as described in:

> Rule 7430 requires any FINRA 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.

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 communication 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 three distinct validation units:
  - TS-3000**i** clocks via Ethernet TCP/IP network connection.
  - PIX-3000xNT clocks via Ethernet TCP/IP network connection.
  - PIX-3000xN clocks with Serial RS485 direct connection.
- Synchronization logging data maintained per Order Audit Trail System (OATS) Rule 7430 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 7430 as per FINRA/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 TS-3000**i** and PIX-3000 series are the highest quality OATS-compliant time stamps 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 time clock LCD display should synchronization not occur.
- Provides a solution for industry sectors that require strict adherence to good time keeping practices with detailed records.

ATVS Typical User/Market

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

- Banks/Insurance
- Investment Brokers
- Broker/Dealer trader Centers
- Casinos
- Manufacturing
- Pharmaceutical/Healthcare (FDA 21 CFR Part 11)
- Hospital/Emergency Call Centers

PIX-3000xN/PIX-3000xNT/TS-3000i Hardware Features

- Maintains time less than four tenths of a second over a 24-hour period once synchronized.
- Time imprint format includes seconds as per FINRA 7430 requirements.
- Prints through up to 6 multiple-part carbonless copies.
- Capable of printing alphanumeric characters in two separate lines.
- Optional Full Power Reserve (FPR) permits clock operation and/or stamping in the event of power outage.
- Quick and easy ribbon cartridge replacement.
- Direct-connect or Ethernet connection to internal or external time servers.
- Optional Power over Ethernet (PoE) accessory for TS-3000**i** eliminates the need for AC power.

ATVS Requirements

ATVS time synchronization software (Enterprise version) for Windows may be used in conjunction with Amano TS-3000**i**, PIX-3000xNT, and PIX-3000xN 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.

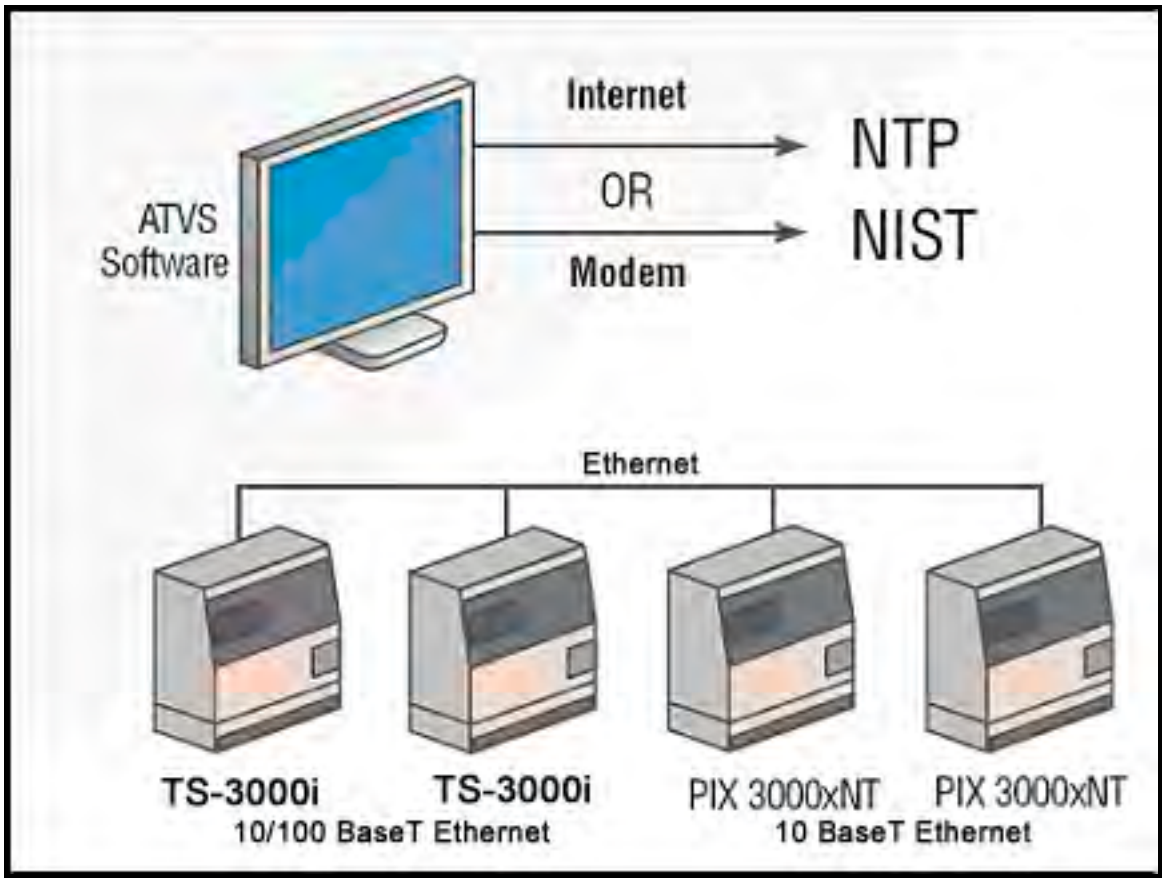


Figure 1-1: Enterprise Edition ATVS Diagram

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.

> ***Note*** – If a previous version of ATVS has been installed on your PC, the InstallShield Wizard will detect it. Confirm to Uninstall the previous version by clicking OK. It is recommended to make a copy of your existing database file which will be in the Program Files/ATVS/db folder and with the filename "*ATVS.fdb*". When the Uninstall is complete, click "*Finish*" to end. Re-insert the ATVS CD to launch the ATVS InstallShield and follow the onscreen prompts. After the ATVS installation is complete, navigate to **Program Files/ATVS/db** folder and replace the "*ATVS.fdb*" with the copy you made of your database.

4. The InstallShield® Wizard screen for ATVS Enterprise **Choose Setup Language** will appear as shown:

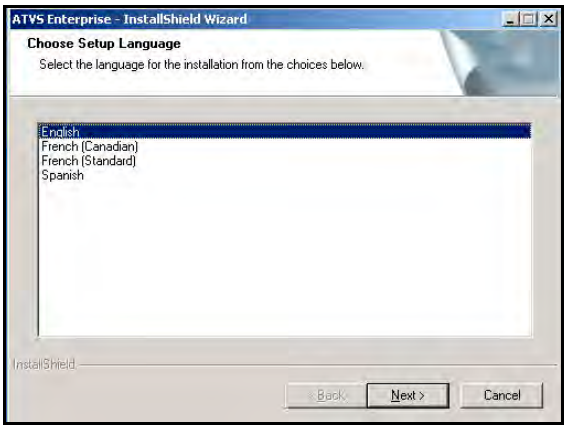


Figure 1-2: Choose Setup Language

5. Click **Next** to continue the installation, and the Welcome to ATVS InstallShield Wizard will appear (see *Figure 1-3*).

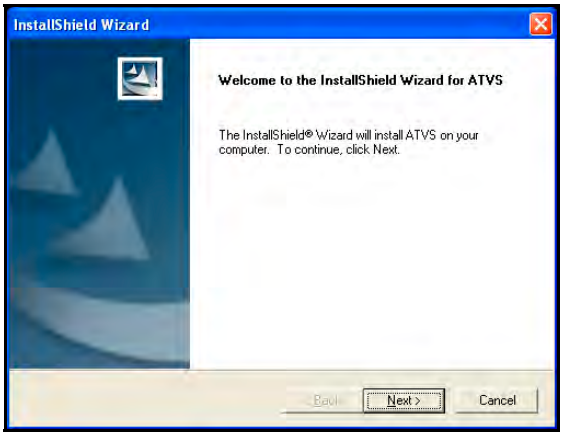


Figure 1-3: Welcome to ATVS InstallShield Wizard

6. Click **Next** to continue the installation, and the Software License Agreement will appear to advise users of their legal responsibilities (see *Figure 1-4*). To continue the installation you must click **Yes** to accept this agreement.

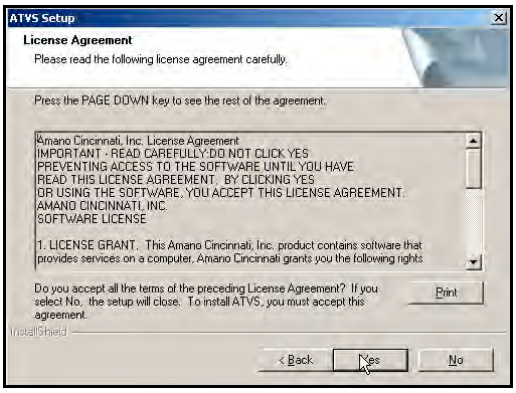


Figure 1-4: InstallShield Wizard License Agreement

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

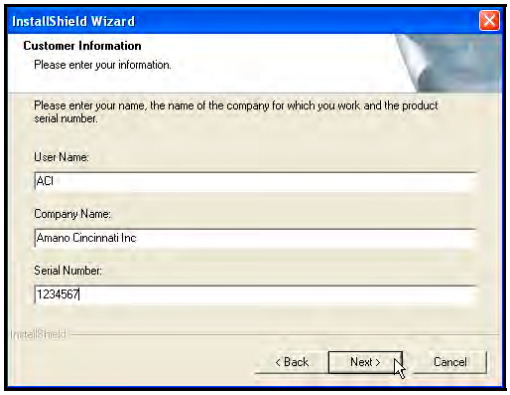


Figure 1-5: InstallShield Wizard Customer Information

7. 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 1-6*.

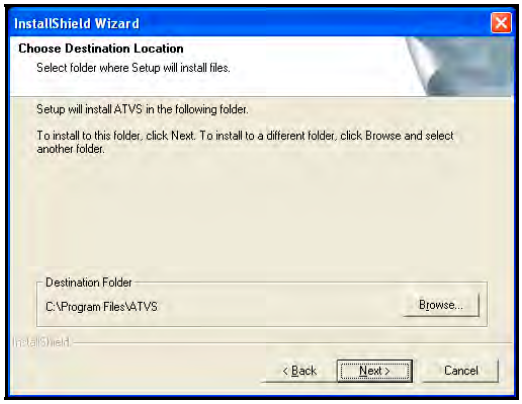


Figure 1-6: InstallShield Wizard Choose Destination Location

8. 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 1-7*).

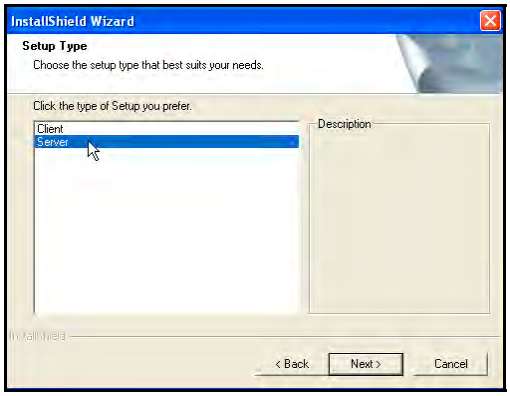


Figure 1-7: InstallShield Wizard Setup Type

9. 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 1-8*).

Figure 1-8: InstallShield Wizard Select Program Folder

10. When asked to enter a server's (PC) IP Address, use the suggested **localhost**, and click **Next** to continue (see *Figure 1-9*).

Figure 1-9: InstallShield Wizard Enter Text

11. 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:

12. Next a Setup Status screen will appear showing a progress status bar for the ATVS installation as shown in *Figure 1-10*.

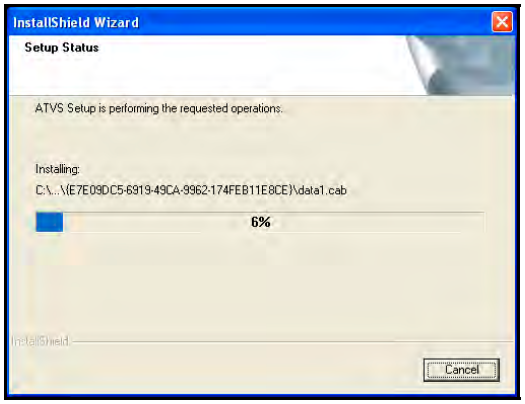


Figure 1-10: InstallShield Wizard Setup Status

13. During installation, if desired, click **Yes** to create a desktop icon for ATVS (see Figure 1-11).

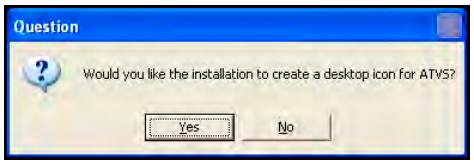


Figure 1-11: Desktop Icon Dialog

14. The InstallShield Wizard Complete will appear (see *Figure 1-12*) when done.

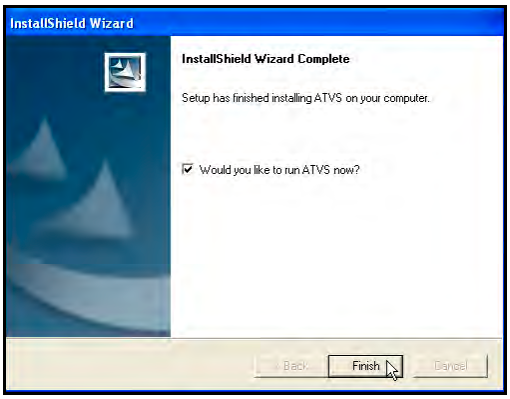


Figure 1-12: InstallShield Wizard Complete

15. 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 1-13*).

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

Figure 1-13: ATVS Scheduler Service Starting

ATVS Software Activation

1. *Figure 1-14* 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** Activate button. If activation is successful the "*Activation was successful. Would you like to register?*" screen will appear (skip to step 4).

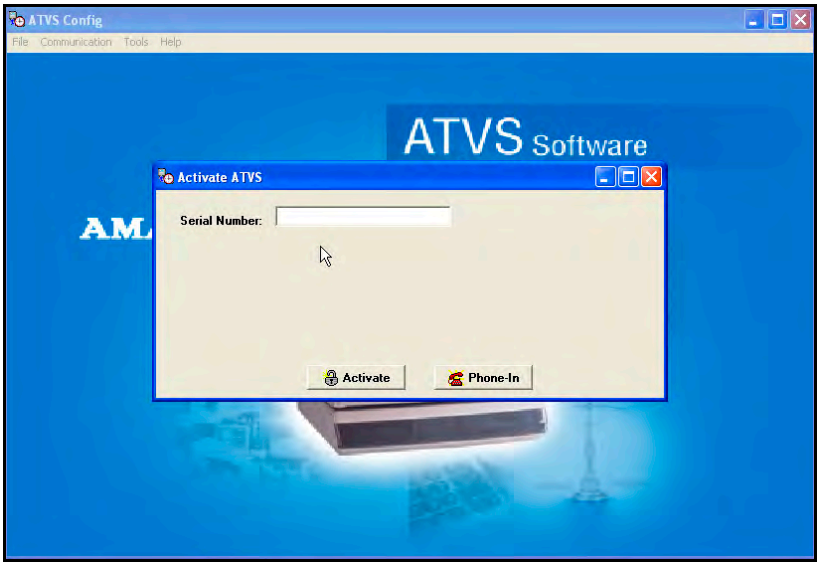


Figure 1-14: Activate ATVS

If you choose not to Activate the software at this point by canceling the activation the following error message will appear (see *Figure 1-15*). 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 here proceed to step 1 of the ATVS Initial Configuration).

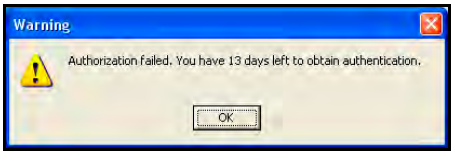


Figure 1-15: ATVS Authorization Failed

2. If an Activation error dialog message appears (see *Figure 1-16*), the serial number is incorrect, no Internet connection with the Amano authorization server occurred, or the same serial number was previously installed.

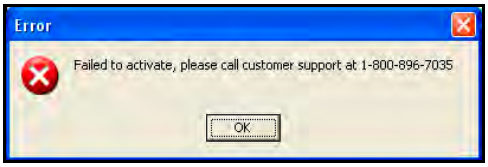


Figure 1-16: Failed to Activate Customer Support Required

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 1-17*).

Figure 1-17: 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 1-17*). 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 1-18*). Click **Yes** to register.

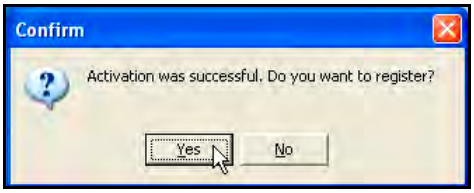


Figure 1-18: Confirm ATVS Activation

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 later 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 1-19*). 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 1-20*).

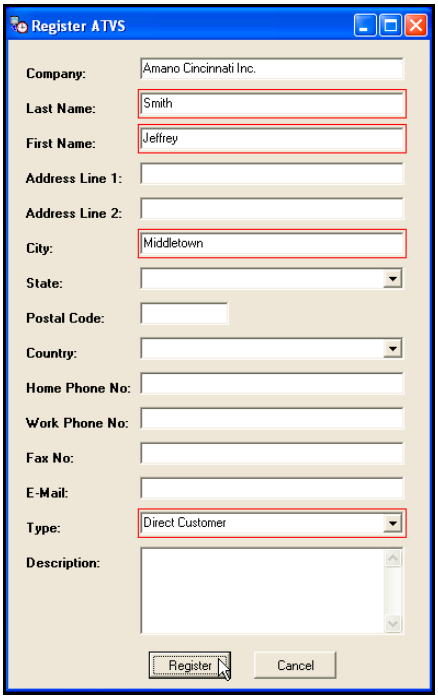


Figure 1-19: ATVS Registration

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 1-20*).

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 the initial Wizard 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 1-20: Initial Wizard

2. For **Step 1**, from the Initial Wizard, click on the Create Users  icon and the Users screen will appear (see *Figure 1-21*).

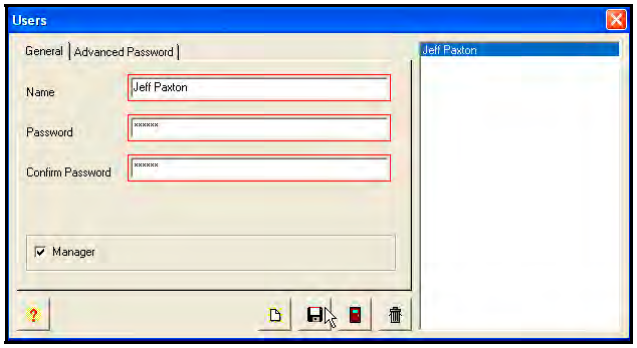


Figure 1-21: Users General Tab

3. Enter a Name, Password [6 character minimum], and Confirm Password. 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 1-22*). 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.

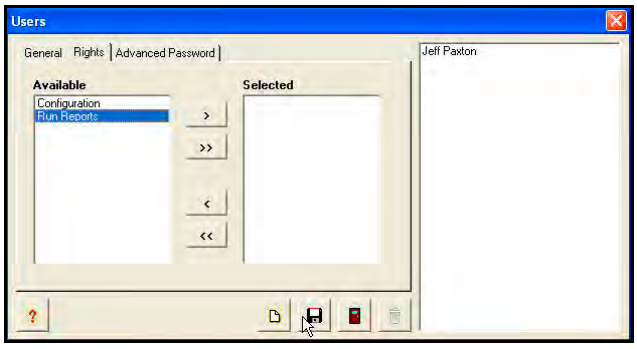


Figure 1-22: Users Rights Tab

4. Click on the **Advanced Password** tab to select a password expiration of: Never Expire, Expires after, or Expires On (see Figure 1-23). The default is Never Expire, so this screen can be skipped if the default selection is acceptable.

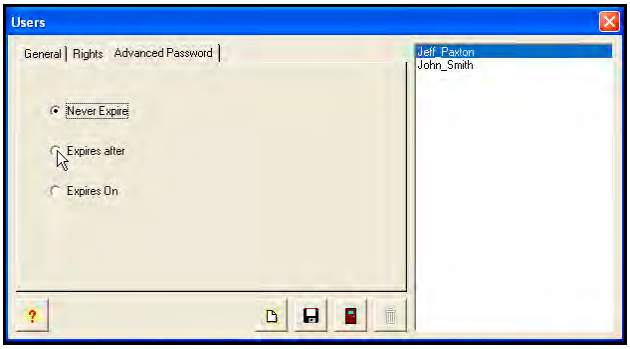


Figure 1-23: Users Advanced Password Tab

5. When finished entering <u>each</u> new user in this step, click on the **Save** button to save the user settings. When finished creating all new users, click on the **Close** button to return to the Initial Wizard screen.
6. **Step 1: Users Wizard** is now complete, and the Initial Wizard screen will indicate this with a **green checkmark**.
7. For **Step 2: Groups**, from the Initial Wizard, click on the Create Groups icon and the Group screen will appear (see *Figure 1-24*).

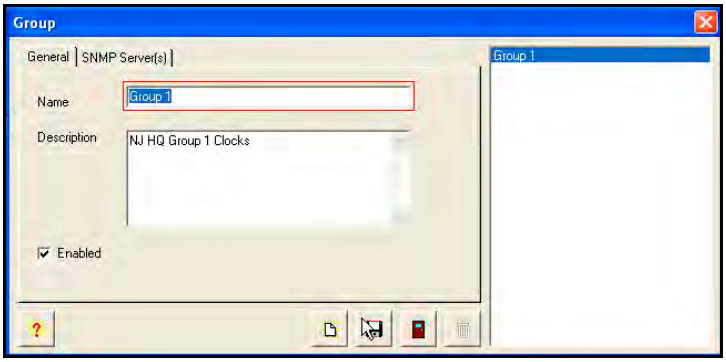


Figure 1-24: Create Groups General Tab

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 <u>each</u> 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 1-25*).

Figure 1-25: 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 1-26*).

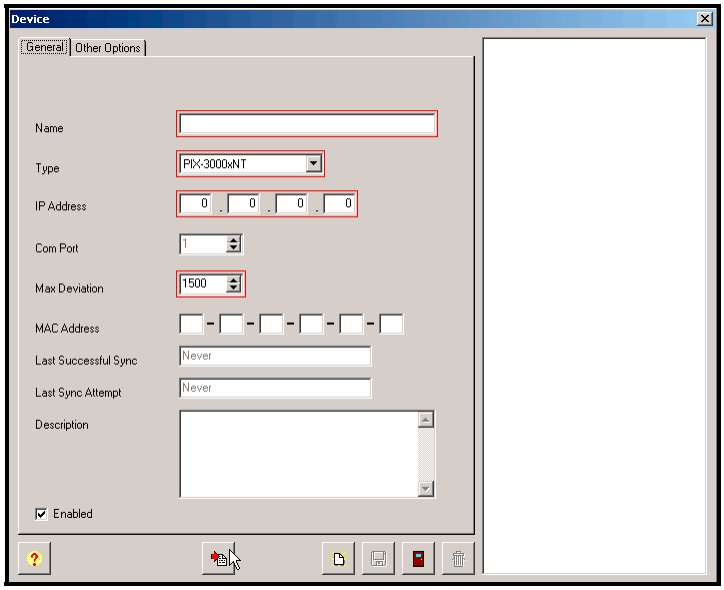


Figure 1-26: Create Devices General Tab

12. Enter the **Name** for the clock (device). Select the Amano clock **Type** (device) from the dropdown menu of TS-3000**i**, PIX-3000xNT, or PIX-3000xN. Enter the **IP Address** and **MAC Address**, if known, for the Ethernet TS-3000**i** or PIX-3000xNT only. The serial PIX-3000xN will require the COM Port instead of the IP and MAC Address to be entered. Enter the acceptable **Max Deviation** in milliseconds (default = 1500 milliseconds or 1.5 seconds) between the ATVS and the Time Server. Click on **Enabled** to make this Time Server active.
13. If the IP address/MAC Address is unknown (for TS-3000**i** or PIX-3000xNT), click on the **Import Device(s)**  button on the bottom of the Device screen to open to the Import Devices screen. Import Devices function can be used to locate TS-3000**i** clocks with Zeroconf auto discovery feature and find IP/MAC address for PIX-3000xNT using DeviceInstaller.

To Import TS-3000i clocks:

14. Select TS-3000i from the dropdown menu for the type of device to import (see *Figure 1-27).*

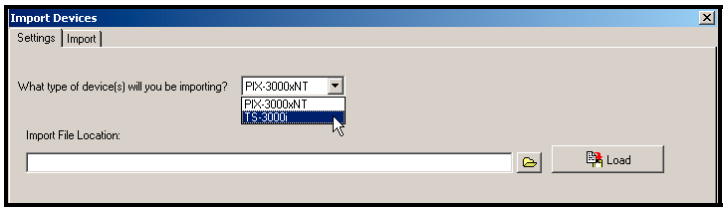


Figure 1-27: Select Device Type

15. This step is optional and should usually be skipped for TS-3000i import. Only perform this step if having problems with auto discovery. Please note - the screen has changed (see *Figure 1-28*) to allow Domain Name change for the search (default = local). Also, you can select the timeout time allowed for the search from the dropdown (default = 1 minute).

Note – If default values are ok, just select TS-3000i and click on the Import tab.

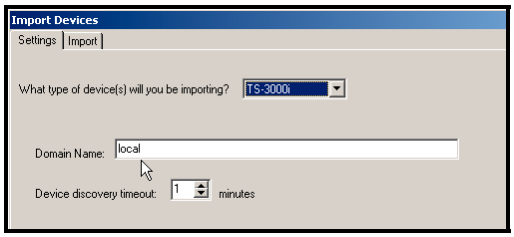


Figure 1-28: Normal Import TS-3000i Settings

16. Click on the Import tab to display a blank Import Devices screen. Click on the **Start TS-3000i Discovery** button. To stop auto discovery, simply click on the **Stop TS-3000i Discovery** button. Searching for the clocks will automatically timeout.

17. All of the discovered TS-3000i clocks will be displayed in a list with their Device Type, IP Address, MAC Address, Device Name, and Group Name. Imported TS-3000i clocks will automatically be given the group name of "*TS-3000i Default Group*" (see *Figure 1-29*).

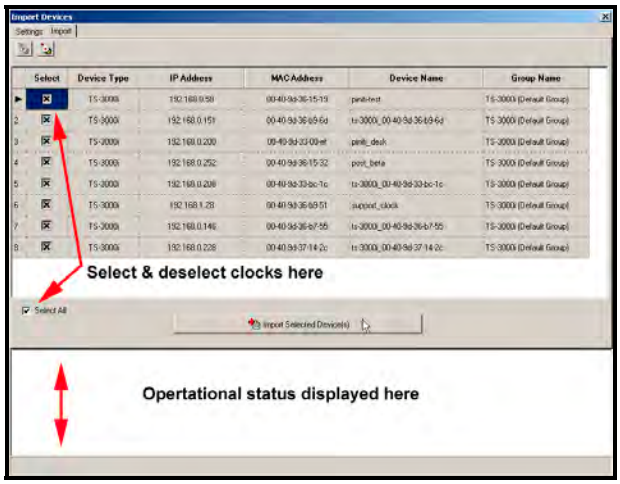


Figure 1-29: Discovered TS-3000i Clocks

18. Select the desired TS-3000i clocks and click on the Import Selected Device(s) button to import these clocks into the ATVS software. The dialog "Are you sure" will appear (see *Figure 1-30*). Click the **OK** button to perform the operation. The operational status will appear in the display window to show that the selected clock(s) have been imported (see *Figure 1-29*).

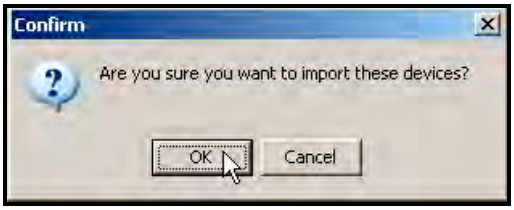


Figure 1-30: Confirm Import Dialog

19. Close the Import Devices screen and select the desired TS-3000i imported clock from the list on the right-hand side (see *Figure 1-31*). The name, IP and MAC addresses will automatically be brought into the device file. Note – the Description field will be auto-populated with the text: "*This device was created in the import module.*" Also, the Launch Web Browser button will appear alongside the clock name to automatically connect to the clock Web page when clicked on.

    Repeat the process detailed in this step for each new TS-3000i clock imported into ATVS. If all of the imported information for the TS-3000i clocks is acceptable and does not have to be changed in ATVS, for example the clock's name, nothing else has to be done. Also, if the imported TS-3000i clock name is changed in ATVS, it will remain unchanged in the TS-3000i clock unless changed by logging into the clock and saving a new name. See the TS-3000i Installation & Operation Guide for complete details on TS-3000i operation.

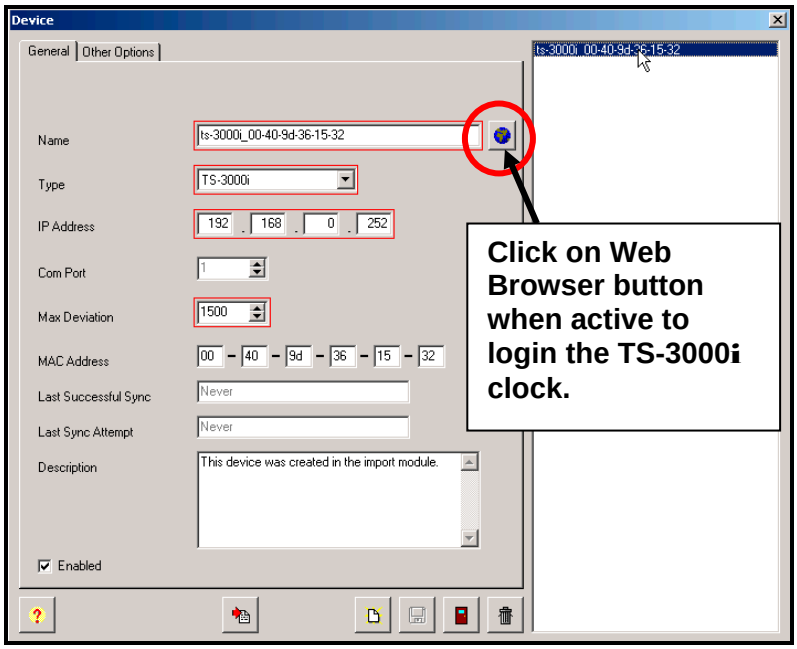


Figure 1-31: Device Imported TS-3000i Selection

To Import PIX-3000xNT clocks:

20. Select PIX-3000xNT from the dropdown menu on the **Import Devices** screen for the type of device to import (see *Figure 1-32).*

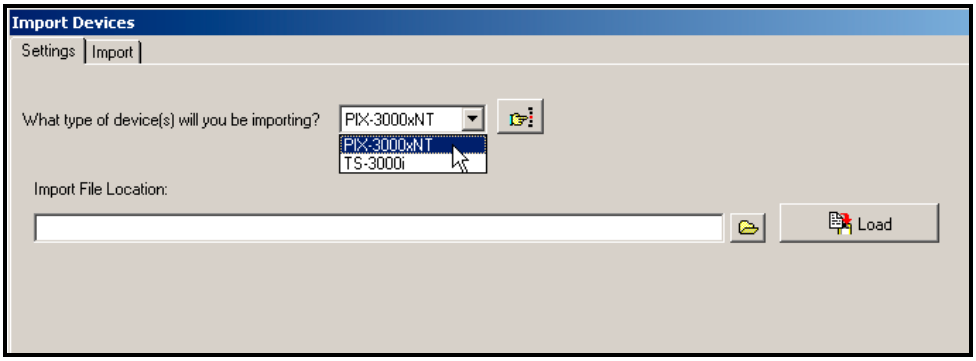


Figure 1-32: Select PIX-3000xNT Device Type

21. Click on the **PIX-3000xNT Device Lookup**  button to launch the DeviceInstaller (see *Figure 1-34*).

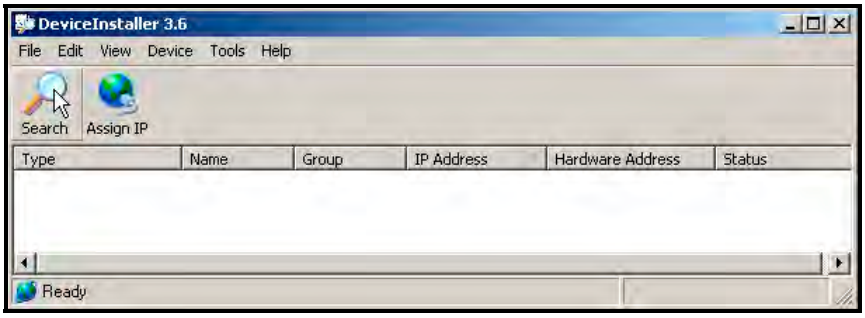


Figure 1-33: DeviceInstaller

22. With the DeviceInstaller open, click on the Magnifying glass  to search for the PIX-3000xNT IP/MAC addresses. *Figure 1-34* shows a search example.

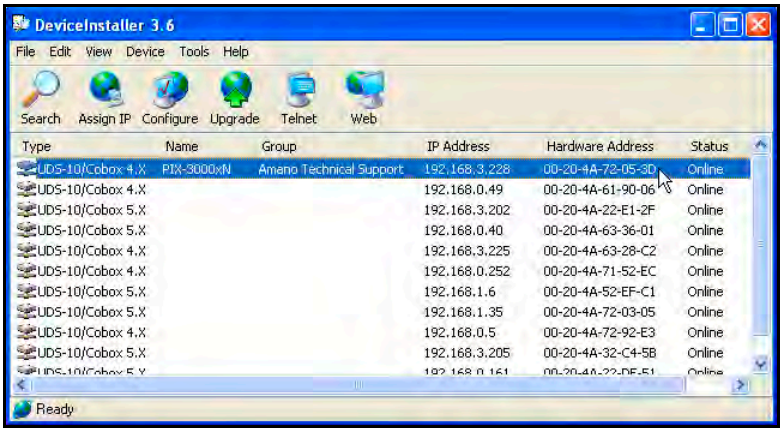


Figure 1-34: DeviceInstaller Search Results Example

23. All PIX-3000xNT devices that are detected here may be imported. 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* and see Chapter on DeviceInstaller Use.

24. Click on **File** on the DeviceInstaller menu and select the **Save As** sub-menu (see *Figure 1-35*).

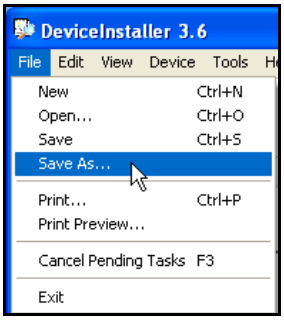


Figure 1-35: DeviceInstaller File Menu

25. From the **Save As** dialog (see *Figure 1-36*), select a destination folder [Save in:] and File name. Click the **Save** button and a text file with the IP/MAC search results will be saved.

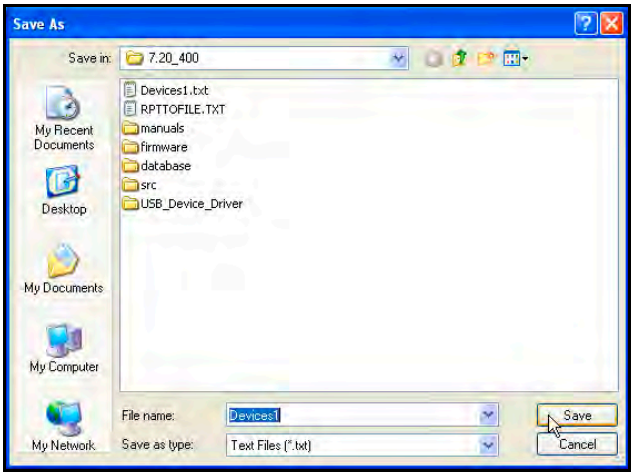


Figure 1-36: Save As Dialog

26. Close the DeviceInstaller, and from the **Import Devices** screen click alongside the Import File Location field 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/MAC search results will appear in the "*Import File Location*" field (see *Figure 1-37*). Click on the **Load File** Load button to load the Device file into the Import Devices function and the device status information will appear on the bottom of the Import Devices screen in the operation status field.

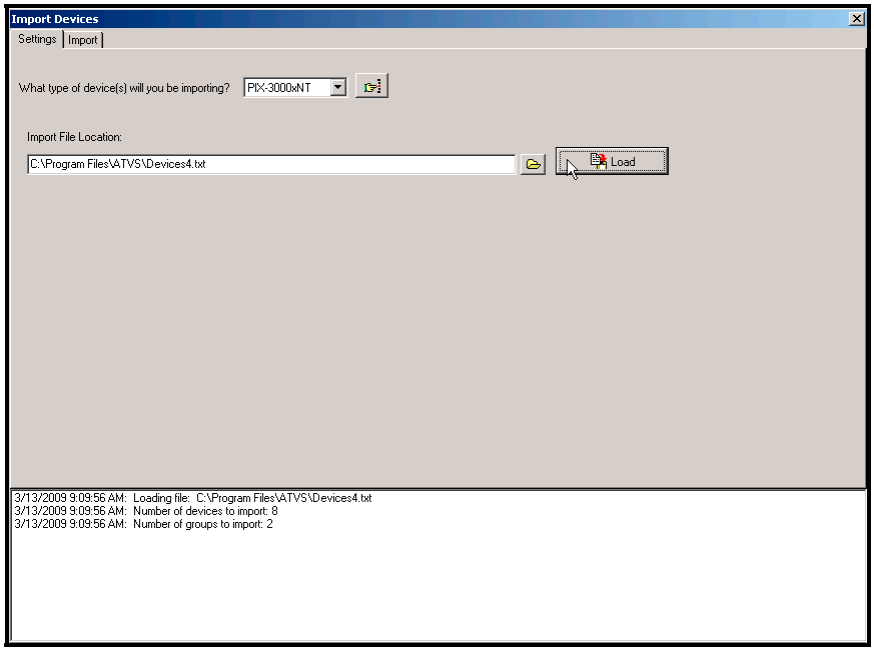


Figure 1-37: Load PIX-3000xNT Device

27. Click on the Import tab to display a list of PIX-3000xNT devices to import that you just loaded from the previous step. Just select the desired devices to import if you do not want to import all the devices on the list (see *Figure 1-38*).

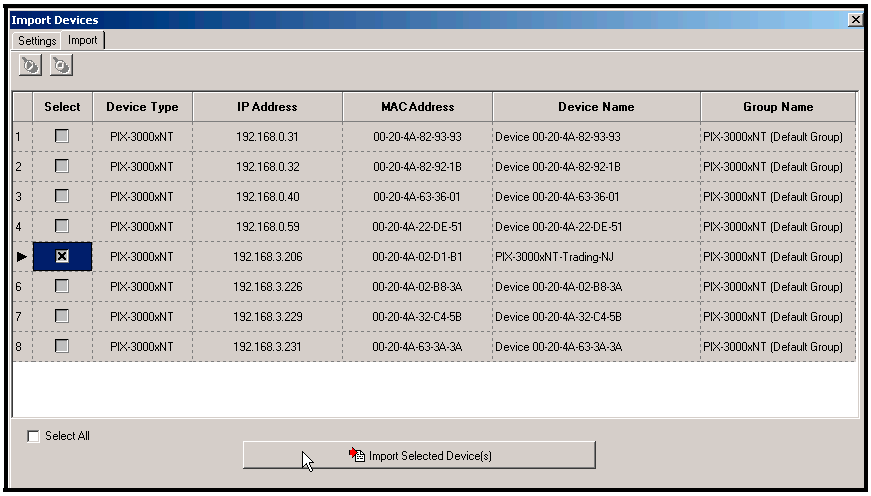


Figure 1-38: Device List from Loaded Devices

28. Click on the Import Selected Device(s)  button to import all the selected PIX-3000xNT devices into ATVS. The operational status of the import will be displayed below on the Import Devices screen.

29. Close the Import Devices screen and you will be back on the Device screen. Click on the imported device from the list on the right and that device information will appear in the proper fields on the device screen (see *Figure 1-39*).

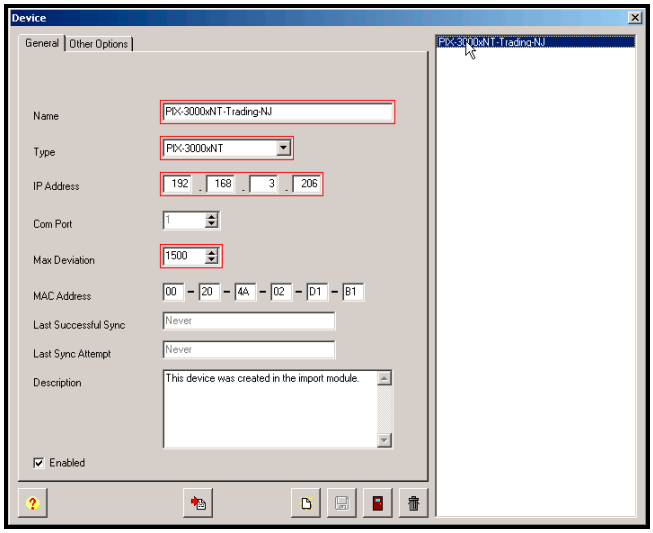


Figure 1-39: Imported Device

30. After the TS-3000i, PIX-3000xNT, and/or PIX-3000xN clock (device) has been created/imported, click on the **Other Options** tab, and the screen will appear as shown in . 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 (GMT-05:00) Eastern Time (US & Canada).

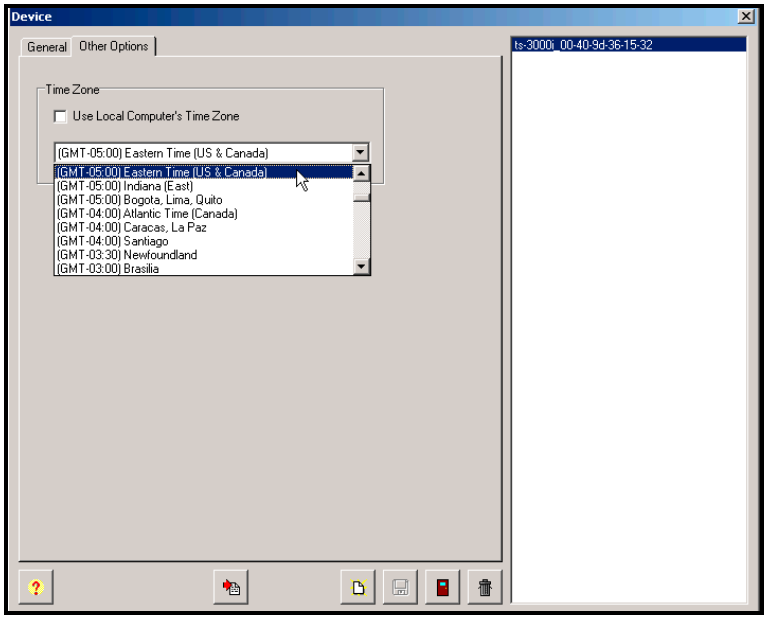


Figure 1-40: Device Other Options Tab

31. 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.

Note – See Chapter 4 for complete procedure to add/import PIX-3000xN and PIX-3000xNT devices.

32. For **Step 4** from the Initial Wizard, click on the Create Time Servers icon, and the Time Server screen will appear (see *Figure 1-41*).

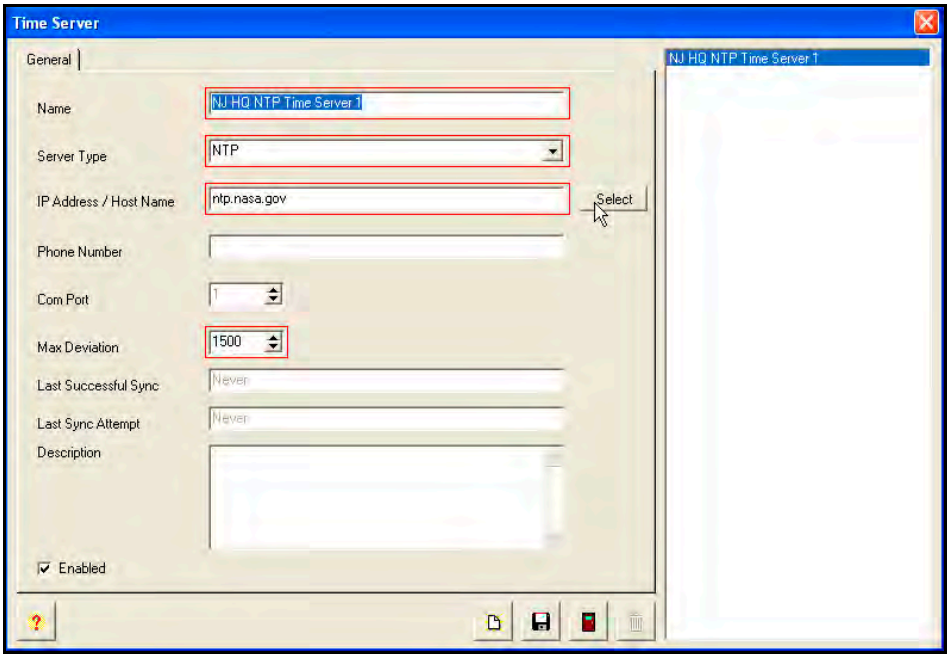


Figure 1-41: Create Time Server

33. 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 1-42*).

    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 start, 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).

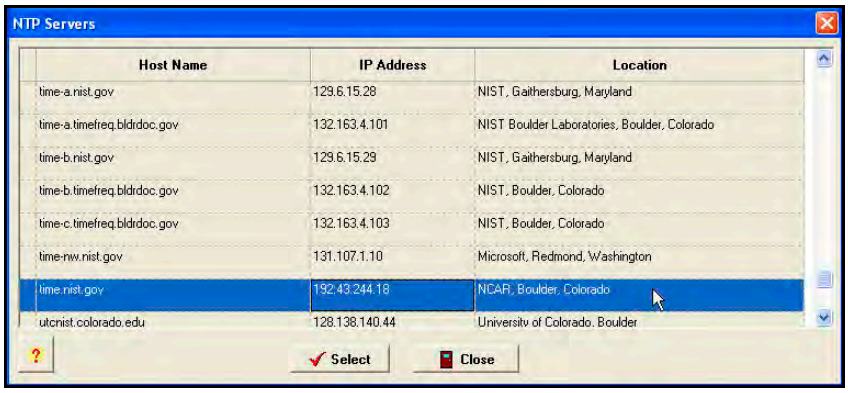


Figure 1-42: NTP Servers

34. 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.

35. The Initial Wizard is now complete (see *Figure 1-43*). 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 1-43: Initial Wizard Complete

36. A user can now login, and the ATVS program will start with the Login (see *Figure 1-44*).

Figure 1-44: ATVS Login

37. Enter the correct Username and Password (previously defined in Step 1: Users), and the ATVS Config screen will appear (see *Figure 1-45*).

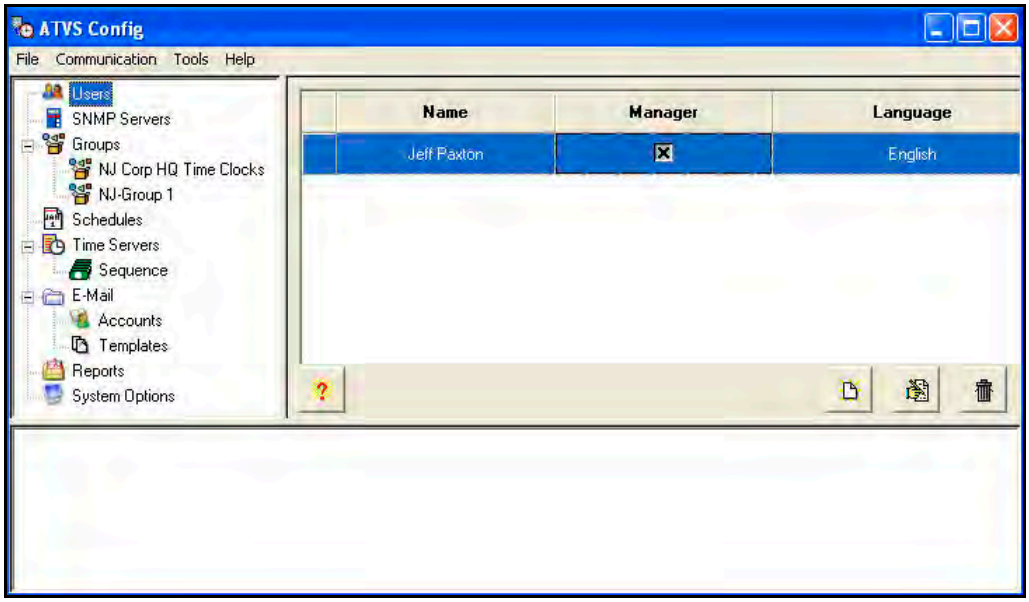


Figure 1-45: ATVS Config Main Screen

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

Note – The ATVS Scheduler and ATVS Config programs will automatically start after the installation to complete the configuration. See Chapter 2: ATVS Config Operation, 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.

This page intentionally left blank.

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 TS-3000**i**'s and PIX-3000xNT's are connected to the Ethernet network which has the ATVS system and are recognized by ATVS to be configured properly. All PIX-3000xN's would be connected by serial connection to the ATVS system.
- Define groups that reference the locations of the installed TS-3000**i**, PIX-3000xNT, and/or PIX-3000xN Time Recorders (using the Wizard).
- Add and configure the TS-3000**i**, PIX-3000xNT, and/or PIX-3000xN Time Recorders that will be used in each group (using the Wizard).
- Assign communication parameters (IP addresses and COM ports) to each TS-3000**i**, PIX-3000xNT and/or PIX-3000xN (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 2-1*).

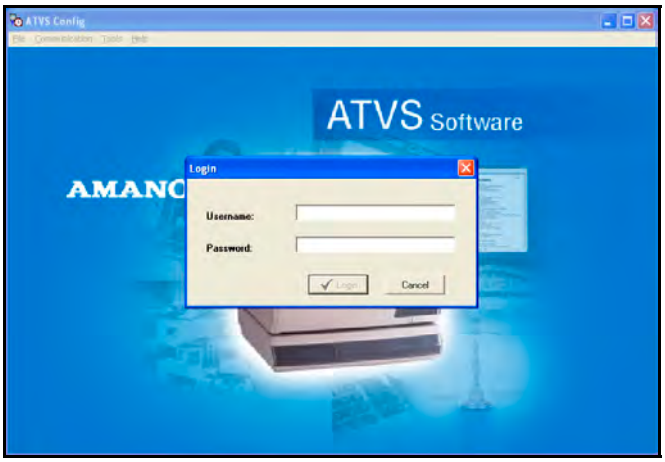


Figure 2-1: ATVS Startup and Login

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 2-2*).

ATVS Config Layout

Figure 2-2 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.

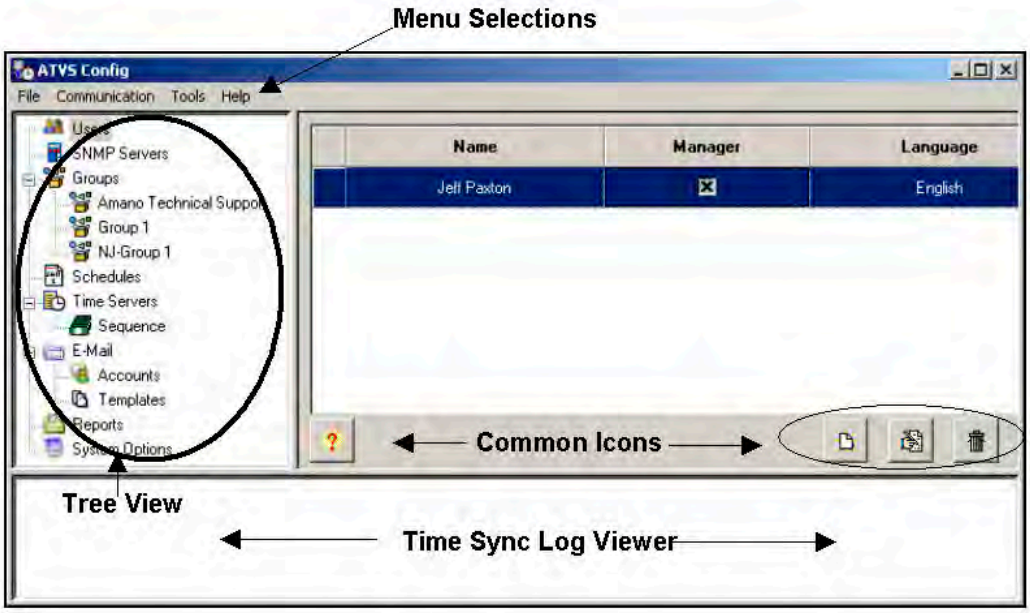


Figure 2-2: ATVS Main Screen Layout

ATVS Config Main Dropdown Menus

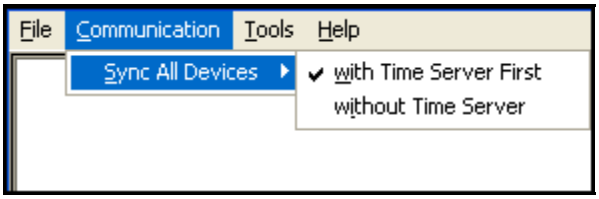
File Menu

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 typically find and configure PIX-3000 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). Typically used to auto discover TS-3000**i**'s.

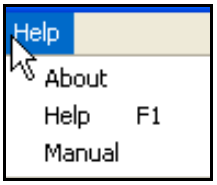
The "*Rebuild Data*" sub-menu selection provides the ability to rebuild the data table for the Device Report.

Help Menu

The Help menu "*About*" selection (see *Figure 2-3*) 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).



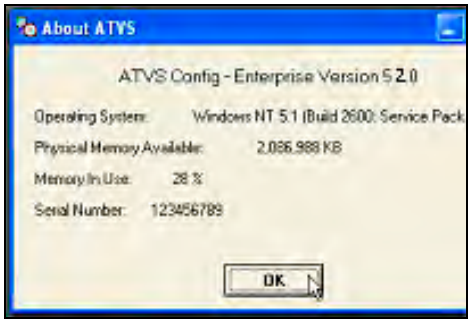


Figure 2-3: About ATVS

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 2-4*). 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.

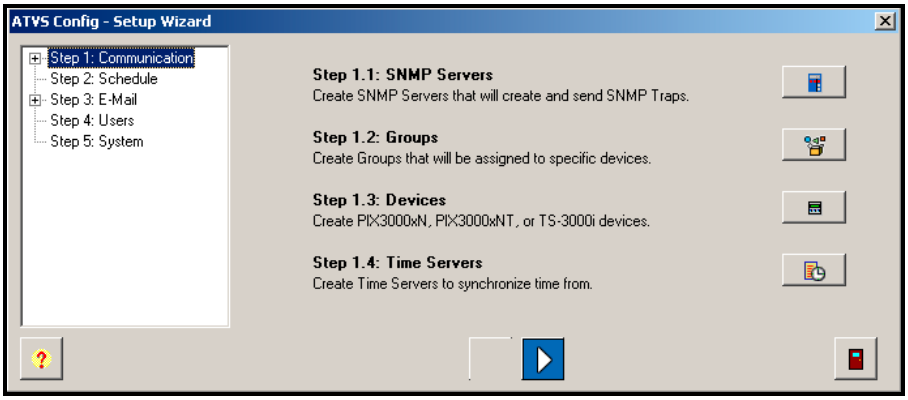


Figure 2-4: Setup Wizard Step 1

2. For **Step 1.1**, click on the Create SNMP Servers  icon, and the SNMP Server screen will appear (see *Figure 2-5*). Enter information into the required fields: Name, IP Address, Port, and Community Name.

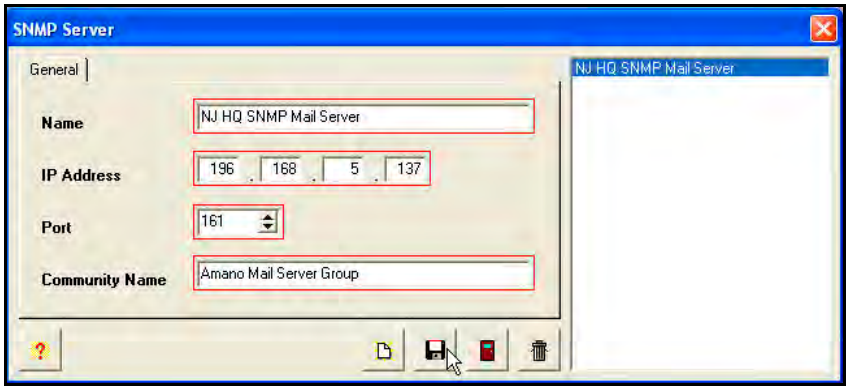


Figure 2-5: Create SNMP Server

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. From the Setup Wizard screen, for **Step 1.2**, click on the Create Groups  icon, and the Group screen will appear (see *Figure 2-6*).

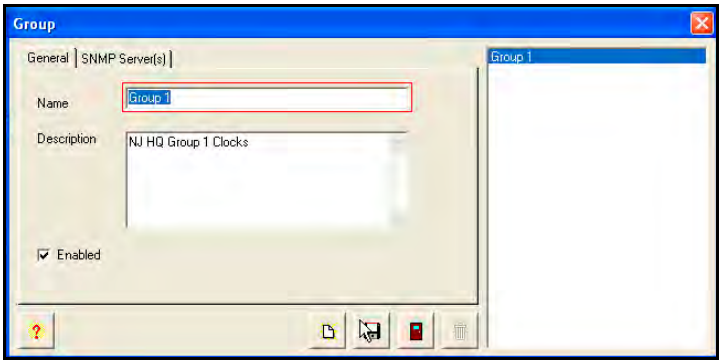


Figure 2-6: Create Group General Tab

Note – All fields outlined in **Red** should be completed.

Note – When the TS-3000i clock is imported, the **Group Description** field will say, "*This group was created in the import module*". When a PIX-3000xNT is imported, the **Group Description** field will say, "*This group created from Device Import module*"

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 2-7*. 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.

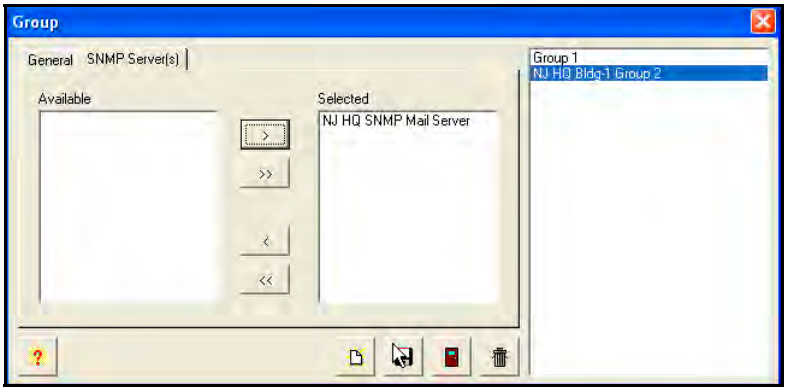


Figure 2-7: Group SNMP Servers Tab

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. From the Setup Wizard, for **Step 1.3**, click on the Create Devices icon, and the Device screen will appear (see *Figure 2-8*).

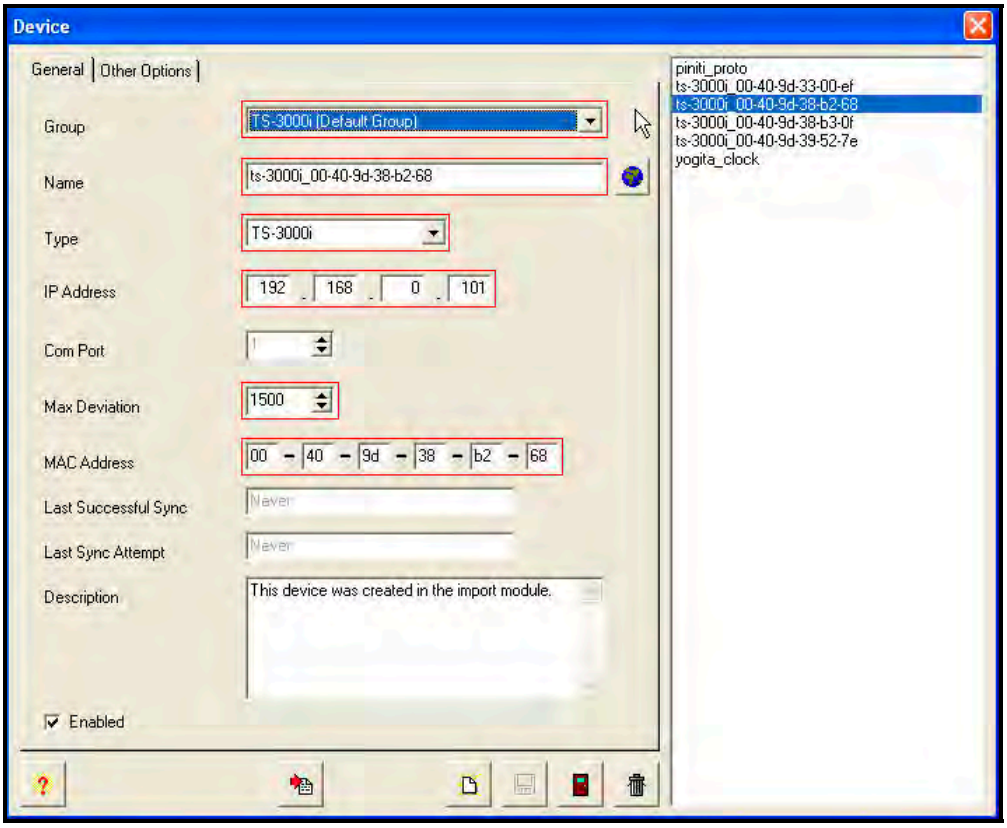


Figure 2-8: Device General Tab

8. Select the desired Group from the dropdown menu (imported clocks will automatically be placed in a group called "Default Group"). Enter the Name for the clock (device). Select the Amano clock Type (device) from the dropdown menu of TS-3000**i**, PIX-3000xN, or PIX-3000xNT. Enter the IP and MAC Address if known for the Ethernet TS-3000**i** and PIX-3000xNT clocks. If unknown for TS-3000**i** or PIX-3000xNT click on the **Import Device(s)** button and the Import Devices screen will launch (see *Figure 1-27*). Follow the procedure outlined for the Initial Wizard for importing TS-3000**i** and PIX-3000xNT clocks. Also, consult the DeviceInstaller chapter.

Note – For an alternate procedure to find the IP and MAC Address for a PIX-3000xNT close the Device screen and click on the **Tools** Menu and select the **Device Lookup** sub-menu selection. This will launch the "*DeviceInstaller*" (see *Figure 4-1*).

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

9. Enter the desired acceptable **Max Deviation** between ATVS and the Time Server. The default is 1500 milliseconds (1.5 seconds).

10. Then click on the **Other Options** tab, and the screen will appear as shown in Figure 2-9. 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 (GMT-05:00) Eastern Time (US & Canada).

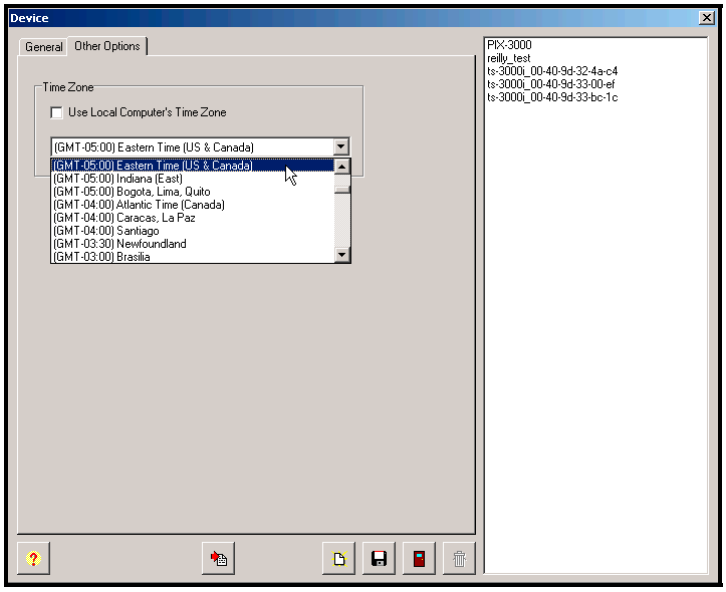


Figure 2-9: Device Other Options Tab

11. 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.

12. From the Setup Wizard, for **Step 1.4**, click on the Create Time Servers icon, and the Time Server screen will appear (see *Figure 2-10*).

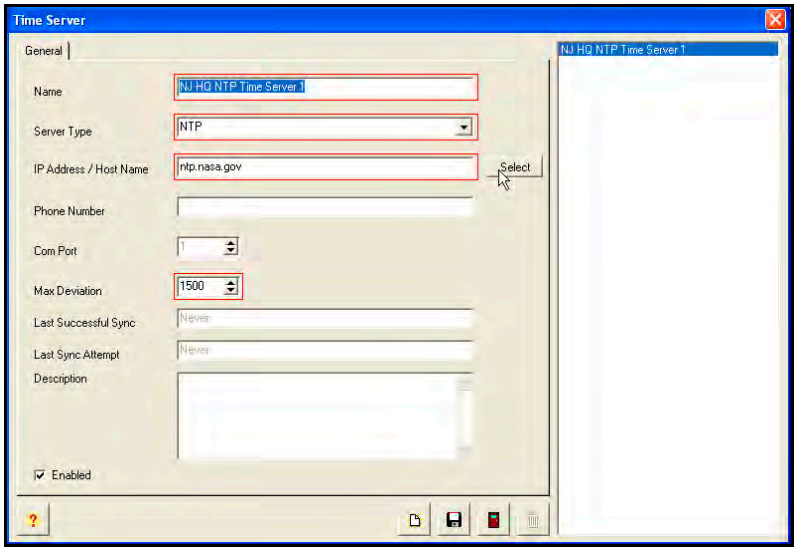


Figure 2-10: Create Time Server General Tab

13. 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. From the Setup Wizard click on the **Next Step** button, to advance to **Step 2.1 : Schedule** (see *Figure 2-11*).

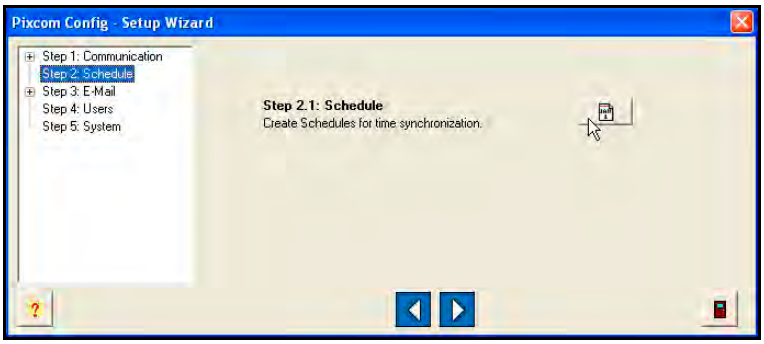


Figure 2-11: Setup Wizard Step 2.1 Schedule

2. Click on the Create Schedules icon, and the Schedule screen will appear (see *Figure 2-12*).

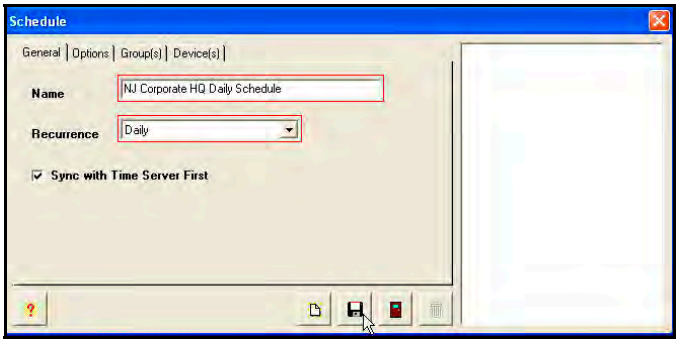


Figure 2-12: Schedule General Tab

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

Note – When using ATVS with the TS-3000i, ATVS will act as the Master with the TS-3000i acting as the slave. Therefore, most of the transaction information from time sync schedules will be stored in the ATVS database and not in the flash memory of the TS-3000i clock. The transaction database in the TS-3000i will just record a single line which says; “An ATVS time sync occurred at DD/MM/YYYY (date). Also, all controlling configuration parameters will reside in ATVS and not the TS-3000i.

Upon startup, the TS-3000i will automatically perform a “Startup Sync”. After, the TS-3000i is imported into ATVS and time sync schedules are enabled, ATVS will become the master for time sync information. When the TS-3000i is the slave, all internal time sync schedules will be ignored.

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 2-13*.

   If **Daily** is selected, then define Every, Start Date [use calendar], Start Time [click in the field to change time], and check Run Every X min(s) 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].

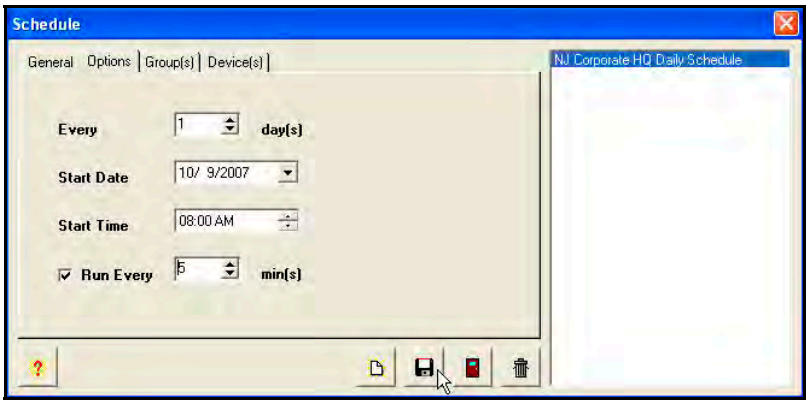


Figure 2-13: Schedule Options Tab

5. Enter the required Options information. Click on the **Group(s)** tab, and the screen will appear as shown in *Figure 2-14*. 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.

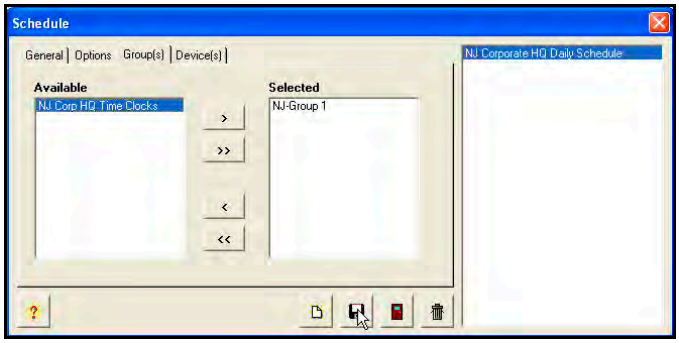


Figure 2-14: Schedule Group(s) Tab

6. Click on the **Device(s)** tab, and the screen will appear as shown in *Figure 2-15*. 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.

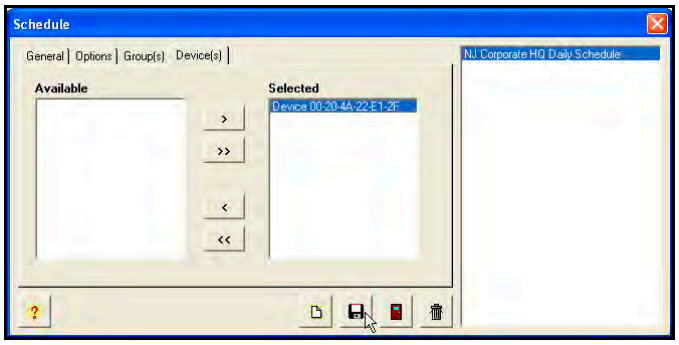


Figure 2-15: Schedule Device(s) Tab

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

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

Step 3: E-Mail

1. From the Setup Wizard 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 2-16*).

Figure 2-16: Setup Wizard Step 3: E-Mail

2. For **Step 3.1**, click on the Create E-Mail Accounts  icon, and the E-Mail Account screen will appear (see *Figure 2-17*).

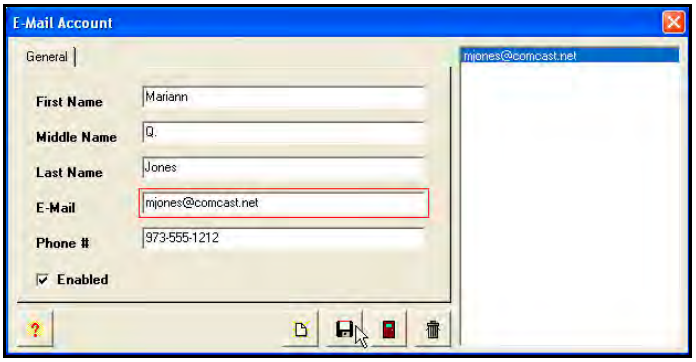


Figure 2-17: Create E-Mail Account

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 to 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 addresses and message must be set in the following E-mail templates.

3. From the Setup Wizard, for **Step 3.2**, click on the Create E-Mail Templates  icon, and the E-Mail Template screen will appear (see *Figure 2-18*).

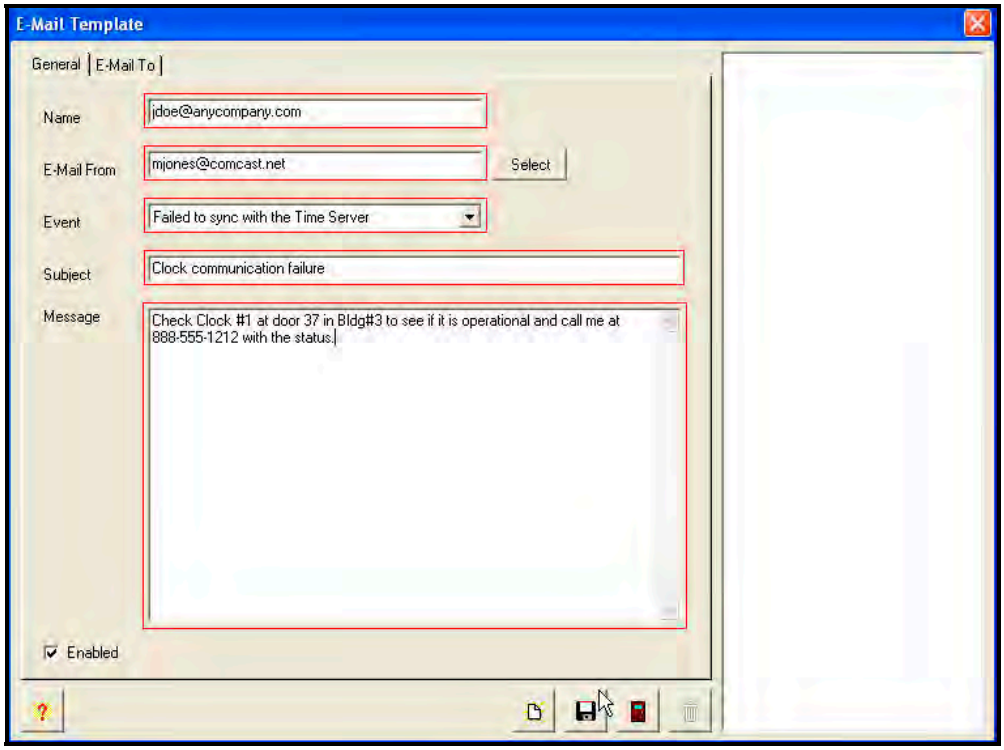


Figure 2-18: E-Mail Template General Tab

4. Enter the required general information; Name, E-Mail From [select address from previously defined addresses by pressing the **Select** button – see *Figure 2-19*], Event [select from dropdown list], enter Subject and Message.

Figure 2-19: E-Mail Account(s) For From

5. Then click on the **E-Mail To** tab, and the screen will appear as shown in *Figure 2-20*. 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.

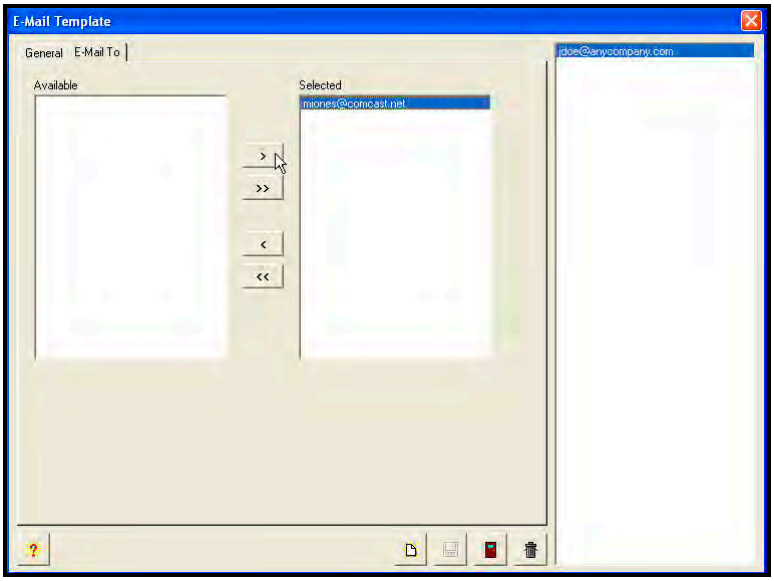


Figure 2-20: E-Mail Template E-Mail To Tab

6. *Figure 2-21* is an example of the ATVS system sending an e-mail notification to the designated **E-Mail To** recipient.

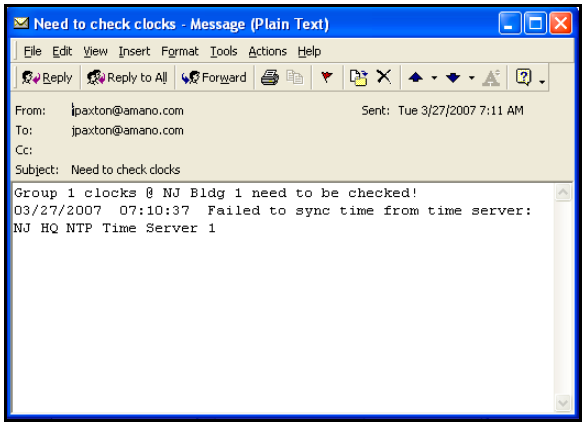


Figure 2-21: Example of E-Mail Notification

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

Step 4: Users

1. From the Setup Wizard, click on the **Next Step** button, to advance to **Step 4: Users**, and the Setup Wizard screen will appear for Step 4.1:Users (see *Figure 2-22*).

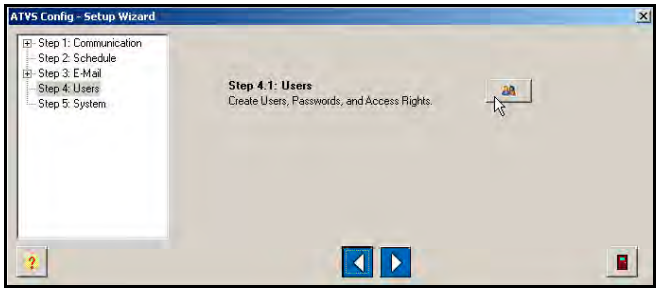


Figure 2-22: Setup Wizard Step 4: Users

2. For **Step 4.1**, click on the Create Users  icon, and the Users screen will appear (see *Figure 2-23*).

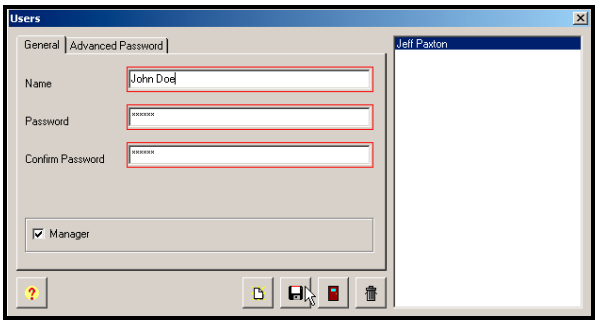


Figure 2-23: Users General Tab

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 2-24*. 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.

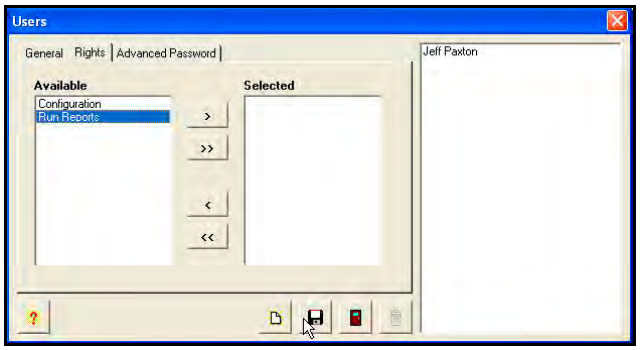


Figure 2-24: Users Rights Tab

4. Click on the **Advanced Password** tab, and the screen will appear as shown in *Figure 2-25*. 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.

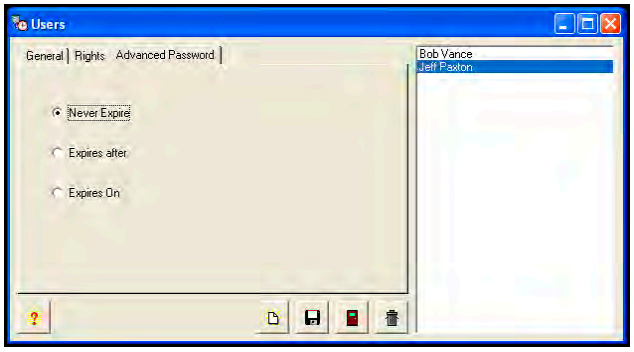


Figure 2-25: Users Advanced Password Tab

5. 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

1. 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 2-26*).

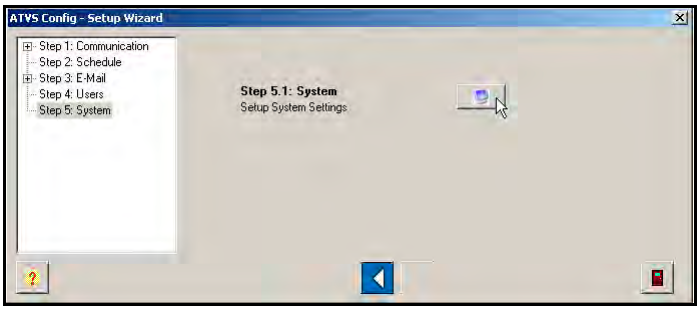


Figure 2-26: Setup Wizard Step 5: System

2. For **Step 5.1**, click on the Setup System Settings icon, and the System Settings will appear (see *Figure 2-27*).

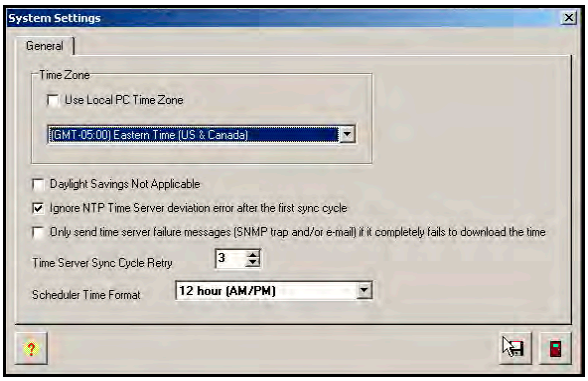


Figure 2-27: General System Settings

3. 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 TS-3000i, PIX-3000xNT, and PIX-3000xN clock connected to that PC (each TS-3000i, PIX-3000xNT and PIX-3000xN 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.

   Select **Time Server Sync Cycle Retry** from the dropdown. The default = 3. This is the amount of times the Time Server will try to sync with the clock(s).

   Note – Service port selection is not available using the Wizard from the **Tools** menu. It is only available during the Initial Wizard setup or by clicking on **System Options** from the tree view (see **General System Options**).

   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, or click on the **Close** button to quit without saving.

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

Using ATVS Config

How to Create Users

1. Click on the Users icon in the tree view (see *Figure 2-28*), and the previously defined Users will appear to the right of the tree view.

Figure 2-28: Select Users

2. Select the **Add** button on the bottom of the displayed Users, and the Users screen will appear (see *Figure 2-29*).

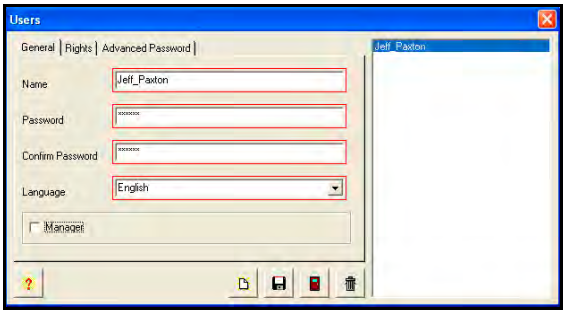


Figure 2-29: Users General Tab

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 2-30*. 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.

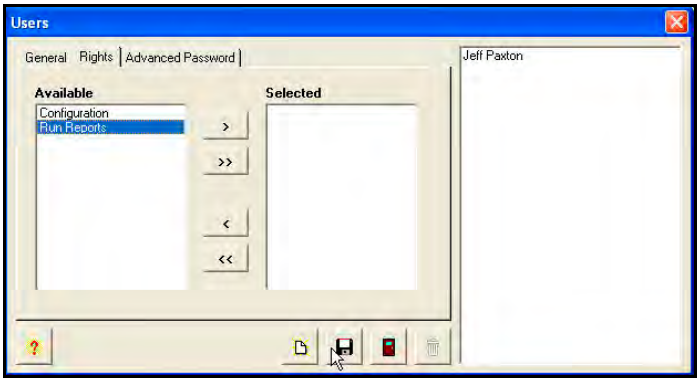


Figure 2-30: Users Rights Tab

4. Click on the **Advanced Password** tab, and the screen will appear as shown in *Figure 2-31*. 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.

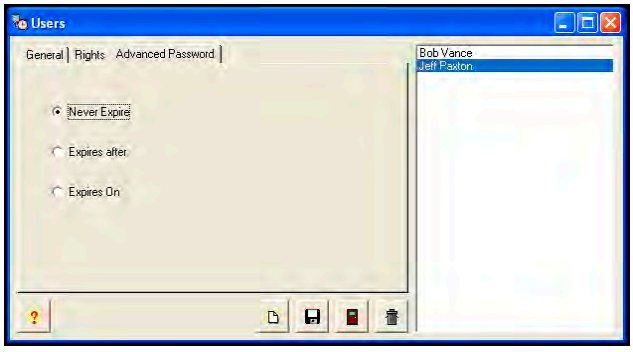


Figure 2-31: Users Advanced Password Tab

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 a User in ATVS Config, click on Users in the tree view (see *Figure 2-28*).
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 2-32*).

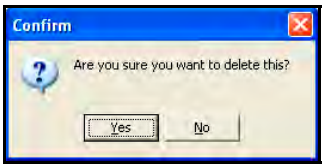


Figure 2-32: Confirm Deletion Dialog

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

How To Modify Users

1. Select a User from the list (see *Figure 2-28*), and double-click on it, or click on the **Edit** button.
2. Type in the modified information (see How to 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 2-33*), and the previously defined SNMP Servers will appear to the right of the tree view.

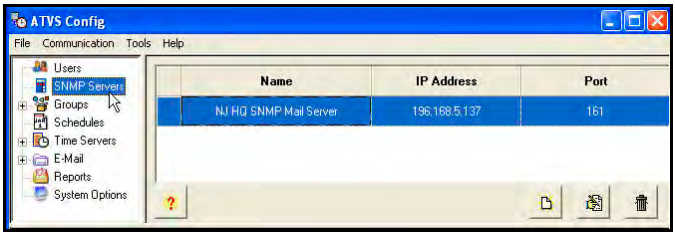


Figure 2-33: Select SNMP Servers

2. Select the **Add** button on the bottom of the displayed SNMP Servers, and the SNMP Server screen will appear (see *Figure 2-34*). Enter information into the required fields: Name, IP Address, Port, and Community Name.

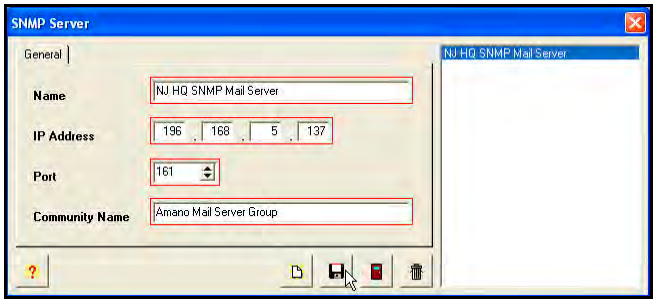


Figure 2-34: Create SNMP Server

Note – All fields outlined in **Red** should be completed.

Note – 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

1. To delete an SNMP Server in ATVS Config, click on SNMP Servers in the tree view (see *Figure 2-33*).
2. 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 2-35*).

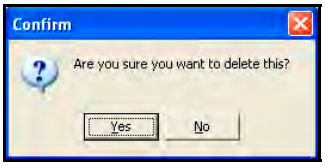


Figure 2-35: Confirm Deletion Dialog

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

How To Modify an SNMP Server

1. Select an SNMP Server from the list (see *Figure 2-33*), and double-click on it, or click on the **Edit** button.
2. Type in the modified information (see How to 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 TS-3000**i**, PIX-3000xNT and PIX-3000xN Time Recorders connected to the ATVS.

ATVS can handle an unlimited number of schedules and events per day. 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 TS-3000**i**, PIX-3000xNT and PIX-3000xN 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 2-36*), and the previously defined Schedules will appear to the right of the tree view.

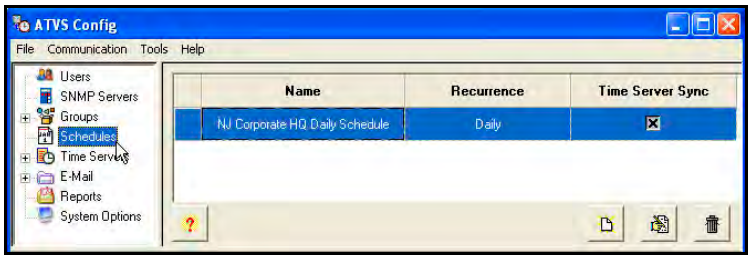


Figure 2-36: Create Schedule

2. Select the **Add** button on the bottom of the displayed Schedules, and the Schedule screen will appear (see *Figure 2-37*).
3. Enter the required General field information. Select the schedule recurrence. The choices are: Daily, Weekly, Monthly, or Yearly.

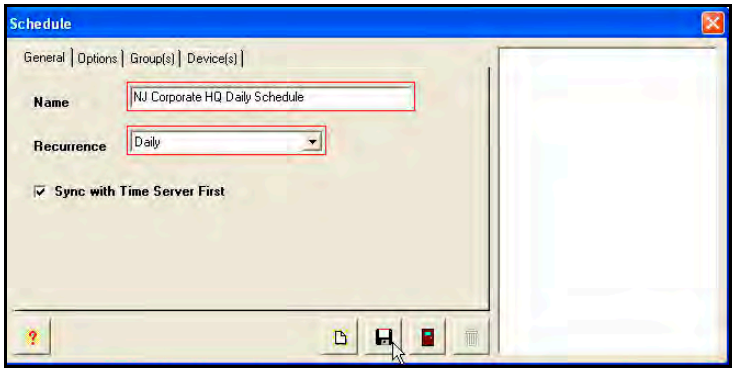


Figure 2-37: Schedule General Tab

4. Click on the **Options** tab, and an example of a possible screen that could appear is shown in *Figure 2-38*.

   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].

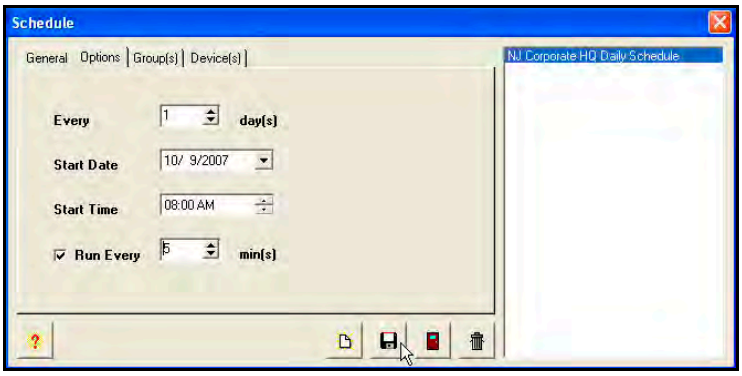


Figure 2-38: Schedule Options Tab

5. Enter the required Options information. Click on the **Group(s)** tab, and the screen will appear as shown in *Figure 2-39*. 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.

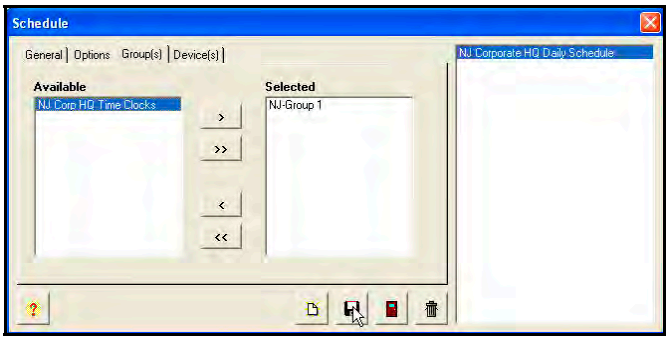


Figure 2-39: Schedule Group(s) Tab

6. Click on the **Device(s)** tab, and the screen will appear as shown in *Figure 2-40*. 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.

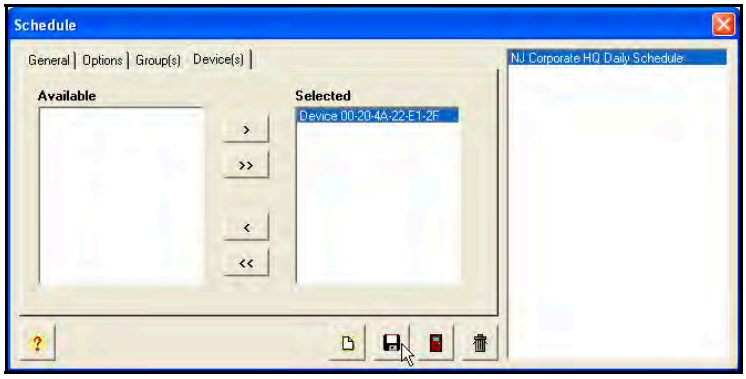


Figure 2-40: Schedule Device(s) Tab

7. 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

1. To delete a Schedule in ATVS Config, click on Schedules in the tree view (see *Figure 2-41*).

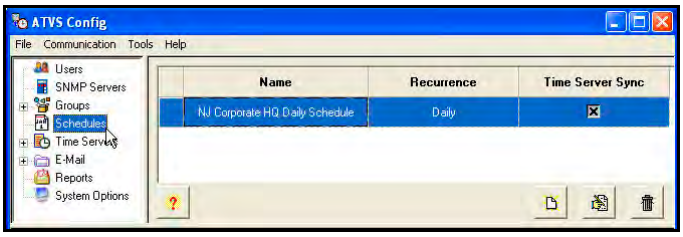


Figure 2-41: Select Schedules From Tree View

2. Select the desired Schedule from the list, and click on the **Delete** button. A dialog box will appear to confirm the deletion (see *Figure 2-42*).

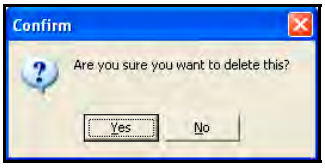


Figure 2-42: Confirm Deletion Dialog

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

How To Modify a Schedule

1. Select a Schedule from the list (see *Figure 2-41*), and double-click on it, or click on the **Edit**  button.
2. 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 Amano TS-3000i/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 2-43*).

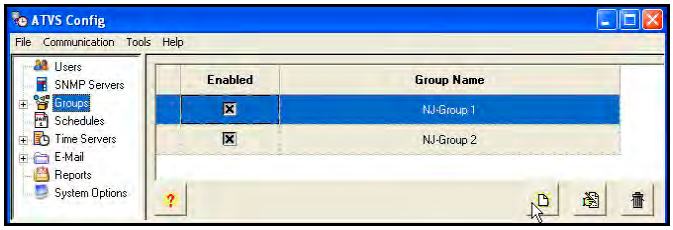


Figure 2-43: Select Groups From Tree View

How to Add a PIX-3000xNT to the System

1. Add and define a Group.
2. Add a Device to the Group using DeviceInstaller (used to locate PIX-3000xNT).
3. Assign a Network Interface Card (NIC) to each Device.
4. Configure communication parameters (IP and MAC Addresses) for each Device.

To Add a Group from ATVS

1. Click on the Groups icon in the tree view (see *Figure 2-43*), 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 2-44*).

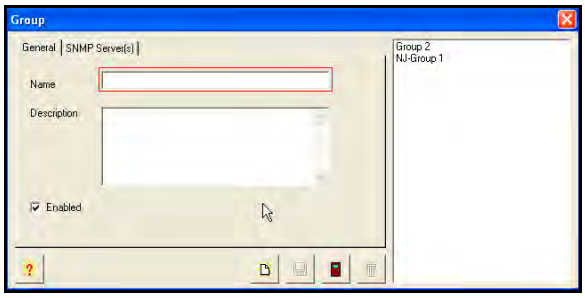


Figure 2-44: Groups General Tab

3. 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 2-45*. 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.

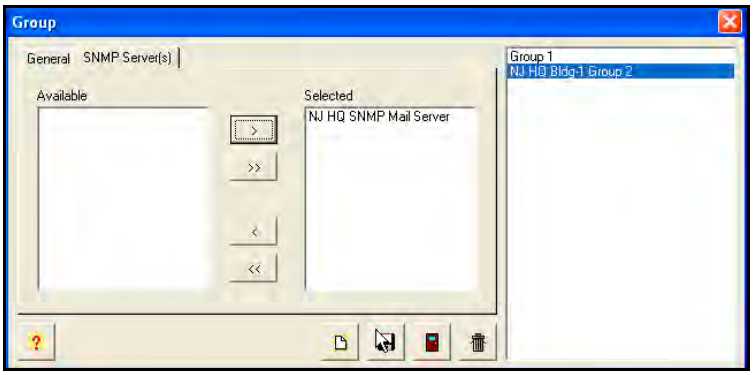


Figure 2-45: Groups SNMP Servers Tab

5. 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

1. Select a Group from the list, and double-click on it, or click on the **Edit** button.
2. 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

1. Select a Group from the Groups list, and click on the **Delete** button.
2. A dialog box will appear to confirm the deletion (see *Figure 2-46*). Click on the **Yes** button.

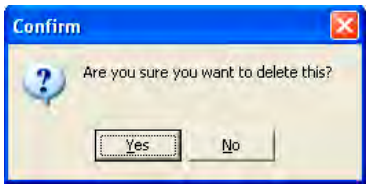


Figure 2-46: Confirm Deletion

How To Add a Device to the 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 **+**. All previously defined groups will appear.
2. Select a Group from the expanded list and click on the **Add** button for the Device screen to appear (see *Figure 2-47*).
3. Enter a **Name** for the device that describes it in some meaningful way.

4. From the **Type** dropdown list, select a TS-3000i, PIX-3000xN or PIX-3000xNT.
5. If selecting a TS-3000i and PIX-3000xNT device, enter its **IP/MAC Address**. If the IP address is unknown, select the Import Device button to launch Import Device screen to auto discover the TS-3000i clock to find the IP and MAC Address.

   If selecting a PIX-3000xNT, click on the PIX-3000xNT Device Lookup button on the Import Device screen to launch the DeviceInstaller program and search for IP/MAC addresses. See Importing Device IP/MAC Address in Chapter 4 for more information on how to use DeviceInstaller.
6. 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 milliseconds, and adjusted accordingly to a higher number (default = 1500 milliseconds).
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 = enabled.

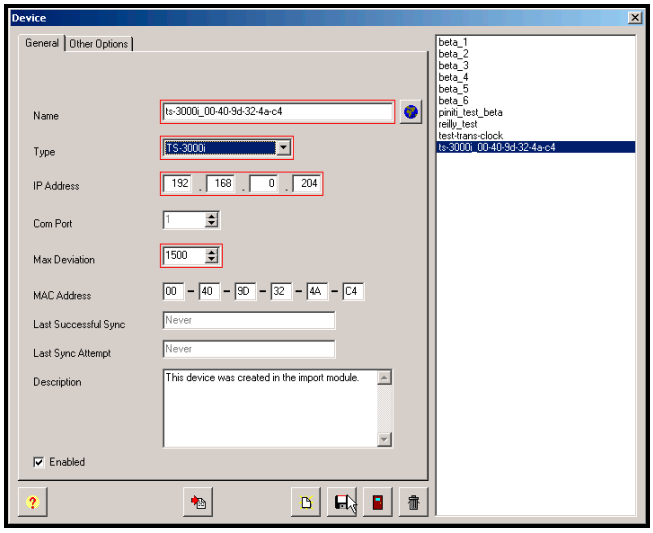


Figure 2-47: Adding a Device

10. Then click on the **Other Options** tab, and the screen will appear as shown in *Figure 2-48*. 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 (GMT-05:00) Eastern Time (US & Canada).

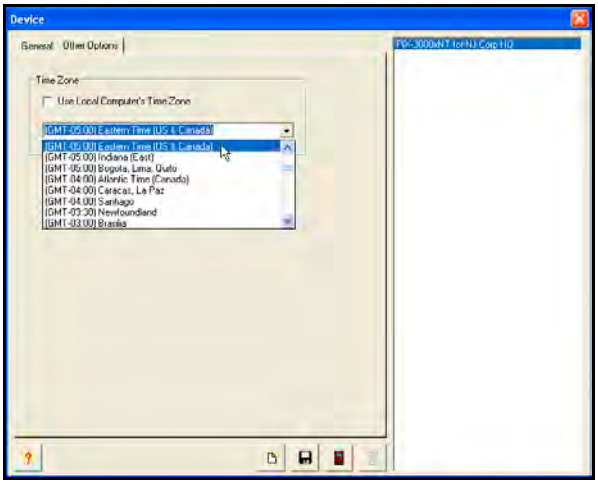


Figure 2-48: Device Other Options Tab

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 2-49*).

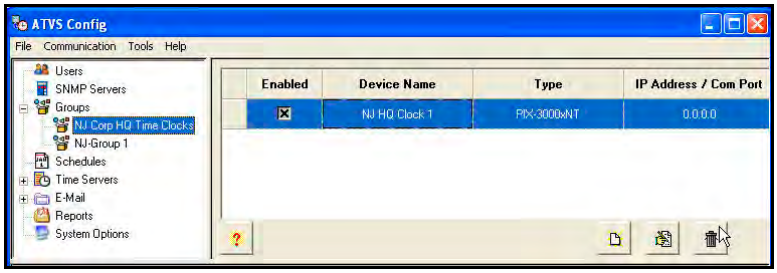


Figure 2-49: Deleting a Device

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 is powered and attached to a network via Ethernet cabling.
2. Verify that the IP Address assigned to the device is valid.
3. Obtain the serial number (MAC address) for the Ethernet board installed in the PIX-3000xNT clock from the label affixed to box. This MAC address could be used when locating your clock with DeviceInstaller.

Time Servers

The **Time Server** selection allows you to select from the 18 default NTP time servers, or define your own NTP time server to synchronize the ATVS Host. You could also select a NIST, NPL, or PTB time servers. For example, select NTP as the server type and click on the Select button alongside "*IP Address/Host Name*" to see the list of predefined NTP servers (see *Figure 2-50*). Choose the desired time server from the list, and click on the Select button. Click the **Close** button when done.

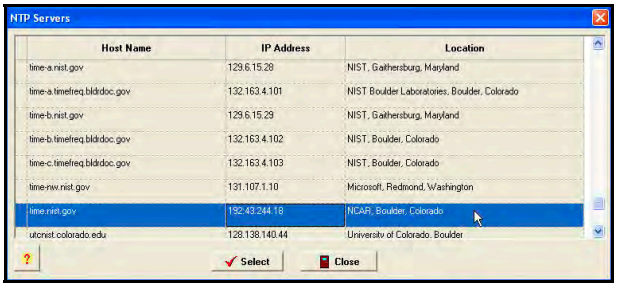


Figure 2-50: NTP Servers

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 2-51*), and all previously defined time servers will appear to the right.

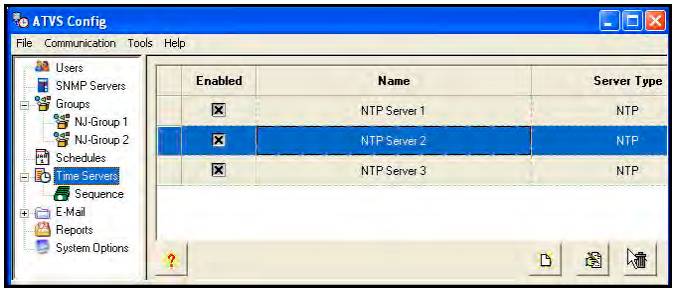


Figure 2-51: Selecting a Time Server

2. Click on the **Add** button, and the Time Server screen will appear (see *Figure 2-52*).

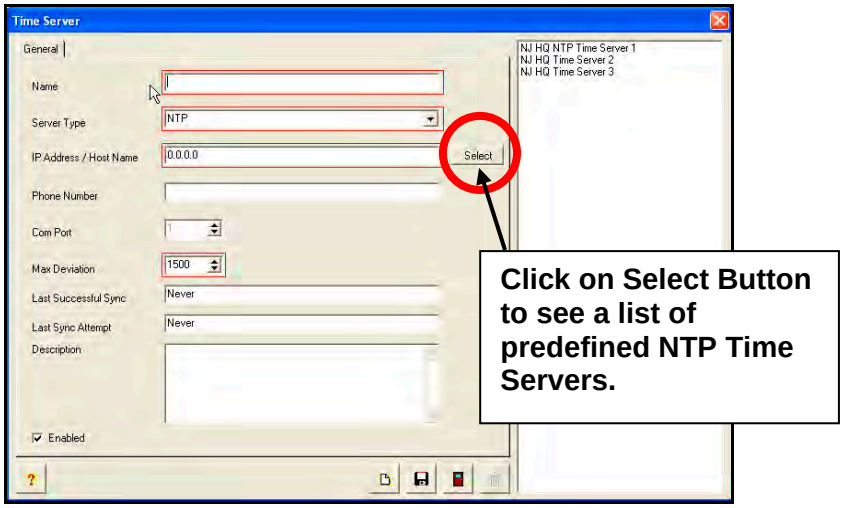


Figure 2-52: Adding a Time Server

3. 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 Select button and a list of 18 predefined NTP servers will appear to choose from (see *Figure 2-50*). This list is the same 18 NTP servers predefined in the TS-3000i clock.

   For NIST, NPL, or PTB, click on the Default # 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**.

4. The **IP Address/Host Name** field will be auto populated with the information from the default NTP Time Server if one is selected.

   However, if a different Time Server such as an internal Time Server is desired, enter the **IP Address/Host Name** in this field.

5. Enter in the **Max Deviation** that is acceptable to synchronize the ATVS Host. The default value is 1.5 seconds or 1500 milliseconds.

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. Place a check in the **Enabled** checkbox to enable the NTP server.

8. 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 2-53*).

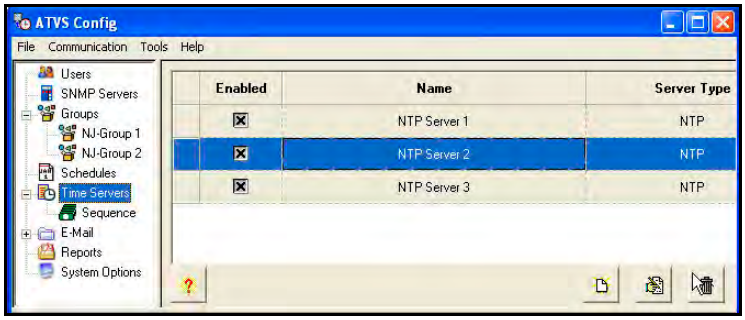


Figure 2-53: Deleting Time Server

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 2-54*).

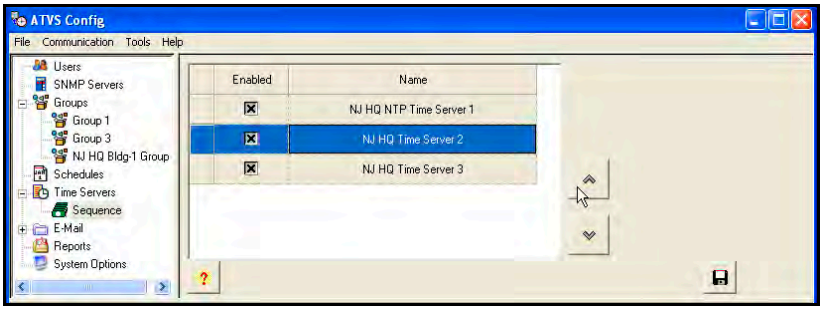


Figure 2-54: Time Server Sequence

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 2-55*). 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. Click on the **Save** button to save the modified System Options settings.

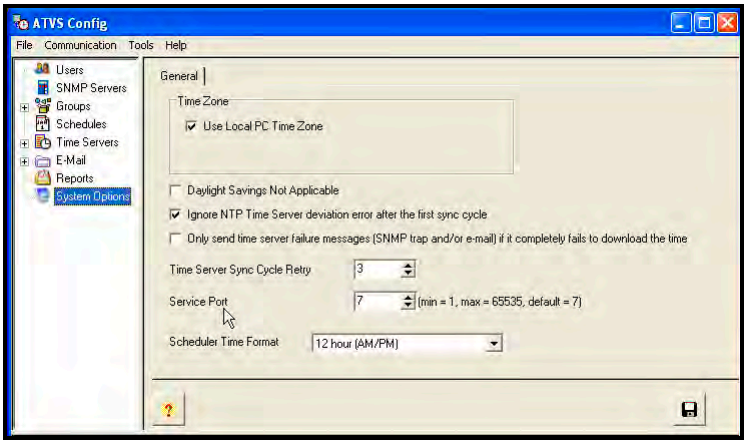


Figure 2-55: System Options

Time Zone

Use Local PC Time Zone: This option should only be checked in areas where OATS compliance is not required, 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 **(GMT -05:00) Eastern Time (US & Canada)**.

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.

Time Server Sync Cycle Retry: Default = 3. This option is the amount of times the Time Server will try to connect and sync time.

Service Port: Default = 7. Can be any unused port from 1 thru 65535. This is the port that is dedicated to listen to the TS-3000i clock(s). If this port is not set the same as the clock(s) it will not detect clock emails, on-line/off-line, etc.

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 2-56*), and enter the new information. To save the modified general e-mail settings click on the **Save** button.

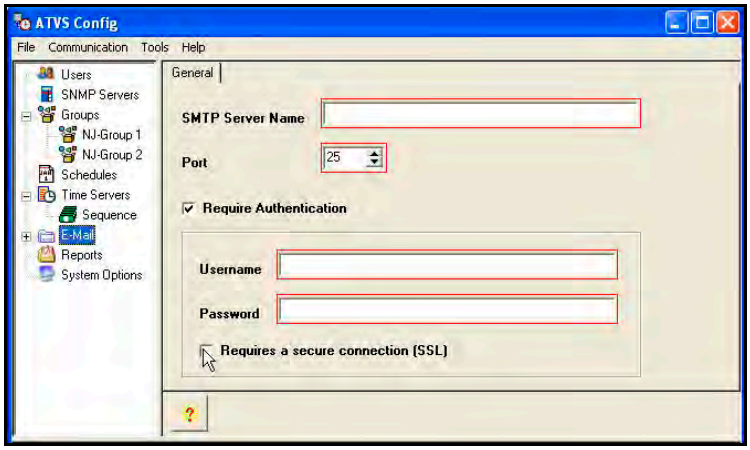


Figure 2-56: General E-Mail Settings

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 2-57* and *Figure 2-58*).

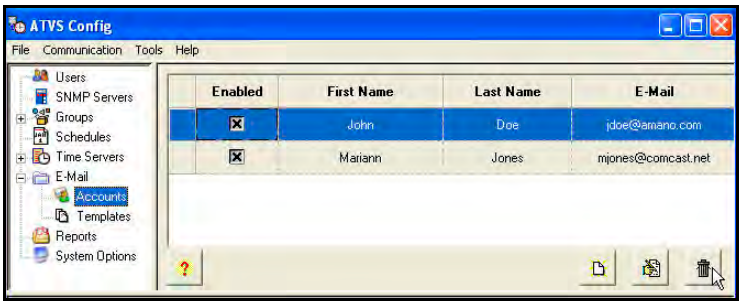


Figure 2-57: Deleting E-Mail Account

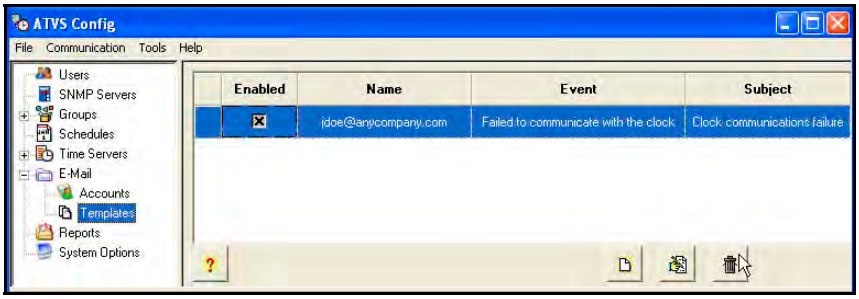


Figure 2-58: Delete E-Mail Template

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 2-57* and *Figure 2-58*), 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 2-59* and *Figure 2-60*).

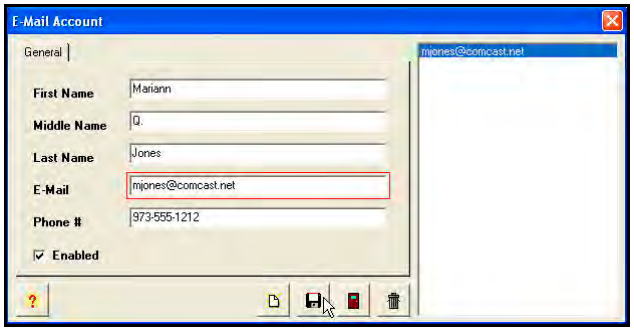


Figure 2-59: Add E-Mail Account

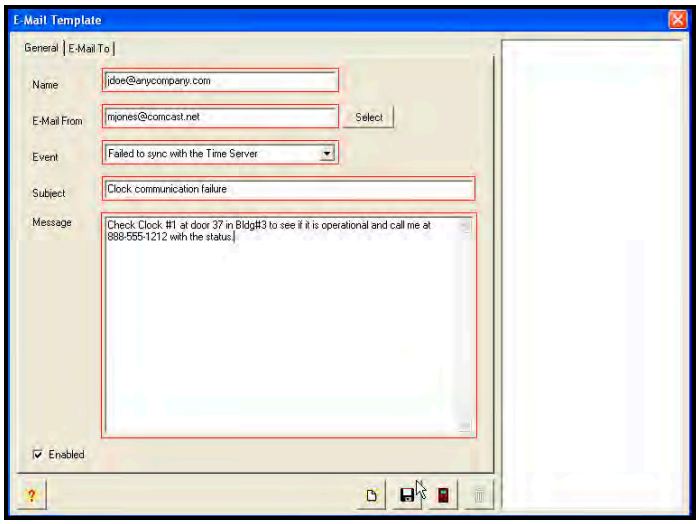


Figure 2-60: Add E-Mail Template

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 2-61* for an example e-mail notification sent by ATVS) and desired **Message**.

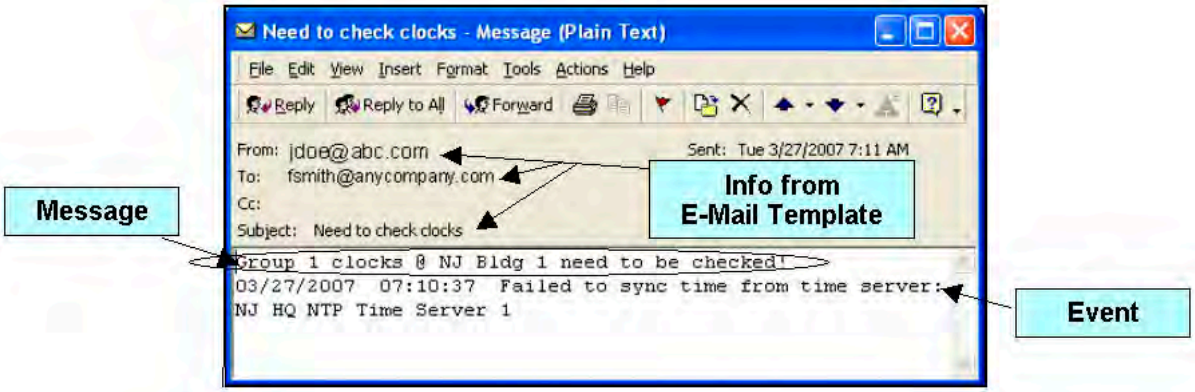


Figure 2-61: Example of E-Mail Notification

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 2-57* for an example).

This page intentionally left blank.

Chapter 3: ATVS Scheduler Operation

The ATVS Scheduler **runs as a service** for the ATVS Enterprise 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 3-1*).

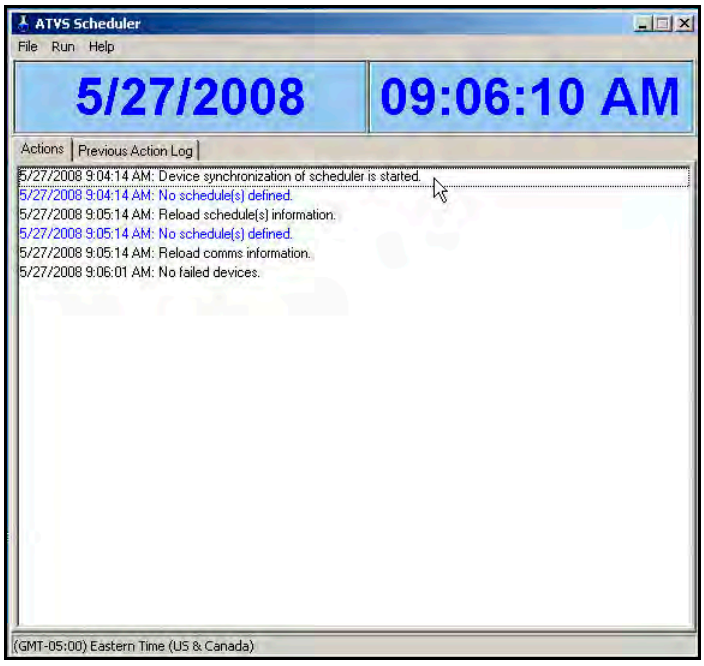


Figure 3-1: ATVS Scheduler

At startup, the ATVS Scheduler will check each PIX-3000xNT 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 PIX-3000xNT 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 Importing TS-3000i & PIX-3000xNT into ATVS). From DeviceInstaller you have to either assign another NIC to the affected PIX-3000xNT(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).

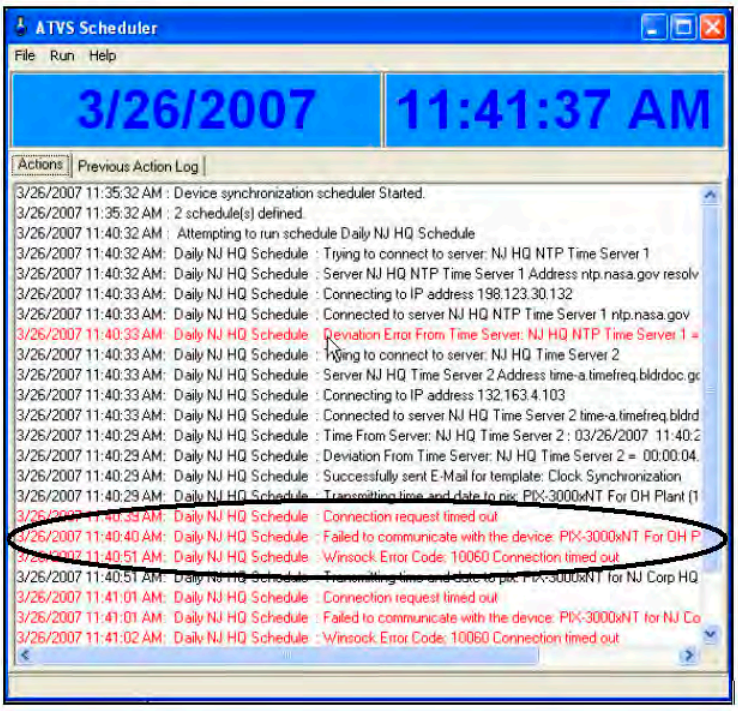


Figure 3-2: ATVS Scheduler Actions Log

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 3-3*).

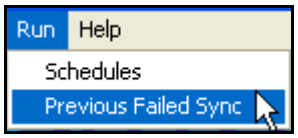


Figure 3-3: Run Menu in ATVS Scheduler

After selecting "Previous Failed Sync", click on the devices you want to sync and then click on the **Sync** button (see *Figure 3-4*).

Figure 3-4: Sync Previously Failed Sync Device(s)

From the **Run** menu select **Schedules** from ATVS Scheduler (see *Figure 3-5*), select a schedule(s) [previously defined], and click on the Run  button to execute that schedule(s).

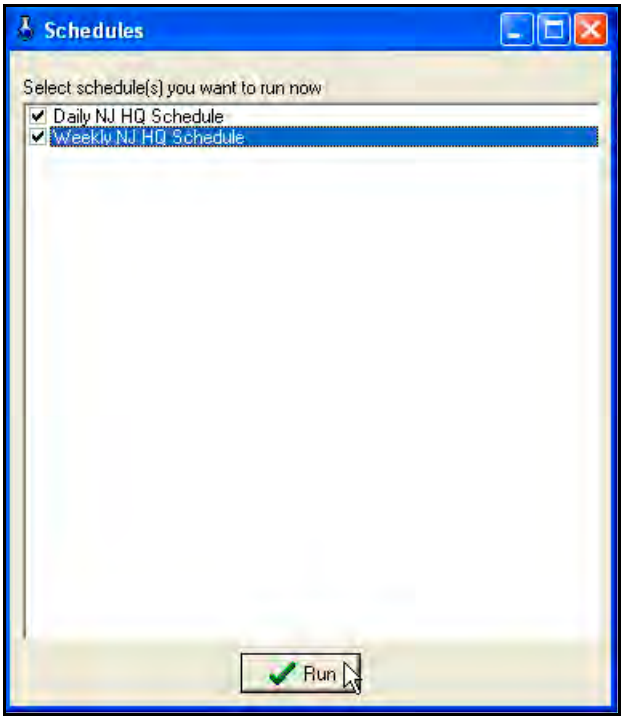
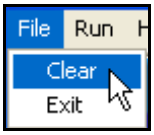


Figure 3-5: Run Schedules From ATVS Scheduler

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 3-6*) to clear the currently displayed Previous Action Log (see *Figure 3-6*).



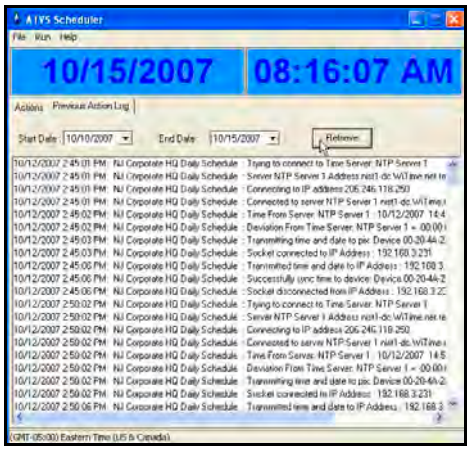


Figure 3-6: Previous Action Log

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 3-6*). For an explanation of the events recorded in the database, refer to Action Log Messages for a complete listing of messages. Click on **Help** menu and select **About** (see *Figure 3-7*) for the ATVS Scheduler version.

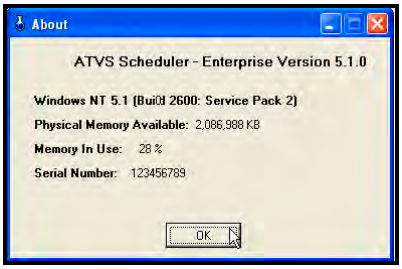
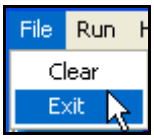


Figure 3-7: ATVS Scheduler About

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: Importing TS-3000i & PIX-3000xNT into ATVS

Amano recommends using the DeviceInstaller to find, import, and or configure PIX-3000xNT clocks for ATVS. From ATVS Config click on the **Tools** menu, and then select the **Device Lookup** sub-menu to launch DeviceInstaller (see *Figure 4-1*).

Figure 4-1: DeviceInstaller Main View

Also, the hardware/MAC address can be obtained from a label on the PIX-3000xNT Time Recorder.

Note – DeviceInstaller can also be launched by opening the Device screen from ATVS. With the Device screen open, select PIX-3000xNT for device type. Then click on the Import Device button on the bottom of the screen. When Import Devices screen opens up, click on the PIX-3000xNT Device Lookup button and DeviceInstaller will open.

Amano recommends using the Import Device function to find, import, and or configure TS-3000i clocks for ATVS. From ATVS Config click on the **Tools** menu, and then select the **Import Devices** sub-menu to launch Import Devices screen (see *Figure 4-2*).

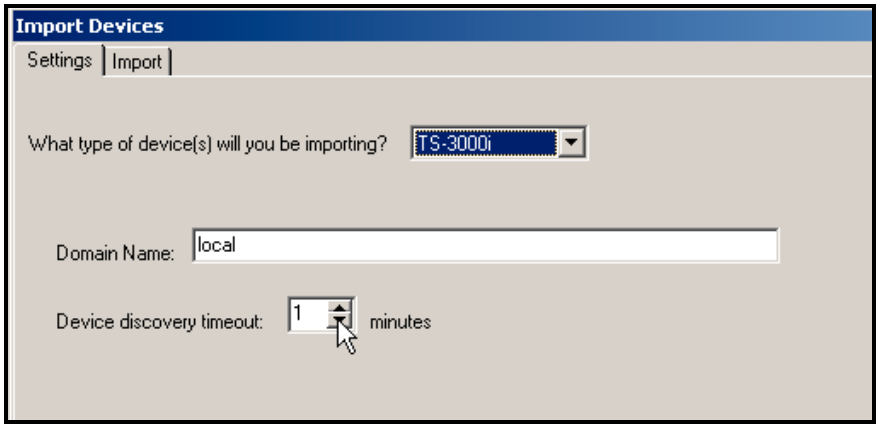


Figure 4-2: Import Devices for TS-3000i

Importing Device IP/MAC Address

How to Import PIX-3000xNT

1. With the DeviceInstaller open, click on the Magnifying glass  to search for the PIX-3000xNT IP/MAC addresses. *Figure 4-3* shows an example of a search.

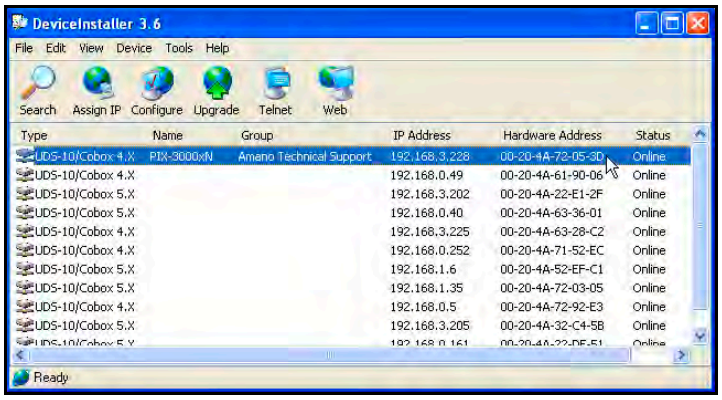


Figure 4-3: DeviceInstaller Search Results Example

2. All PIX-3000xNT devices that are detected here may be imported. If you wish to define a specific group for the imported device, double-click on the device and the Configure Device screen will appear (see *Figure 4-4*).

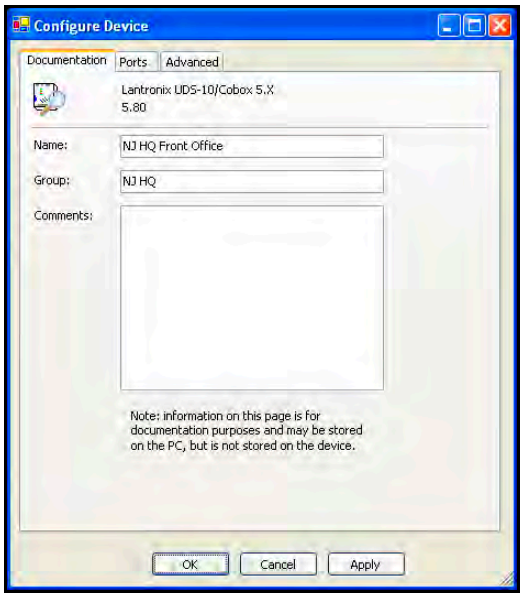


Figure 4-4: Configure Device

3. 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 already 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 4-5*) with the Group defined in the Group heading.

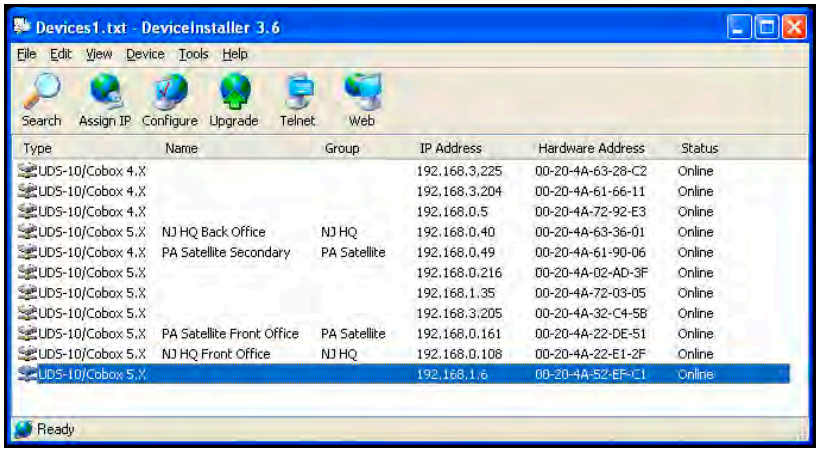


Figure 4-5: DeviceInstaller Grid Results Example

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*.

4. Click on **File** and select the **Save As** sub-menu (see *Figure 4-6*).

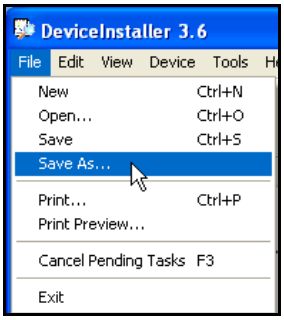


Figure 4-6: DeviceInstaller File Menu

5. From the **Save As** dialog (see *Figure 4-7*), 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.

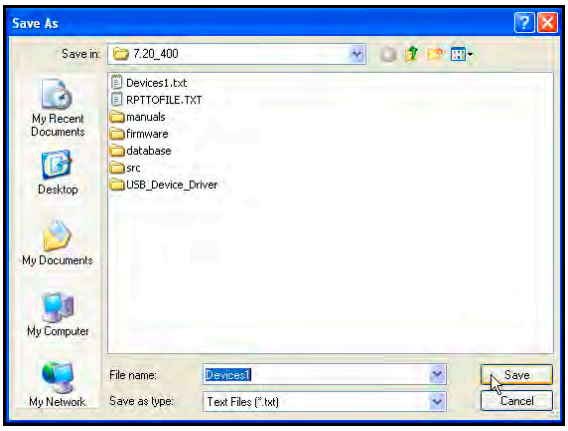


Figure 4-7: Save As Dialog

6. Close the DeviceInstaller, and from the ATVS Config main screen click on the Groups icon in the tree view to expand the Groups list by clicking in the tree view on the **+** to list all Groups/devices and select the PIX-3000xNT Default Group (if it exists). This group is automatically created the first time a PIX-3000xNT is imported. To the right of the Groups shown in the tree view will be a list of the devices connected to that group.

Note – However, the PIX-3000xNT clock could manually be added to a specific group. See "*Moving a Device to Another Group*" for how to move devices.

7. Select the PIX-3000xNT (Default Group) to import the PIX-3000xNT device to. Click on the Add button to create a new device and the Device screen will appear (see *Figure 4-8*). Select PIX-3000xNT from the dropdown menu for device type.

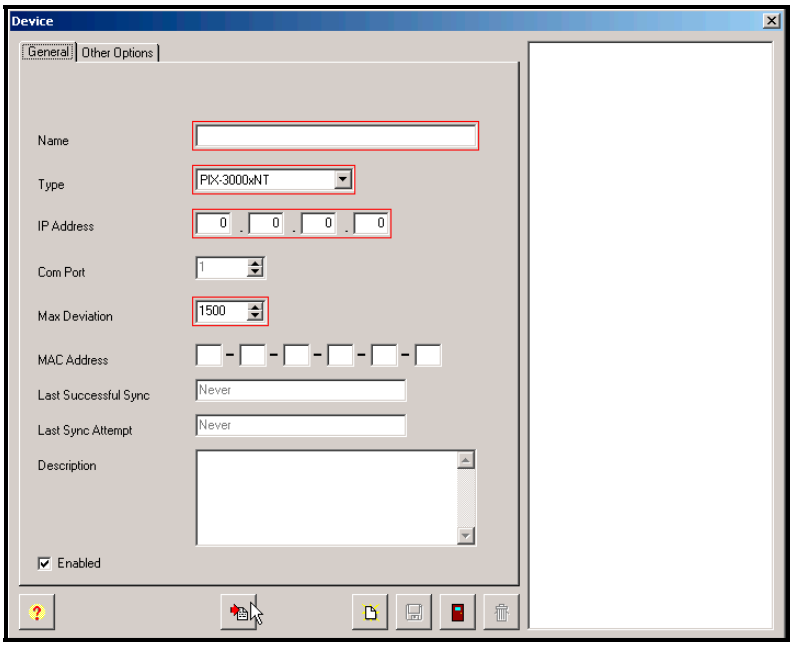


Figure 4-8: Add Device

8. Click on the **Import Device(s)** button on the bottom of the Device screen to open to the Import Devices screen.
9. Select PIX-3000xNT from the dropdown menu for the type of device to import (see *Figure 4-9*). May already be selected.

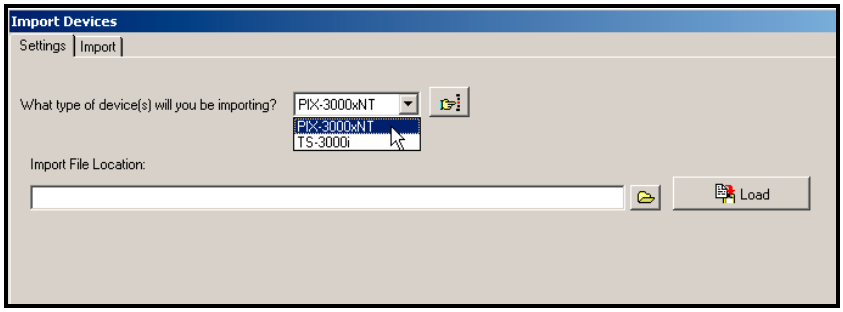


Figure 4-9: Select PIX-3000xNT Device Type

10. Click alongside the Import File Location field on the **Browse** button and navigate to the saved "*Devices.txt*" file previously created (see *Figure 4-7*). Once the file is selected, click on the **Open** button and the path for the text file with the IP/MAC search results will appear in the "*Import File Location*" field (see *Figure 4-10*). Click on the Load File button to load this information into the Import function and the device status information will appear on the bottom of the Import Devices screen in the operation status field (see *Figure 4-10*).

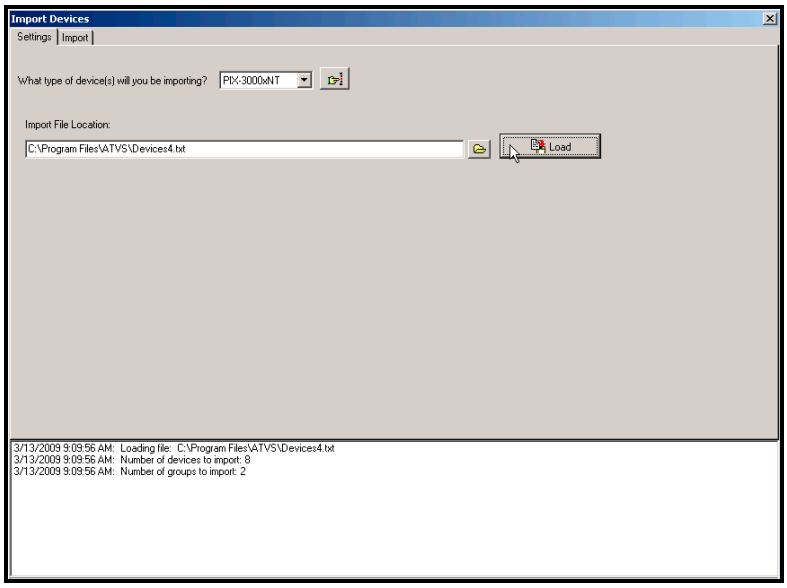


Figure 4-10: Load PIX-3000xNT Device

11. Click on the Import tab to display a list of PIX-3000xNT devices to import that you just loaded (*device.txt* file) from the previous step. Just select the desired devices to import if you do not want to import all the devices on the list (see *Figure 4-11*).

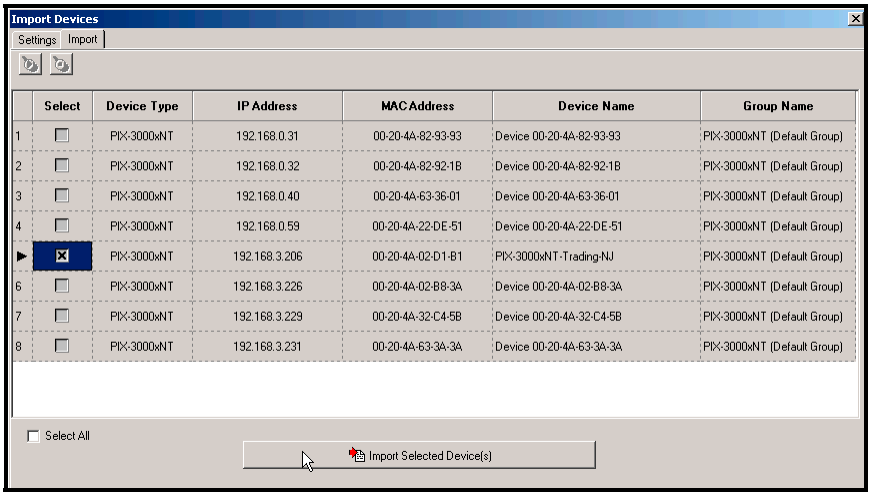


Figure 4-11: Device List from Loaded Devices

12. Click on the Import Selected Device(s) button to import all the selected PIX-3000xNT devices. The operational status of the import will be displayed below on the Import Devices screen.

13. Close the Import Devices screen and you will be back on the Device screen. If you started from the PIX-3000xNT Default Group, click on the device from the list on the right and that device information will appear in the proper fields (see *Figure 4-12*). If you did not start from the PIX-3000xNT Default Group, you will have to navigate to that group from the ATVS Config main screen by clicking on the Groups icon in the tree view and selecting the PIX-3000xNT Default Group.

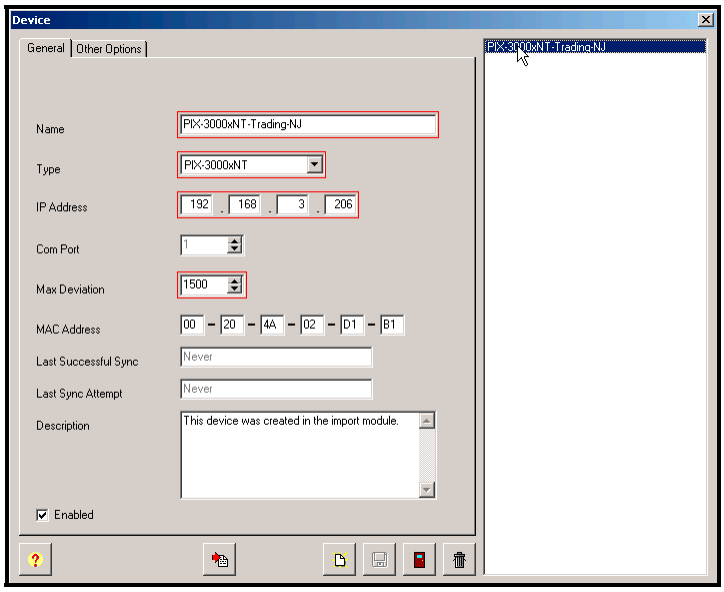


Figure 4-12: Import Device Information

14. Click on the **Other Options** tab, and the screen will appear as shown in *Figure 4-13*. 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 (GMT-5:00) Eastern Time (US & Canada).

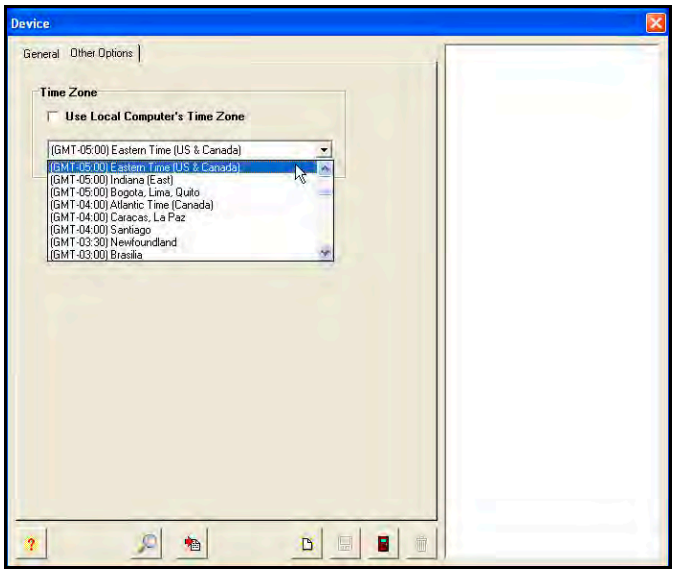


Figure 4-13: Create Device Other Options Tab

15. When finished entering importing each new PIX-3000xNT device, click on the **Save** button to save the device settings. When finished importing new devices, click on the **Close** button to quit and return to the ATVS Config screen.

How to Import TS-3000i

1. From ATVS Config click on the **Tools** menu, and then select the **Import Devices** sub-menu to open Import Devices screen.
2. Select TS-3000i from the dropdown menu for the type of device to import (see *Figure 4-14).*

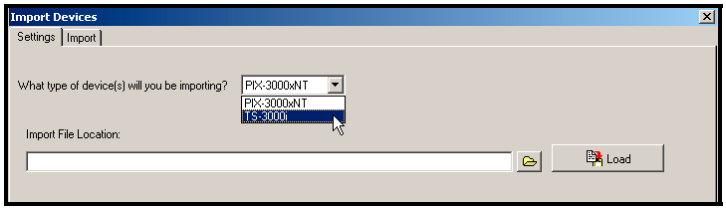


Figure 4-14: Select Device Type

3. This step is optional and should usually be skipped for TS-3000i import. Only perform this step if having problems with auto discovery. Please note - the screen has changed (see) to allow Domain Name change for the search (default = local). Also, you can select the timeout time allowed for the search from the dropdown (default = 1 minute).

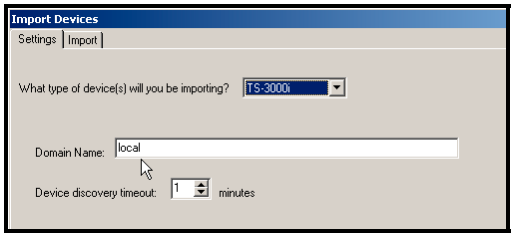


Figure 4-15: Normal Import TS-3000i Settings

4. Click on the Import tab to display a blank Import Devices screen. Click on the **Start TS-3000i Discovery** button. To stop auto discovery, simply click on the **Stop TS-3000i Discovery** button. Searching for the clocks will automatically timeout.
5. All of the discovered TS-3000i clocks will be displayed in a list with their Device Type, IP Address, MAC Address, Device Name, and Group Name (they will automatically be given the group name of "*TS-3000i Default Group*" (see *Figure 4-16*).

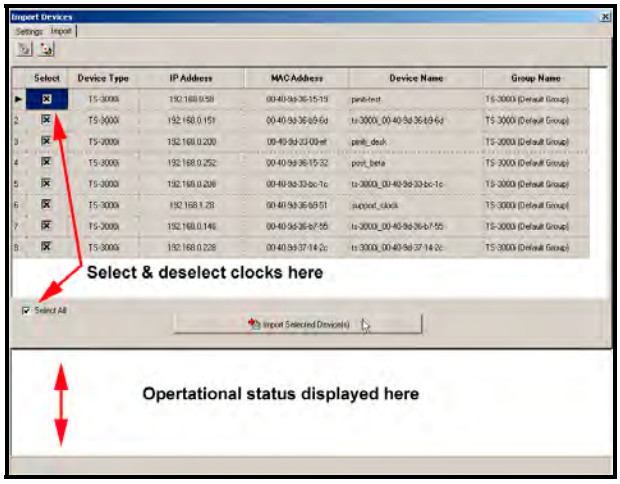


Figure 4-16: Discovered TS-3000i Clocks

6. Select the desired TS-3000i clocks and click on the 

button to import these clocks into the ATVS software. The dialog "Are you sure" will appear (see *Figure 4-17*). Click the **OK** button to perform the operation. The operational status will appear in the display window to show that the selected clock(s) have been imported (see *Figure 1-29*).

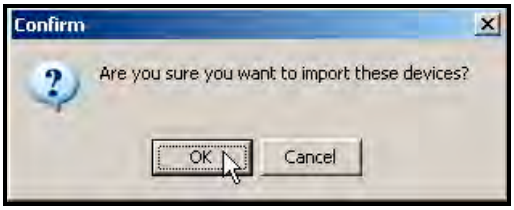


Figure 4-17: Confirm Import Dialog

7. Close the Import Devices screen, and from the ATVS Config main screen click on the Groups icon in the tree view to expand the Groups list by clicking in the tree view on the **+** to list all Groups/devices and select the TS-3000i Default Group (if it exists). This group is automatically created the first time a TS-3000i clock is imported. To the right of the TS-3000i Default Group shown in the tree view will be a list of the TS-3000i devices connected to that group.

Note – However, the TS-3000i clock could manually be added to a specific group. See "*Moving a Device to Another Group*" for how to move devices.

8. Select the desired TS-3000i imported clock from the group list by double-clicking on it or clicking on the Edit  button. All devices belonging to that group will appear in the right-hand side (see *Figure 4-18*). The name, IP and MAC addresses will automatically be brought into the device file. Note – the Description field will be auto-populated with the text; "*This device was created in the import module.*" Also, the Launch Web Browser  button will appear alongside the clock name to automatically connect to the clock Web page when clicked on.

   To add TS-3000i clocks to ATVS at a later time, just repeat the process detailed here.

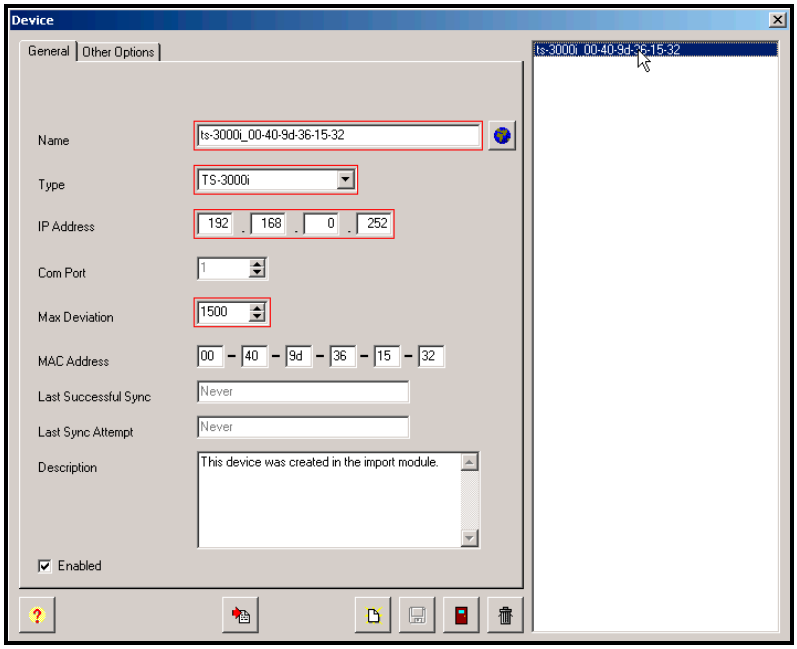


Figure 4-18: Device Imported TS-3000i Selection

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*.

16. Click on the **Other Options** tab, and the screen will appear as shown in *Figure 4-19* . 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 (GMT-5:00) Eastern Time (US & Canada).

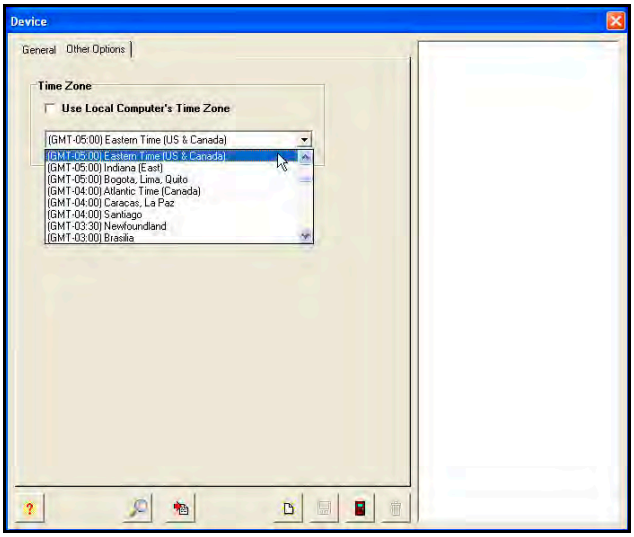


Figure 4-19: Create Device Other Options Tab

17. When finished entering importing each new TS-3000i device, click on the **Save** button to save the device settings. When finished importing new devices, click on the **Close** button to quit and return to the ATVS Config screen.

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 4-20*). To the right of the Groups shown in the tree view will be a list of the devices connected to that group.

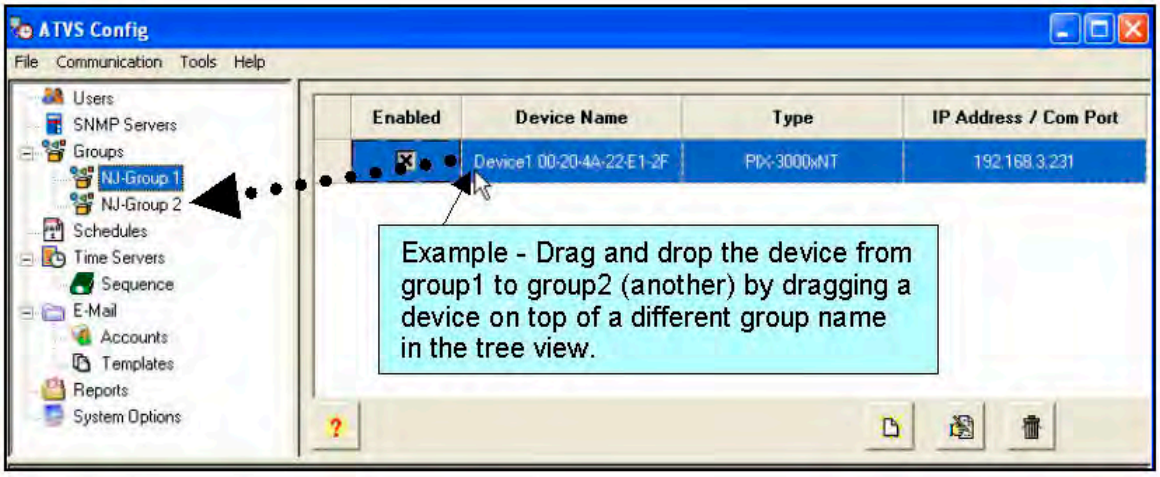


Figure 4-20: Drag and Drop a Device

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.

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 5-1 shows an example of what the reports listing looks like after clicking on the Reports icon from the tree view.

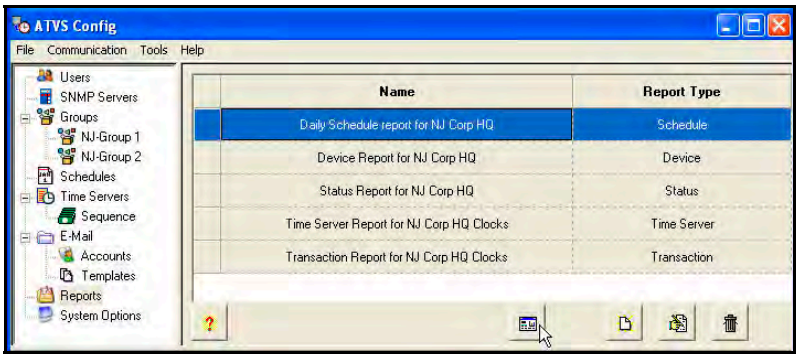


Figure 5-1: ATVS Config Reports

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 5-2*).

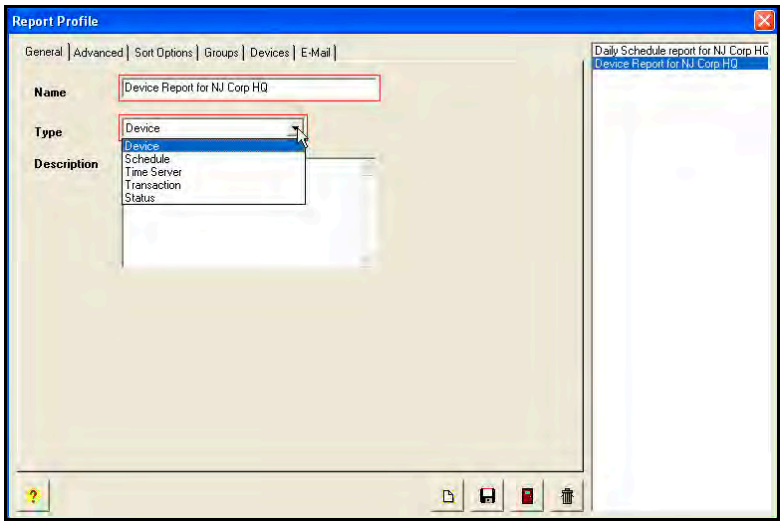


Figure 5-2: Creating A Report Profile

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 5-3*.

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

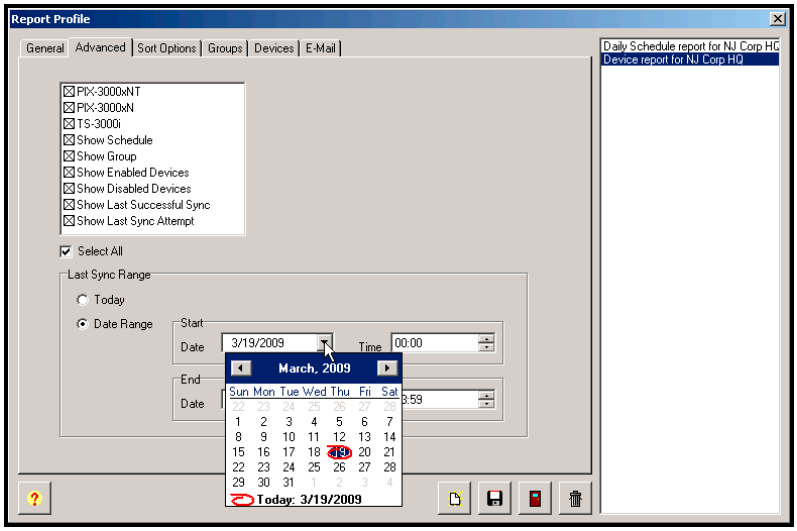


Figure 5-3: Report Profile Advanced Tab

5. Individually select the desired devices (i.e., TS-3000**i**) and/or item(s) to show on the report, or click on **Select All** to show on the report.

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 5-4*.

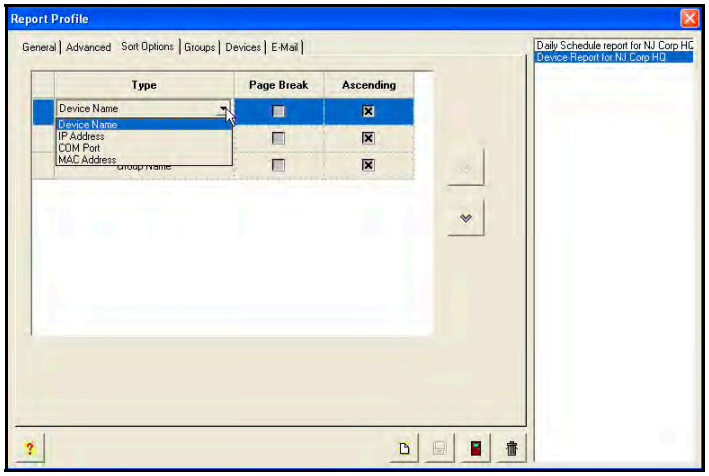


Figure 5-4: Report Profile Sort Options Tab

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 5-5*.

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

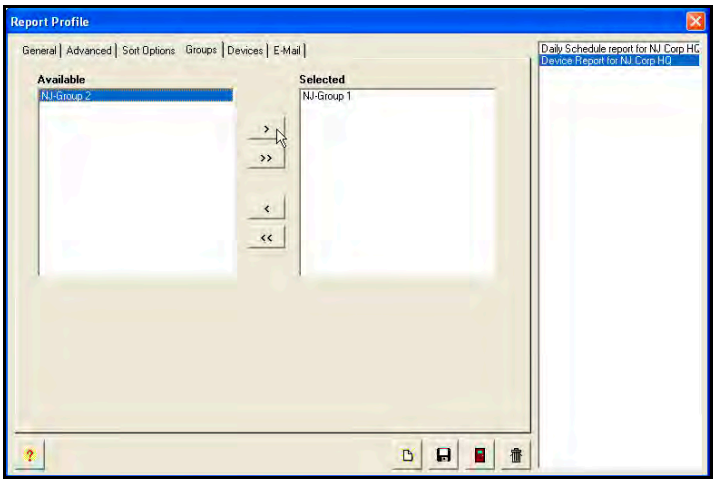


Figure 5-5: Report Profile Groups Tab

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 5-6. 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.

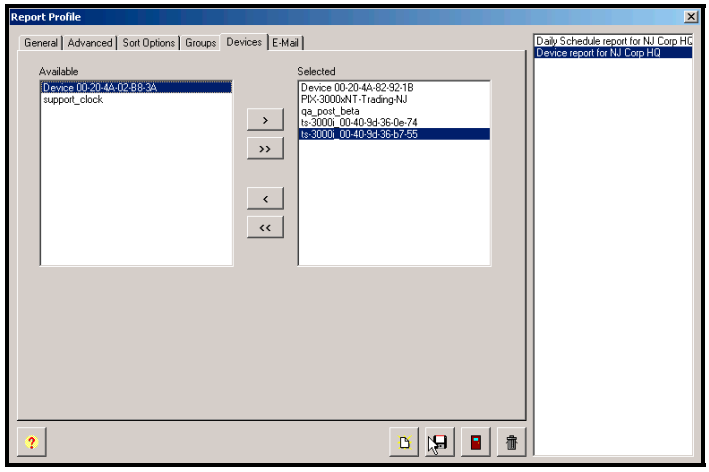


Figure 5-6: Report Profile Devices Tab

10. Then click on the **E-Mail** tab, and the screen will appear as shown in *Figure 5-7*. 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.

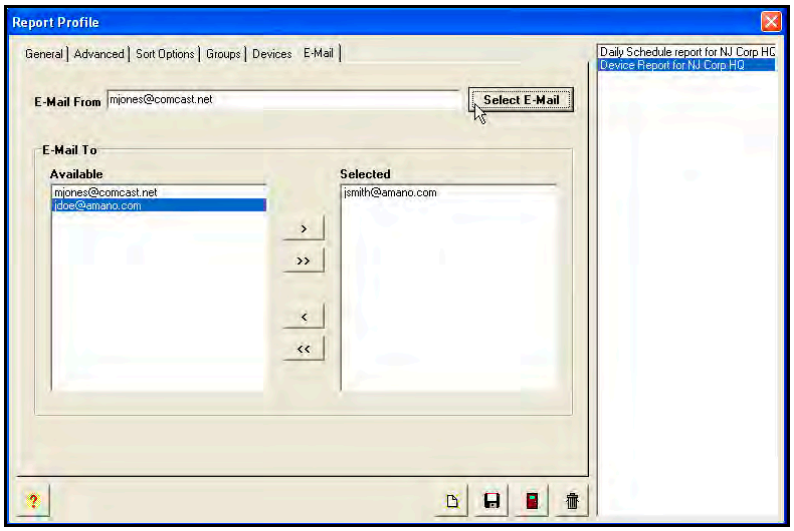


Figure 5-7: Report Profile E-Mail Tab

Use the **Select E-Mail** button to choose an e-mail address for the **E-Mail From** address (see *Figure 5-8*).

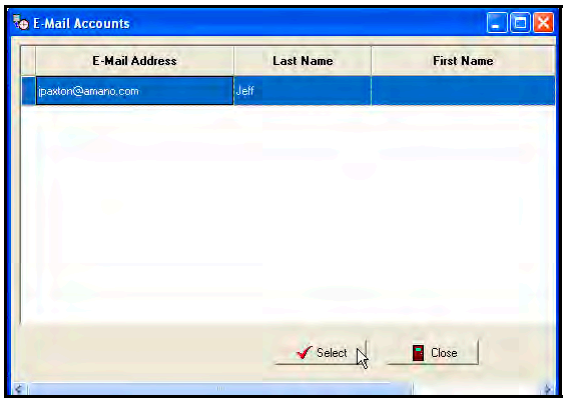


Figure 5-8: Selecting E-Mail Account

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 5-1*).

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 5-9*).

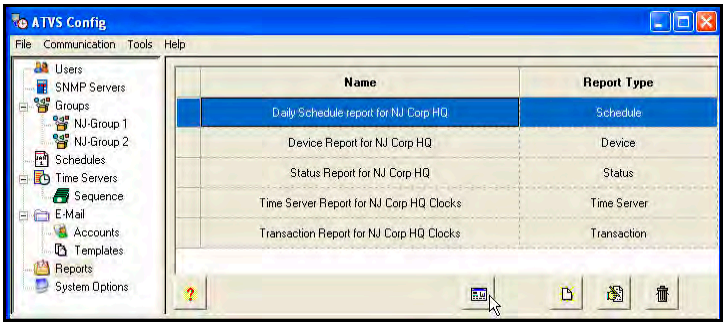


Figure 5-9: Selecting an ATVS Report

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 5-9*).
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 5-10*).

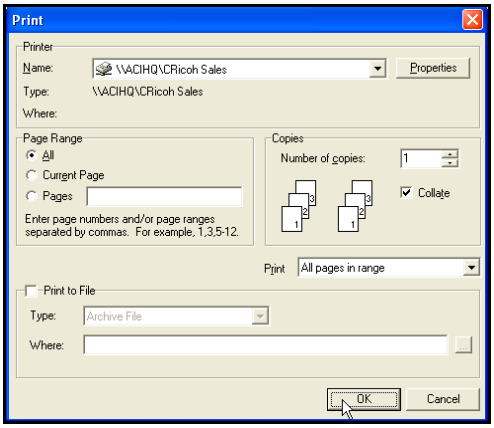


Figure 5-10: Windows Print Dialog

How To Create a Report File

Follow the preceding procedure for printing a report.

1. When the Windows Print dialog window appears (see *Figure 5-10*) click **Print to File** (see *Figure 5-11*).

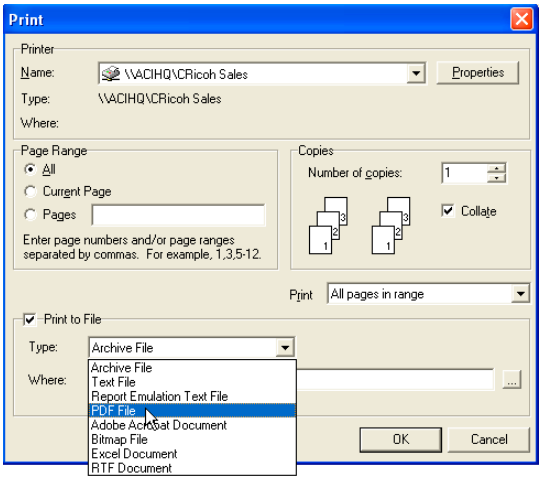


Figure 5-11: Select File Type

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 5-12*).

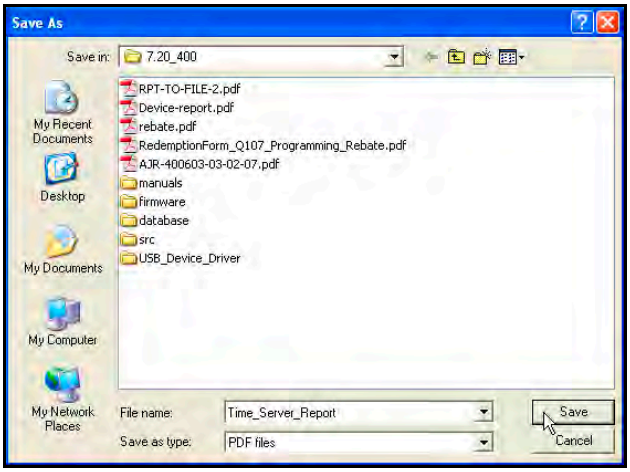


Figure 5-12: Windows Save As Dialog

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 5-13* 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 5-13* is an example of a displayed Device Report.

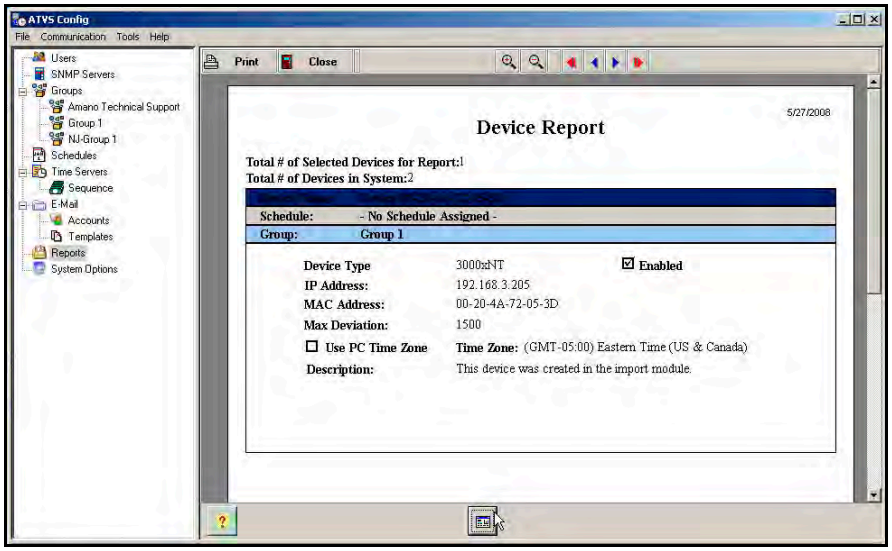


Figure 5-13: Device Report Example

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 5-14* is an example of a displayed Schedule Report.

Figure 5-14: 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 5-15* is an example of a displayed Time Server Report.

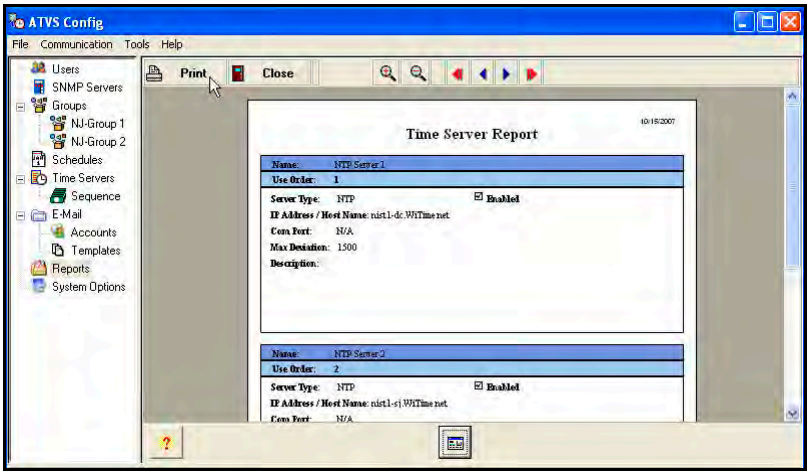


Figure 5-15: Time Server Report Example

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 5-16* is an example of a displayed Transaction Report.

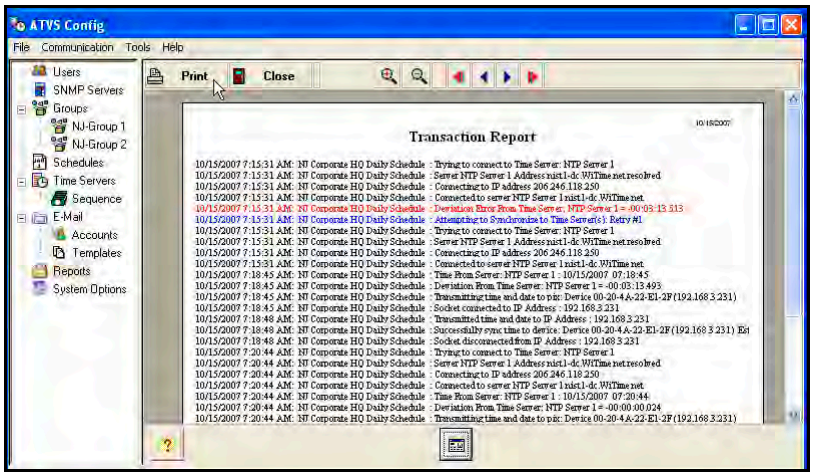


Figure 5-16: Transaction Report Example

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 5-17* is an example of a displayed Status Report.

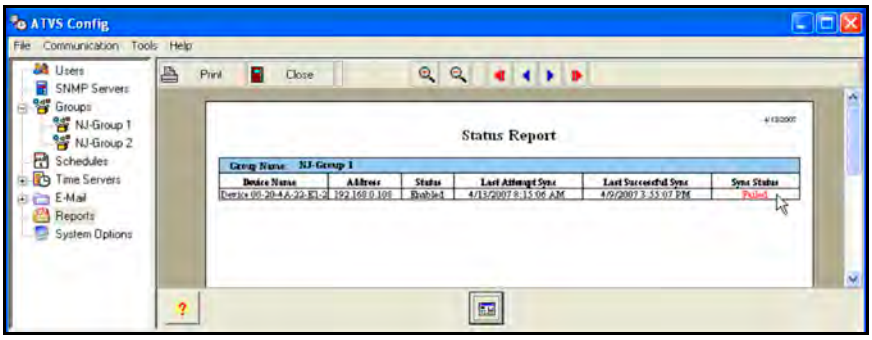


Figure 5-17: Status Report Example

Note – In a report, if a Device had failed synchronization, the word "**Failed**" will be in the Sync Status column in **red**.

This page intentionally left blank.

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 6-1* is an example of the ATVS Scheduler.

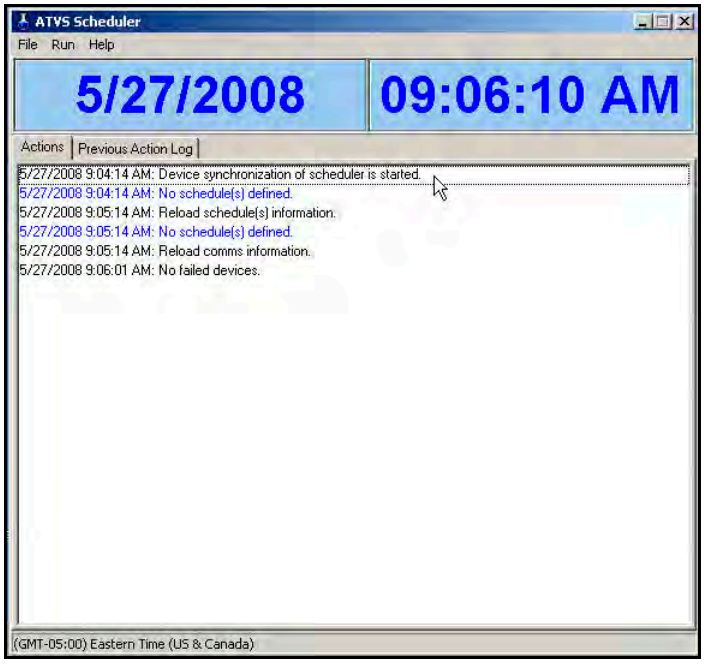


Figure 6-1: ATVS Scheduler

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 : XXXXXXX (xxx.xxx.xxx.xxx)

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

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

or

Successfully sync time to Device: XXXXXXX via Com X

Where X is the Com Port #. Where XXXXXXX is the Device Name, xxx.xxx.xxx.xxx is its IP Address, xxxx 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 XXXXXXX (xxx.xxx.xxx.xxx)

Where XXXXXXX 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 xxxxxxx via Com x.

Where x is the Com Port number and xxxxxxx is the Device Name. Broadcast to Com Port X has failed, and XXXXXXX 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.
- Consult the TS-3000i Installation and Operation Guide for more details on clock operation.

This page intentionally left blank.

AMANO®

Corporate Headquarters
140 Harrison Avenue, Roseland, NJ 07068-1239
(800) 526-2559

www.amano.com/time

Amano Software Support: 1-800-896-7035