

# AlliedView™-EMS 3.11

## DEVICE MANAGEMENT GUIDE

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## Basic Operations

Device Manager's main window shows the main panel of the target device. It has both common and device-specific menus on its menu bar.

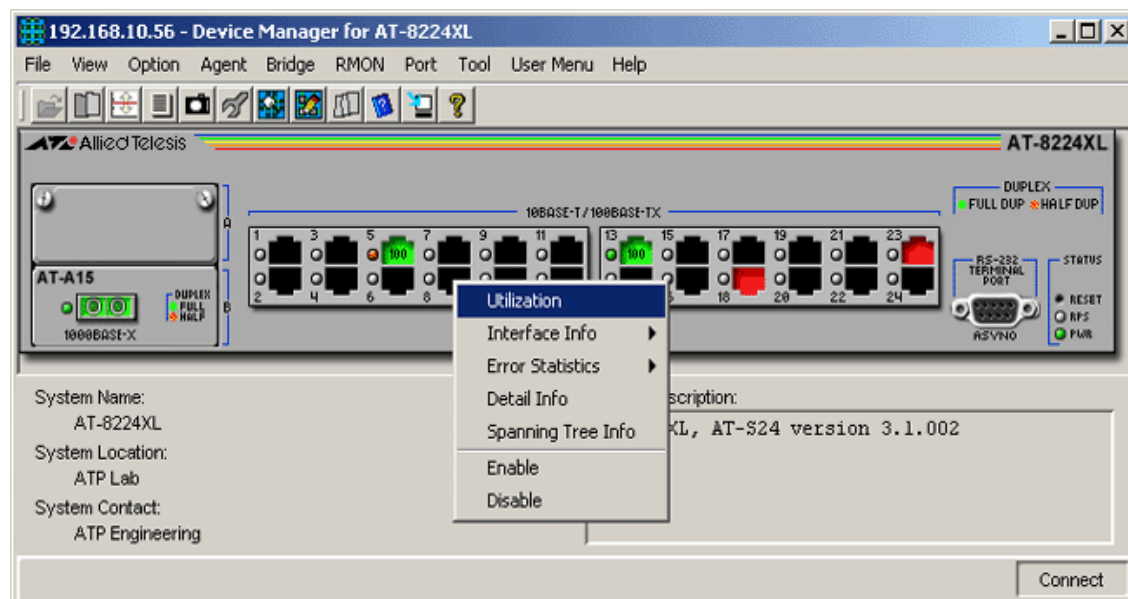
**Note** - SNMPv3: All device-specific menu options are displayed regardless of the user's view access security settings.

You can perform operations on the agent by doing a right click on the main panel or by selecting a menu item from the menu bar. Ports and LEDs on the main panel indicate the status of the port, system and traffic.

Topics:

- [Common operations on the main window](#)
- [Menu for stacked devices](#)
- [Port selection dialog box](#)
- [Port status colors](#)
- [LED status](#)
- [Utilization](#)

## Common operations on the main window



*Right clicking on a port*

### *Port*

Right clicking on a port opens a pull-down menu specific to the device. Selecting a menu item opens another window and lets you view and edit MIB information related to the port. You can also access the same menu from the menu bar.

### *RS-232 Terminal Port*

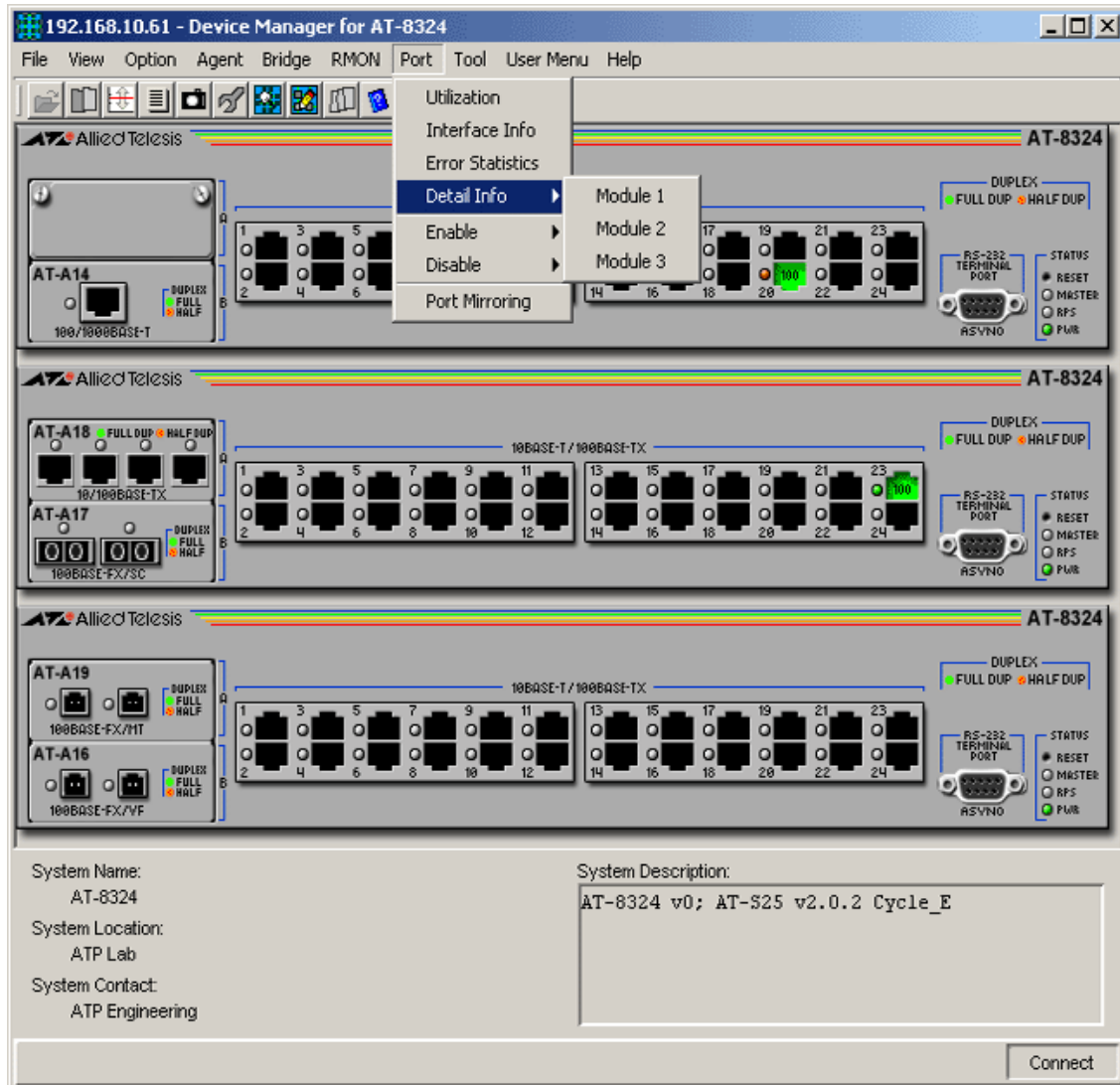
Right clicking on an RS-232 port opens a pull-down menu and lets you choose how to log into the agent. Depending on the managed device, choose Telnet or WEB Browser.

### *Reset Button*

Right clicking on a reset button opens a pull-down menu with an option that allows you to reset the device. (Not available on some devices.)

## **Menu for stacked devices**

If the target is a stacked device, some menus have extra subitems to specify a single device in the stack.

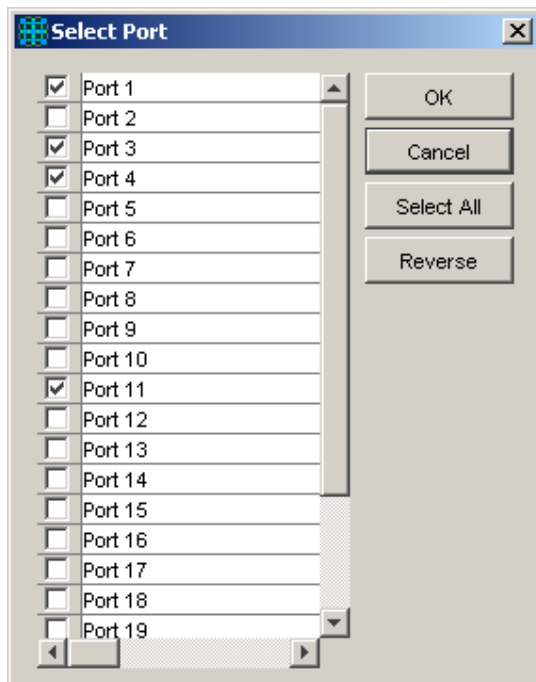


Module submenu

## Port selection dialog box

When you select a menu item acting on ports, a dialog box opens to let you select ports. Check the target ports and click OK.

**Note** - If you select multiple ports, it may take some time for data to be displayed.



Select Port dialog box

## Port status colors

Port status is shown by its color. Port speed is also displayed in the port image.

- Link Up: Green
- Disabled: Red (the port is disabled by an administrator)
- Partitioned/Blocking: Yellow
- Others: Default colour (usually black)

**Note** - SNMPv3: Depending on the READ VIEW access settings of the User Account Name used, there is a possibility that Device Manager may not be able to access some MIB values that control the Port status. When this happens, the affected ports will be shown in the default color.

## LED status

In Device Manager, LEDs do not blink. The meaning of each LED will differ from one device to another.

## Utilization

Utilization is calculated by the following formula.

$$\text{Utilization (\%)} = \frac{\text{\# of frames} \times (96 + 64) + \text{octets} \times 8}{\text{Port speed (bps)} \times \text{Sampling Interval(sec)}} \times 100$$

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Basic Operations

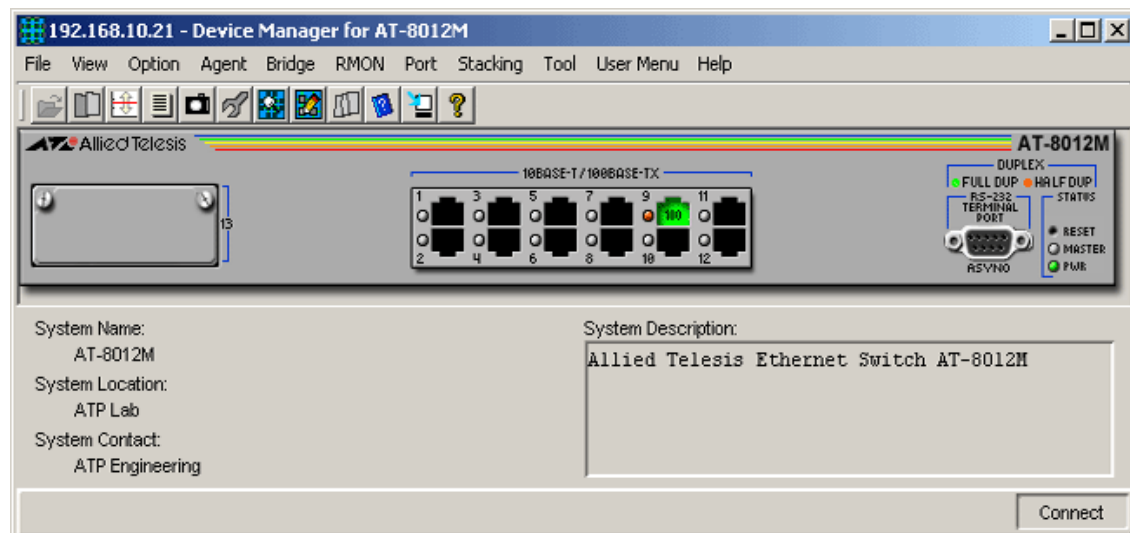
## AT-8000 Series

This section describes Device Manager menus and operations specific to the AT-8000 Series.

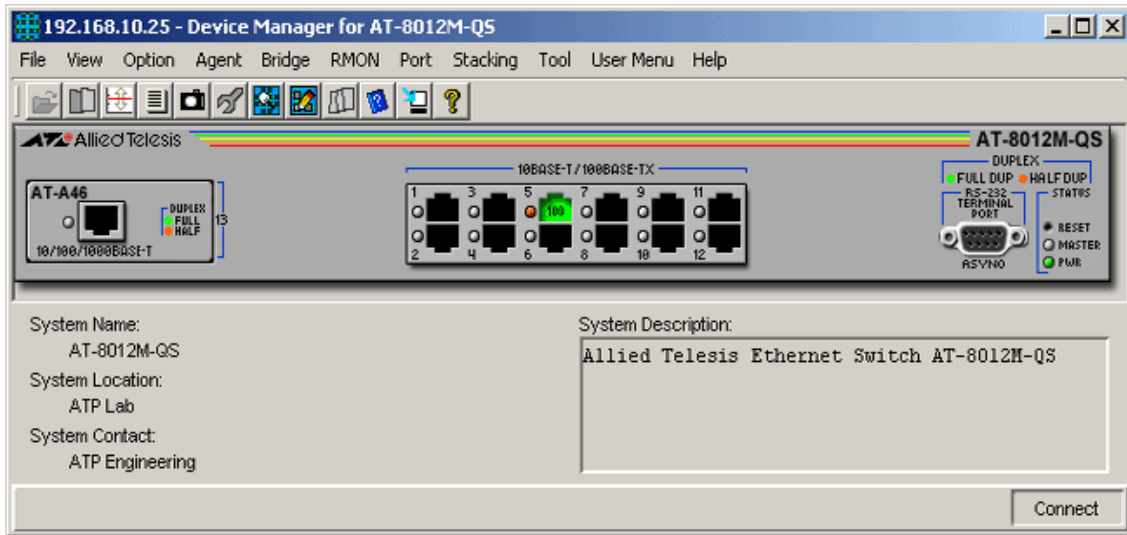
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)
- [Expansion Module Notes](#)

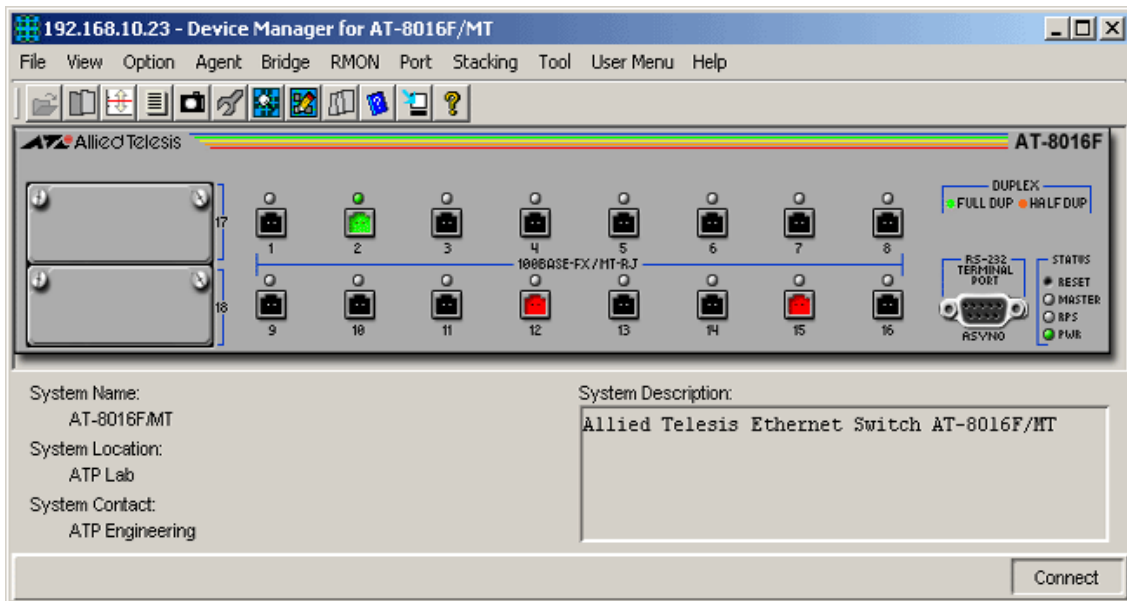
## Main Window



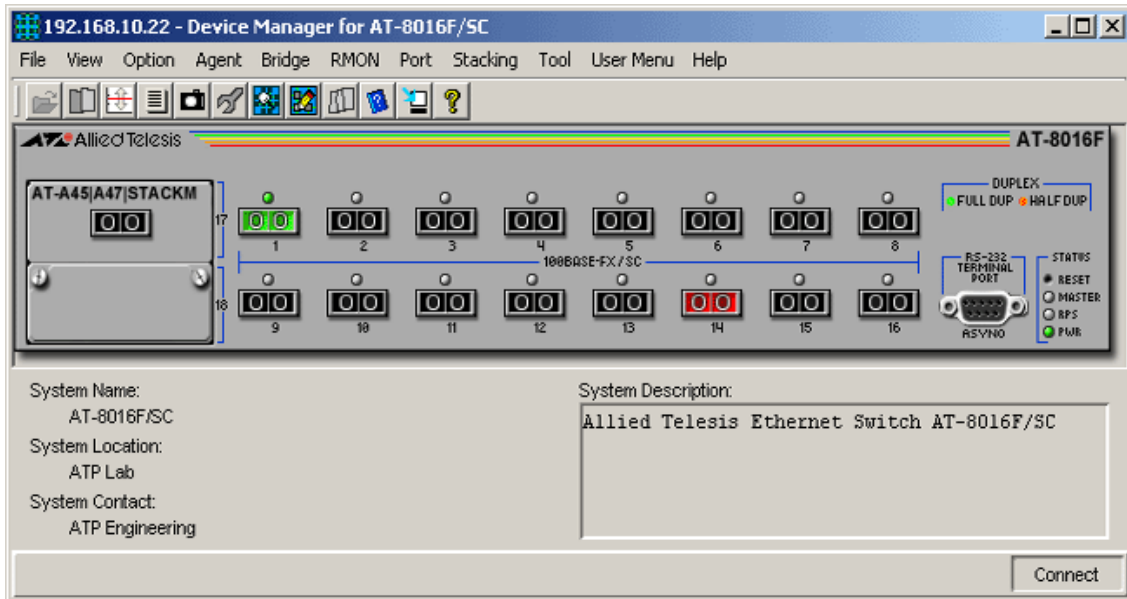
AT-8012M



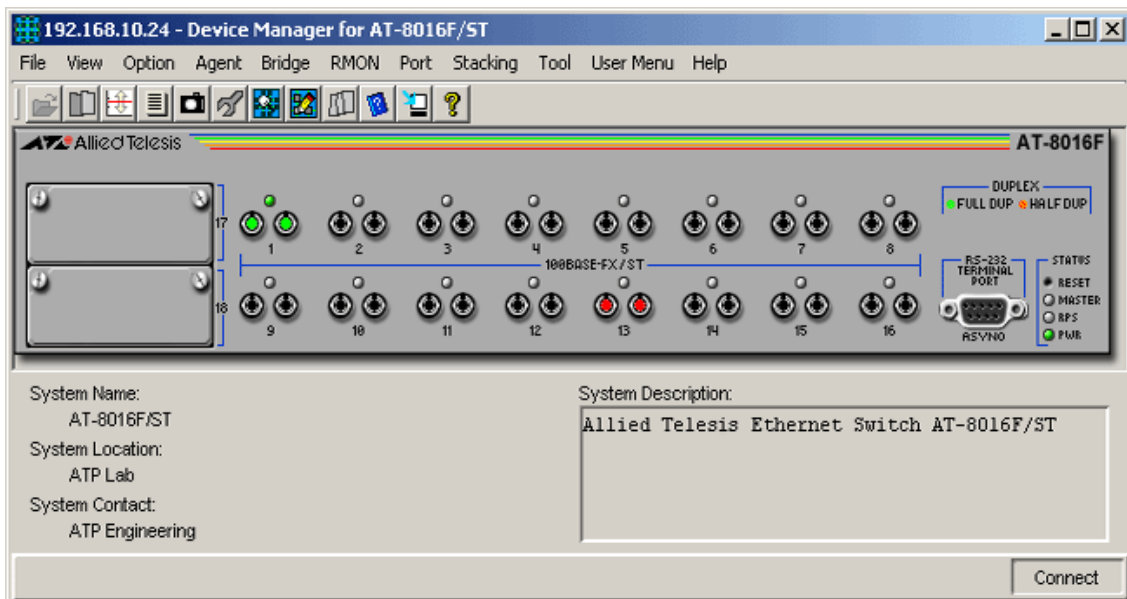
AT-8012M-QS



AT-8016F/MT

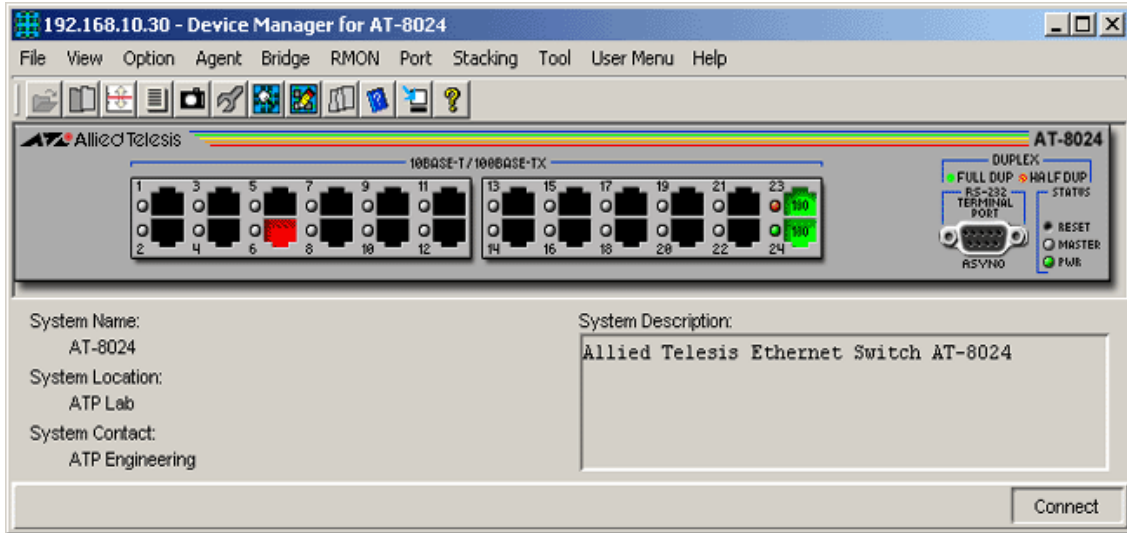


AT-8016F/SC

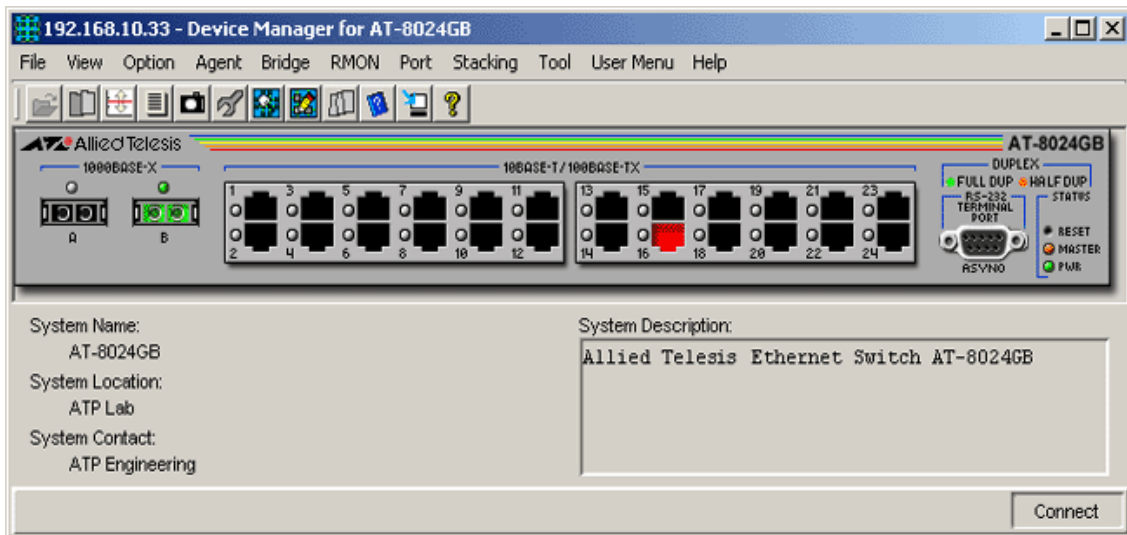


AT-8016F/ST

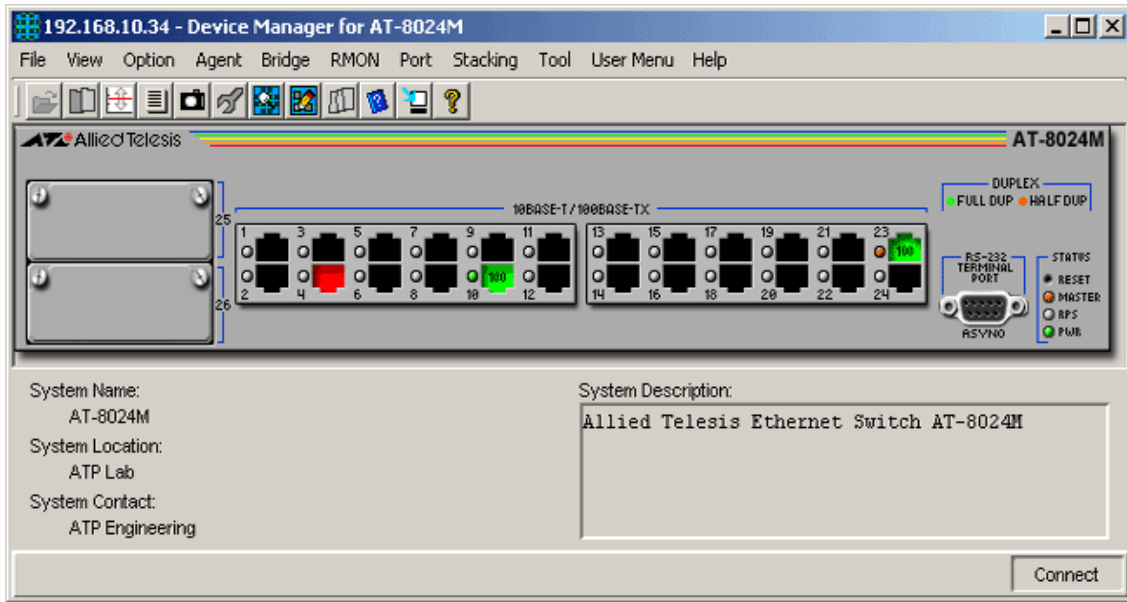




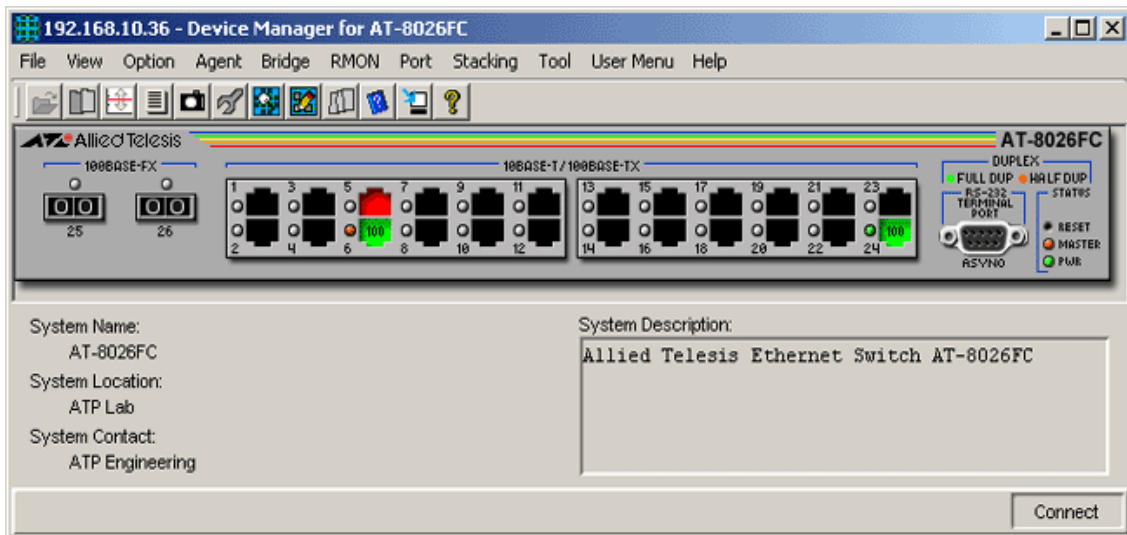
AT-8024



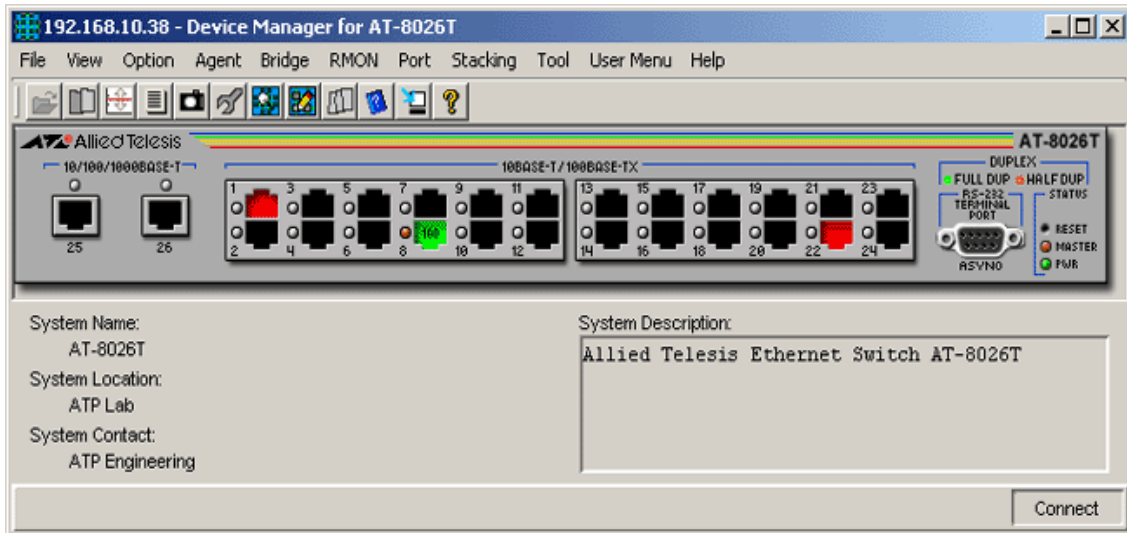
AT-8024GB



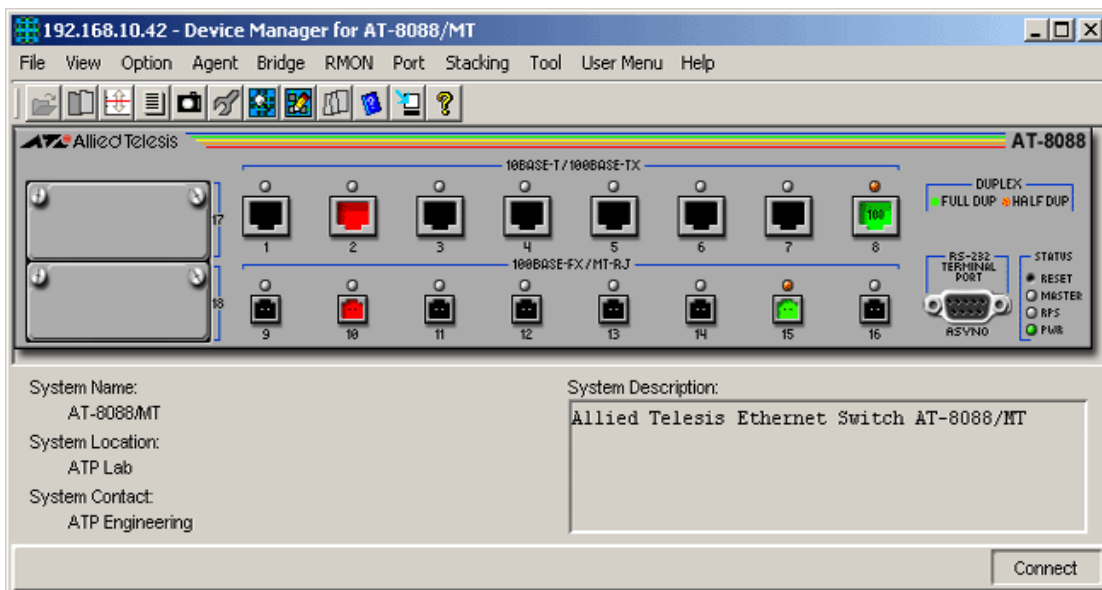
AT-8024M



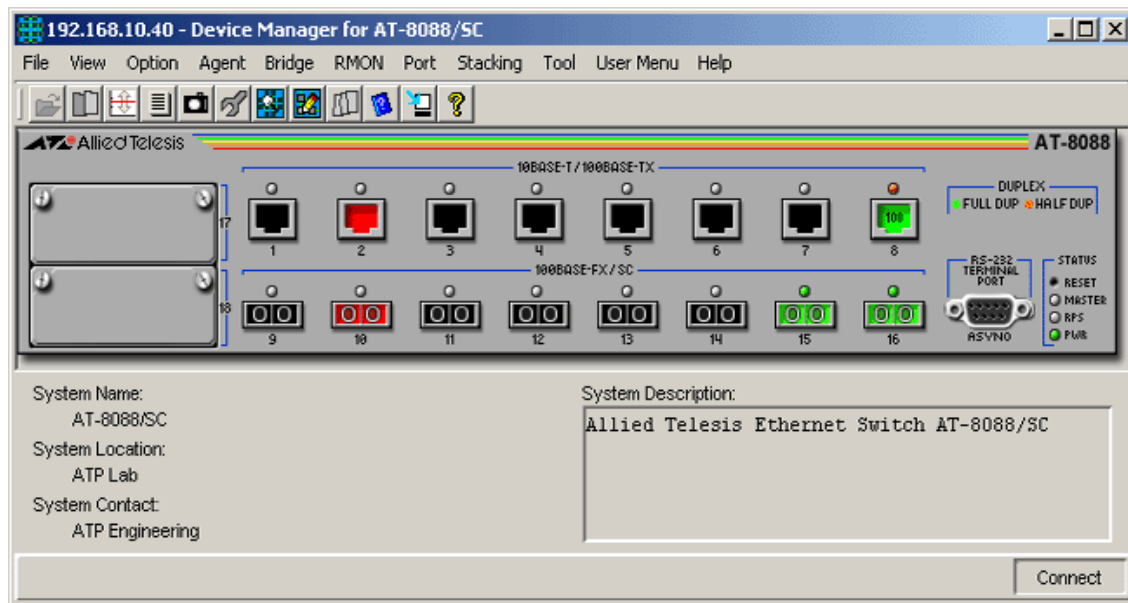
AT-8026FC



AT-8026T



AT-8088/MT



AT-8088/SC

### Device Manager LEDs for AT-8000 Series

LED	State	Description
PWR	Green	The switch is receiving power.
MASTER	Orange	The switch is the master switch of an enhanced stack.
	Gray	The switch is a slave switch or is not a member of an enhanced stack.
DUPLX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - Please refer to [Uplink Modules](#) for the operations and behavior of the expansion modules installed on these devices.

**Note** - The current firmware version does not allow Device Manager to support the RPS LED.

**Note** - When connecting to a slave switch, Device Manager does not automatically replace the master switch image in the main window with the slave switch image. To view the slave switch image, click on the Refresh option under the Agent menu.

**Note** - Device Manager will detect a loss of connection between an AT-8024GB and an AT-9410GB when the uplink port on both devices are set to the same speed and mode.

**Note** - Connection between an AT-8024GB and an AT-8324 can only be established if the uplink ports on both devices are configured to auto-negotiate.

**Note** - Setting the 'Active Protocol Version' to 'STP' and 'Spanning Tree Status' to 'enabled' will set the Port State parameter of disabled ports to 'blocking'. As a result, port images for disabled ports will turn yellow.

**Note** - Setting the 'Active Protocol Version' to 'RSTP' and 'Spanning Tree Status' to 'enabled' will set the Port State parameter of inactive ports and disabled ports to 'blocking'. As a result, port images for inactive ports and disabled ports will turn yellow.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Attempting to set the System Contact, System Name, and System Location parameters to NULL will result in a general error. However, the parameters will still be temporarily set to NULL. Once the switch is restarted, the original values will be restored.

**Note** - The current firmware version accepts up to 40 characters for the System Contact, System Name and System Location parameters. However, specifying a value that is exactly 40 characters in length will result in an error message. This error message may be ignored as the value will still be set successfully.

### *Firmware Info*

Displays firmware version.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

**Note** - The current firmware version does not allow the Default Domain Name and the DNS Server parameters to be configured.

### *Manager Address Info*

Displays the IP address of the management station.

### *Device Info*

Displays general information about the switch.

### *MAC Address Table*

Displays a list of static MAC addresses configured on the switch.

**Note** - MAC Address Table entries created through a local or telnet management session will not be visible to Device Manager until the device is restarted.

### *Reset*

Resets the switch.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## **Bridge Menu**

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

**Note** - AT-8016F/xx: The current firmware version may, at times, return duplicate Forwarding Database table entries.

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

**Note** - The current firmware version accepts values in the range [10-1000000] inclusive for the Aging Time parameter.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - The current firmware version accepts values in the range [0-65535] inclusive for the Priority parameter regardless of the active spanning tree protocol version.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

### *Statistics*

Displays traffic statistics in the network segment attached to each port.

### *History Control Table*

Displays the RMON History table.

**Note** - The current firmware version does not support the "historyControlTable" MIB object of RFC1757. As a result, Device Manager displays the error message "Failed to get MIB data." when the History Control Table option is selected from the RMON menu.

### *Alarm Table*

Displays the RMON Alarm table.

### *Event Table*

Displays the RMON Event table.

### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Error Statistics*

Displays error statistics.

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - L3 Models: The current firmware version does not allow the Port Speed and Port Duplex parameters to be configured to the desired port speed and duplex

mode. As a result, the speed label that will be displayed on the port image and its corresponding DUP LED will depend on the actual speed and duplex mode detected by the device.

**Note** - Valid MIB Set values for the Port Flow Control and Port Back Pressure parameters are 'disable' and 'enable'. Attempting to set these parameters to 'unknown' will cause them to be set to 'enable'.

**Note** - The Port CoS/QoS Priority and Port STP State parameters are not applicable to the AT-9400 series and should be ignored.

**Note** - AT-94xxTs/XP: The current firmware version returns the value 'unknown' for the Port Speed parameter of the XFP ports.

**Note** - AT-94xxTs/XP: The Port Speed and Mode parameter of the XFP ports has a fixed value of 'auto sense' and cannot be configured.

**Note** - The Port MDIO parameter is not applicable to the AT-9408LC/SP.

#### *Spanning Tree Info*

Displays the port's spanning tree parameters.

**Note** - Setting a port's Port parameter to 'disabled' does not automatically set the Port State parameter under Detail Info to 'disabled'. As a result, the port's image may not turn red as expected.

**Note** - The current firmware version accepts values in the range [0-255] inclusive for the Port Priority parameter regardless of the active spanning tree protocol version.

**Note** - The current firmware version accepts values in the range [0-65535] inclusive for the Port Path Cost parameter regardless of the active spanning tree protocol version.

#### *Enable*

Enables the port.

**Note** - Under the Sun Solaris platform, the Device Manager application may terminate abnormally if multiple ports have been selected and each dialog box with the message "May I set 'atiswitchPortState.n' to up" is clicked one after the other.

#### *Disable*

Disables the port.

**Note** - Under the Sun Solaris platform, the Device Manager application may terminate abnormally if multiple ports have been selected and each dialog box with the message "May I set 'atiswitchPortState.n' to down" is clicked one after the other.

#### *Port Mirroring*



Displays port mirroring parameters and allows configuration of port mirroring state, source, and destination.

**Note** - Valid MIB Set values for the Mirroring Destination Port parameter should range from 0 to 24. However, the current firmware version allows the user to enter values up to 65535. Attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - The current firmware version does not allow the Port Mirroring Status parameter to be set to 'receive' and 'transmit'. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - By default, the Port Mirroring Status parameter is set to 'disabled' and the Mirroring Destination Port parameter is set to 0. From this default state, the Port Mirroring Status parameter can be set to 'both' successfully. However, to set the Port Mirroring Status parameter back to 'disabled', the Mirroring Destination Port parameter must be set to a non-zero value.

**Note** - Any change made to the Mirroring Source Ports parameter while the Mirroring Destination Port parameter is set to 0 will take effect internally but will not be reflected in the MIB variable window. To see the change reflected in the MIB variable window, the Mirroring Destination Port parameter should be set to a non-zero value.

## Stacking Menu

From the Stacking menu, you can perform enhanced stacking from any AT-8000 Series master switch.

### *Stacking Info*

Displays information about the switch's mode. This is also the menu where you can perform enhanced stacking.

**Note** - For the Stack Switch Model parameter, additional characters appear after the model name for discovered AT-8524M, AT-9424T/SP and AT-9424T/GB devices.

## Expansion Module Notes

- Device Manager cannot distinguish between the AT-A45/xx, AT-A47, and AT-STACKM expansion modules. All are displayed with the same GIF image.
- When both the AT-A45 and AT-A46 expansion modules are present on a device, the AT-A45 port image may show up as green and its Port Speed parameter may reflect the value "1 Gbps" even if there is no connection established on the port. To

reflect the correct port image color and port speed, restart the device. This applies to the following devices:

- AT-8016F/xx
  - AT-8024M
  - AT-8088/xx
- 
- The Spanning Tree Protocol (STP) does not work for the AT-A46 expansion module when it is installed on an AT-8016F/ST device. As a result, the Port State parameter of the AT-A46 expansion module port will never be set to 'blocking' and the port image will never turn yellow.
  - Connection between an AT-A47 expansion module port that is configured to operate at 1Gbps full duplex and a port on another device can only be established if the port on the other device is configured to auto-negotiate.
  - For the AT-A47 expansion module, Device Manager will only display the AT-A45/AT-A47/AT-STACKM shared GIF image if a GBIC module is present in the GBIC slot.
  - By default, the Port Speed and Mode parameter of the AT-A47 expansion module port is set to 'auto sense'. From this mode, the Port Speed and Mode can only be changed to '1Gbps full-duplex'. However, once set to '1Gbps full-duplex', it can no longer be set to 'auto sense'.

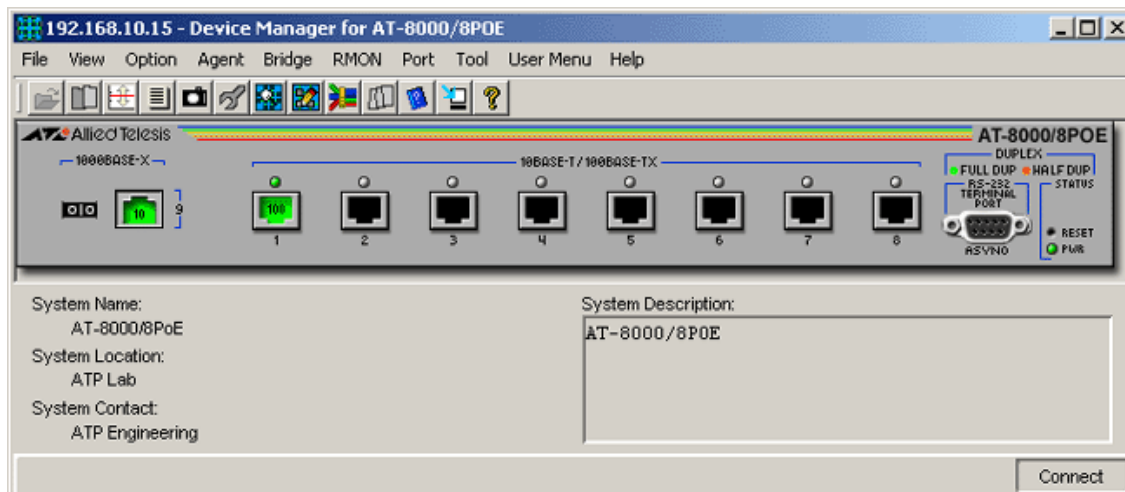
## AT-8000/8POE

This section describes Device Manager menus and operations specific to the AT-8000/8POE switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

### Main Window



AT-8000/8POE

Device Manager LEDs for AT-8000/8POE		
LED	State	Description
PWR	Green	The switch is receiving power.
DUPLX	Green	The port is operating at full-duplex mode.
	Orange	The port is operating at half-duplex mode.

**Note** - The current firmware version does not allow Device Manager to determine whether a port is enabled or disabled. As a result, port images will remain black even if they are actually disabled.

**Note** - The current firmware version does not allow Device Manager to detect the presence or absence of an SFP module in the SFP slot. As a result, the SFP slot on the device image will always show an SFP image regardless of whether or not an SFP module is physically present in the slot.

**Note** - Status information for port 9 will always be reflected on both the RJ-45 port image and the SFP port image regardless of whether it is the RJ-45 or the SFP port that is actually in operation. However, if Device Manager detects that the established link speed is less than 1 Gbps, only the RJ-45 port image will turn green.

**Note** - When Global RSTP is enabled, the current firmware version sets the Port State parameter of inactive ports to 'blocking'. As a result, expect port images for inactive ports to turn yellow in Device Manager.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version accepts anywhere from 1 up to 64 characters for the System Contact, System Name and System Location parameters. NULL values are not accepted.

### *Firmware Info*

Displays firmware version.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *Manager Address Info*

Displays the IP address of the management station.

**Note** - The current firmware version does not allow the Trap Destination IP Address parameters to be configured.

### *DHCP Info*

Displays DHCP information including the DHCP System Group and DHCP Timer Group.

### *Reset*

Resets the switch.

*Telnet*  
Starts a Telnet connection to the switch.

*WEB Browser*  
Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the spanning tree status.

*Forwarding Database*  
Displays the Forwarding Database table as returned by the device.

*Discard/Aging Time Info*  
Displays information about the device's aging time.

*Spanning Tree Info*  
Displays spanning tree parameters such as priority and cost.

**Note** - Values entered for the Root Maximum Aging Time, Root Hello Time and Root Forward Delay Time parameters must be multiples of 100. Values that are not multiples of 100 will be automatically rounded down to the nearest hundreds.

*Statistics*  
Displays statistics about frames received/transmitted on the switch's ports.

*Basic Bridge Info*  
Displays basic bridge information such as the LAN ID, bridge address, number of ports and the bridge type.

*Bridge Port Info*  
Displays basic bridge information on a per port basis such as the LAN ID, port number, circuit, delay exceeded discards and MTU exceeded discards.

**Note** - The current firmware version returns a NULL value for the Circuit parameter.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

### Statistics

#### Standard

Displays traffic statistics in the network segment attached to each port.

**Note** - To collect statistical data on an interface, do the following using a MIB browser tool that allows you to issue an SNMP Set request on a specific table element:

- Set the *etherStatsStatus* (1.3.6.1.2.1.16.1.1.1.21) object to "createRequest(2)"
- Set the *etherStatsDataSource* (1.3.6.1.2.1.16.1.1.1.2) object to the OID of the Ethernet interface to monitor (e.g. 1.3.6.1.2.1.2.2.1.1.1 - Port 1)
- Set the *etherStatsStatus* object to "valid(1)"

#### Additional Info

Displays additional traffic statistics in the network segment such as frames received/sent, collisions, broadcast frames and multicast frames.

**Note** - The Deferred Transmissions parameter is not applicable to the AT-8000/8POE and should be ignored.

#### Error

Displays error statistics in the network segment such as CRC errors, alignment errors, bad frames received late collisions and total transmit errors.

### History Control Table

Displays the RMON History table.

**Note** - To maintain a history of statistics taken at particular intervals for an interface, do the following using a MIB browser tool that allows you to issue an SNMP Set request on a specific table element:

- Set the *historyControlStatus* (1.3.6.1.2.1.16.2.1.1.7) object to "createRequest(2)"
- Set the *historyControlDataSource* (1.3.6.1.2.1.16.2.1.1.2) object to the OID of the Ethernet interface for which historical data will be collected (e.g. 1.3.6.1.2.1.2.2.1.1.1 - Port 1)
- Set the *historyControlStatus* object to "valid(1)"

### Alarm Table

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

##### *Standard*

Displays port statistics such as the number of packets received and transmitted on the port, bytes received and transmitted on the port and port status.

**Note** - The current firmware version returns a NULL value for the Specific Media MIB parameter.

##### *Additional Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port and port status.

**Note** - The Deferred Transmissions parameter is not applicable to the AT-8000/8POE and should be ignored.

##### *Error Statistics*

Displays error statistics.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The current firmware version does not return the correct value for the Port State parameter. It also does not allow the parameter to be configured.

**Note** - The Port Flow Control and Port QoS Priority parameters are not applicable to the AT-8000/8POE and should be ignored.

#### *Spanning Tree Info*

Displays the port's spanning tree parameters.

#### *Enable*

Enables the port.

*Disable*

Disables the port.

*Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source and destination.

*IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

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AT-8000/8POE



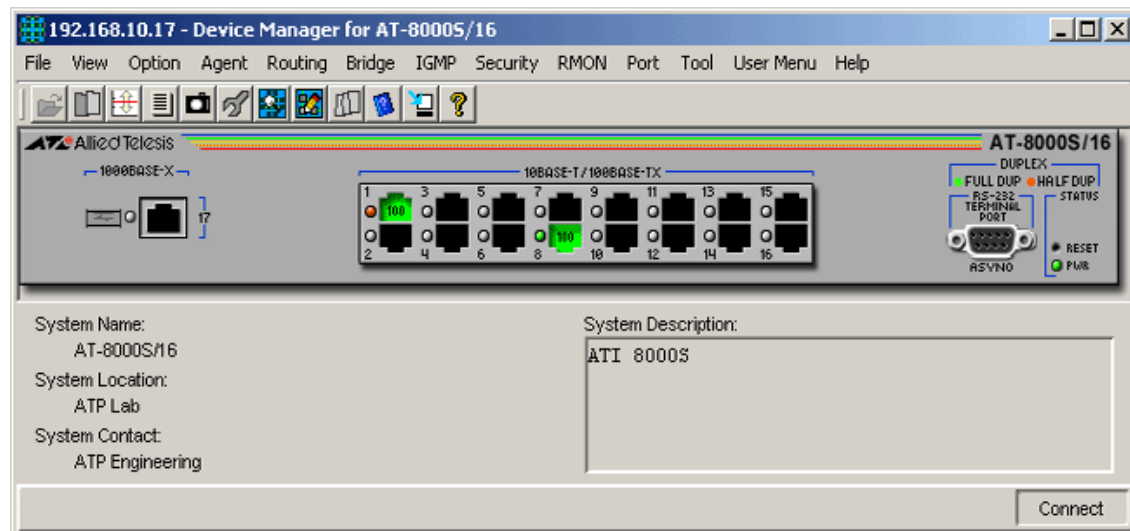
## AT-8000S Series

This section describes Device Manager menus and operations specific to the AT-8000S Series.

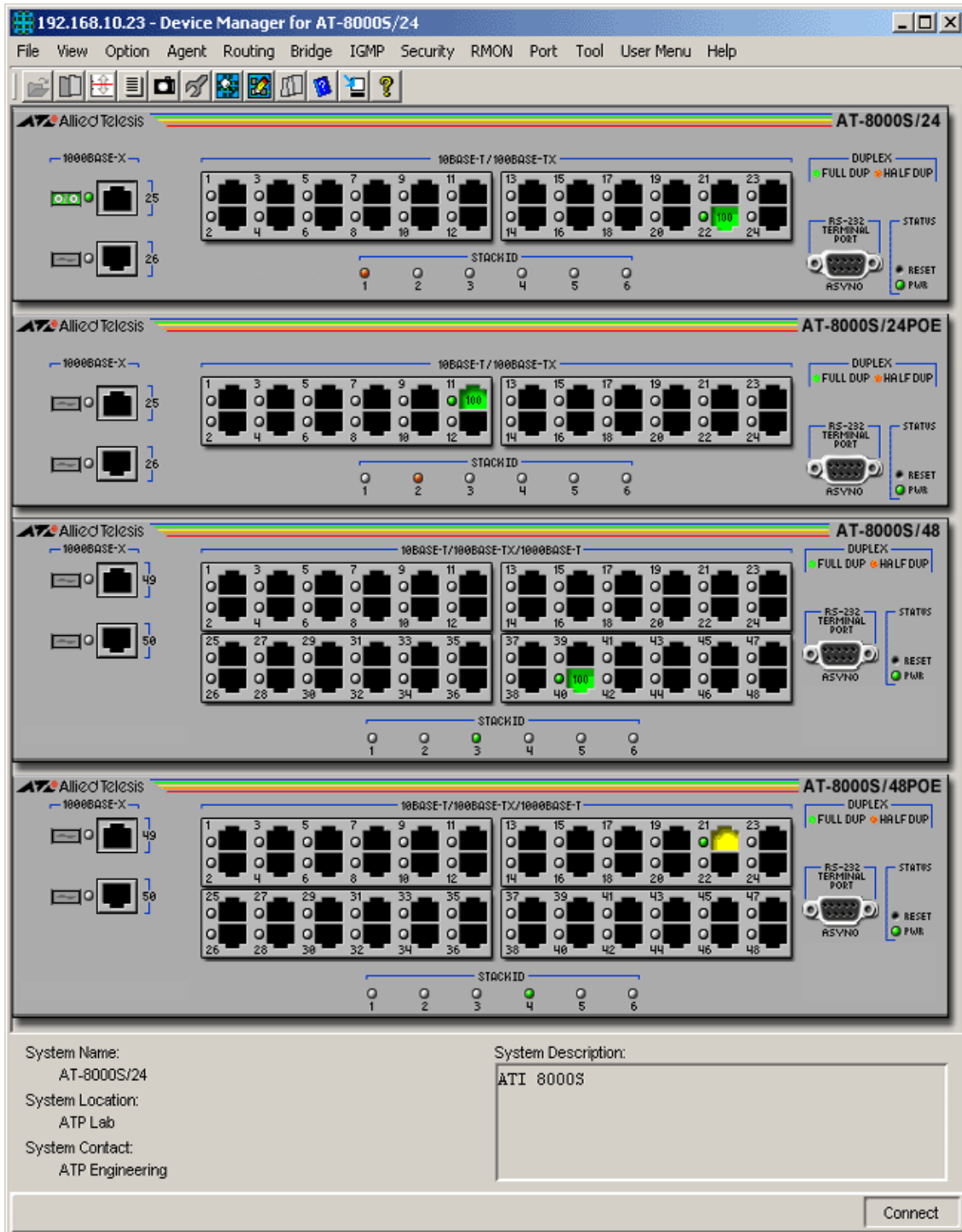
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [IGMP Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-8000S/16



System Name: AT-8000S/24

System Location: ATP Lab

System Contact: ATP Engineering

System Description: ATI 8000S

Connect

### AT-8000S/24, AT-8000S/48 and POE Models

The AT-8000S/24, AT-8000S/24POE, AT-8000S/48 and AT-8000S/48POE can be combined to form a single stack of up to 6 units.

Device Manager LEDs for AT-8000S Series		
LED	State	Description
PWR	Green	The switch is receiving power.
STACK ID	Orange	The stacked unit is either the Stacking Master or the Backup Master.
	Gray	The switch is a set to standalone mode.
	Green	The stacked unit is a slave switch.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - When multiple units of the AT-8000S series are stacked together, port numbering is continuous based on the Box ID.

- Box ID 1 - 1 to 54
- Box ID 2 - 55 to 108
- Box ID 3 - 109 to 162
- Box ID 4 - 163 to 216
- Box ID 5 - 217 to 270
- Box ID 6 - 271 to 324

This numbering scheme assumes that a unit can have a maximum of 54 ports.

Combo ports on the AT-8000S/24 and AT-8000S/24POE devices are assigned port numbers 49 and 50.

**Note** - The current firmware version does not allow Device Manager to detect the presence of an SFP module in any of the SFP slots unless there is an active connection on the SFP ports. As a result, SFP images will appear on the device panel only if there is an established connection on the physical SFP ports.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version accepts up to 160 characters for the System Name parameter.

#### *Device Info*

##### *General Info*

Displays common management information.

##### *Active Software File*

Displays the currently available images on the flash.

#### *Physical Description*

##### *Basic Info*

Displays the number of stack units.

##### *Module Info*

Displays module information for each unit in the system.

##### *Port Attributes*

Displays port information.

##### *Stack Info*

Displays information about the stacked devices.

##### *Stack Active Unit ID*

Displays the current unit ID of the device after reset.

**Note** - AT-8000S/16: The current firmware version allows the Active Unit ID After Reset parameter to be configured but the value is not saved after it is rebooted.

##### *Power Supply Info*

Displays information about the power supply and redundant power supply.

##### *Fan Info*

Displays fan status.

##### *Unit General Info*

Displays the device's software versions.

**Note** - The current firmware version accepts up to 160 characters for the Serial Number and Asset Tag parameters but truncates them to 31 and 16 characters respectively.

**Note** - The current firmware version is unable to display any value for the Service Tag parameter.

#### *Unit Environment Info*

Displays the device's main power supply and temperature status.

#### *Software Packages*

Displays the device's software packages.

### *Management Info*

#### *General Management*

Displays common management information.

#### *Flash File System*

##### *Basic Info*

Displays the flash file size of the device.

##### *File List*

Displays the device's list of files.

**Note** - The current firmware version does not allow the Row Status parameter to be configured.

### *Jumbo Frames*

Displays the current jumbo frames status.

### *Management ACL*

#### *Basic Info*

Displays basic information about the management access list.

**Note** - The current firmware version does not allow the Active List Name parameter to be configured.

#### *Access Lists*

Displays information about access lists.

### *Mid-level Management*

#### *Alarm Options*

Displays information about alarm options.

**Note** - The current firmware version does not allow the Alarm Enabling parameter to be configured.

#### *MIB Tree*

Displays information about the device's MIB tree.

### *Tuning*

#### *Agent Diagnostics*

Displays diagnostic information about the agent.

**Note** - The current firmware version returns a 'noSuchName' value for the Location parameter.

#### *General Tuning*

Displays general tuning information.

**Note** - The current firmware version accepts values in the range [0-255] inclusive for the Debug Level parameter.

#### *Max Entries Tuning*

Displays information about the maximum entries in tuning.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Max IP Next Hop Entries After Reset
- Max IP Prefixes After Reset
- Max IP ECMP Entry After Reset
- Max IP Interfaces After Reset

#### *TCP Tuning*

Displays the memory pool size for tcp tuning.

#### *Radius Tuning*

Displays the memory pool size for radius tuning.

#### *Syslog Tuning*

Displays the current cache size and its size after reset.

#### *Management ACL Tuning*

Displays the current number of access rules and the number after reset.

#### *SSH Tuning*

Displays the current number of the maximum number of authorized keys and its value after reset.

#### *Terminal Sessions*

Displays the current number of maximum sessions and its value after reset.

#### *DNS Client Tuning*

Displays the maximum values of the cache entries and the negative cache entries before and after reset.

#### *Tuning Parameters*

Displays the current value, value after reset, default value, minimum and maximum value of the different tuning parameters.

#### *Host Parameters*

Displays the corresponding value of the different host parameters.

#### *Terminal Debug Mode*

Displays the terminal debug mode password.

**Note** - The current firmware version does not allow the Terminal Debug Mode Password to be configured.

#### *Telnet*

##### *Basic Info*

Displays the basic telnet information.

##### *Telnet Sessions*

Displays the login time, client ip address and telnet session status.

##### *CLI Info*

Displays information if the file is enabled or not.

##### *LCLI Info*

Displays information about the device's Telnet sessions and SSH sessions if enabled or not.

**Note** - Valid MIB Set values for the History Size, Telnet History Size and SSH History Size parameters are in the range [10-160] inclusive. Attempting to set these parameters to a value outside of the valid range will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *RS-232*

Displays the configuration of the baud rate of the device.

#### *Web*

Displays the configuration about the HTTP and HTTPS Port the device used.

#### *Date and Time*

##### *Time Synchronization*

Displays the configuration about the device's date/time and time zone.

**Note** - The current firmware version does not allow the Managed Time and Managed Date parameters to be configured.

**Note** - Device Manager always treats objects of type OCTET STRING as a sequence of bytes in hexadecimal format and does not convert them to plain text format when necessary. As a result, the DST End and the DST Start parameters will neither be readable nor configurable.

**Note** - Valid MIB Set values for the DST Offset parameter should range from 1 to 1440. However, the current firmware version allows the user to enter values in the range [-2147483648 to 2147483647] inclusive. Attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e., 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

#### *SNTP/NTP Client Config*

Displays information about SNTP/NTP client configuration.

**Note** - Valid MIB Set values for the Polling Interval parameter should range from 60 to 86400. However, the current firmware version allows the user to enter values in the range [-2147483648 to 2147483647] inclusive. Attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e., 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

#### *SNTP Config*

Displays information about SNTP client configuration.

**Note** - The current firmware version returns a 'noSuchName' value for the Broadcast Poll State and Anycast Poll State parameters.

#### *Broadcast Mode*

Displays information about broadcast mode per interface.

#### *SNTP Server Info*

Displays information about trusted SNTP servers to be queried in unicast or broadcast mode.

#### *Authentication Keys*

Displays information about keys information for authentication of NTP packets.

### *System Log*

#### *Basic Info*

Displays information and configuration of the device's log files.

**Note** - Setting the Clear Log File and Clear Cache parameters to a value other than 0 will delete the log file and clear the cache memory but the value used will not be retained.

#### *Event Log*

Displays information about events sent to the system log file.

#### *Error Log*

Displays information about errors registered to the system cache.



#### *Syslog Device*

Displays information about Syslog diagnostic messages.

**Note** - Device Manager does not handle 8-bit string parameters correctly. As a result, the Syslog Device Control parameter will display the string "00000000" and will not be configurable.

#### *Syslog Collector*

Displays the information to generate syslog messages to an aggregating agent or collector.

#### *Syslog Application*

Displays information about a managed entity that provides individual control over the severity level of the messages that it will generate.

**Note** - The current firmware version does not allow the Severity parameter to be configured.

#### *Reset*

Resets the switch.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's routing functions.

#### *IP*

##### *ARP Table*

Displays the ARP cache on the switch.

##### *Address Table*

###### *Standard*

Displays the list of IP interfaces on the switch.

###### *Additional Info*

Displays additional information about the address table.

**Note** - The current firmware version does not allow the IP Interface Owner parameter to be configured.

**Note** - The Backup Address parameter is not applicable to the AT-8000S module and should be ignored.

#### *Static Route Table*

Displays the IP static routing table.

**Note** - The current firmware version does not allow the Routing Type parameter to be set to 'local' for all models except the AT-8000S/I6. For the AT-8000S/I6, the Routing Type parameter cannot be set to 'remote.'

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

**Note** - The current firmware version does not allow the Forwarding Status parameter to be configured.

#### *ARP Table Config*

Displays configuration information about ARP.

#### *I/F Name-Address Translation*

Displays information about the IP interface's name translated to an IP interface address.

#### *TFTP*

Displays configuration information about the TFTP.

**Note** - The current firmware version does not allow the Get Config File parameter to be configured to receive image/config/boot files from a TFTP server.

**Note** - The current firmware version does not allow the Send Config File parameter to be configured to send config/image/boot files to a TFTP server.

### *UDP*

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP statistics.

### *TCP*

#### *Connection Info*

Displays TCP connection-specific information.

**Note** - The current firmware version does not allow the Connection Status parameter to be configured.

#### *TCP Statistics*

Displays TCP statistics.

## CIDR

### *Route Number*

Displays the number of valid CIDR entries.

### *Route Table*

Displays the CIDR routing tables.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Destination Port Number
- Routing Protocol MIB
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Destination Metric 5

**Note** - The current firmware version does not allow the Routing Type parameter to be set to 'local' for all models except the AT-8000S/I6. For the AT-8000S/I6, the Routing Type parameter cannot be set to 'remote.'

## ICMP

### *ICMP Statistics*

Displays ICMP Statistics.

### *Error Messages*

Displays the variable that controls the ability to generate ICMP error messages.

## DNS Resolver

### *Resolver Config*

Displays information about the DNS client.

**Note** - The current firmware version does not allow the Reset parameter to be set to "reset".

### *Basic Counters*

Displays information about basic DNS counters.

### *Counters by OpCode*

Displays information about the current count of resolver queries and answers.

### *Counters by Response Code*

Displays information about the current count of responses to resolver queries.

### *Lame Delegation Overflows*

Displays information about number of times the resolver attempted to add an entry to the lame delegation table.

#### *Cache Info*

Displays information about a collection of objects providing access to and control of a DNS resolver's cache.

#### *Negative Cache Info*

Displays information about a collection of objects providing access to and control of a DNS resolver's negative response cache.

#### *Additional Counters*

Displays information about a collection of objects providing further instrumentation applicable to many but not all DNS resolvers.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Aging Time Info*

Displays information about the device's aging time.

#### *Spanning Tree Info*

##### *STP*

##### *Standard*

Displays the spanning tree information such as the STP version and path cost.

##### *Additional Info*

Displays additional STP information like supported type.

##### *MSTP*

##### *Basic Info*

Displays the basic information about MSTP.

##### *Instance Info*

Displays information that contains Mstp instance specific information for the Multiple Spanning Tree Protocol.

##### *VLAN Info*

Displays information about the allocation of vlans to groups.

### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

### *Basic Bridge Info*

Displays basic bridge information.

### *Bridge Port Info*

Displays statistics about frames received/transmitted on the switch port.

**Note** - The current firmware version does not allow the Number of Traffic Class parameter to be configured.

### *802.1p*

#### *Device Capabilities*

Displays information on the device capabilities.

#### *Port Priority Group*

Displays information about the port priority.

#### *Traffic Class*

Displays information about the traffic class and traffic class priority.

**Note** - Valid MIB Set values for the Traffic Class parameter are in the range [0-3] inclusive. Attempting to set this parameter to a value outside of the valid range will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *MAC Table Info*

Displays MAC table information.

## **IGMP Menu**

From the IGMP menu, you can view and edit IGMP information such as IGMP queries and reports sent between devices, VLAN's IGMP functions and interfaces on which IGMP is enabled.

### *MAC Multicast Info*

Displays configurations of the enabling/disabling multicast.

### *IGMP Config*

Displays configurations of the Internet Group Management Protocol function.

### *VLAN Info*

Displays configurations of the VLAN information.

## Security Menu

From the Security menu, you can view and edit different security and authentication protocols SSL, SSH, and port-based authentication.

### *Authentication/Authorization/Accounting*

#### *Basic Info*

Displays basic information about Authentication/Authorization/Accounting.

**Note** - The current firmware version does not allow the EAP Current Method List parameter to be configured.

#### *Method Lists*

Displays information about all method lists.

**Note** - The current firmware version does not allow the Row Status parameter to be configured.

#### *Lines*

Displays information about all lines, their passwords and their authorization levels.

**Note** - The current firmware version does not allow the Password, Row Status and Password Valid Time parameters to be configured.

**Note** - The current firmware version is unable to display any value for the Password Expiry Date parameter.

#### *Local Users*

Displays information about all usernames, their passwords and their authorizations.

**Note** - The current firmware version does not allow the User Password, Row Status and Password Valid Time parameters to be configured.

**Note** - The current firmware version is unable to display any value for the Password Expiry Date parameter.

#### *Authenticated Users*

Displays all the current users that have been authenticated.

#### *EAP Method Lists*

Displays information about all EAP method lists.

**Note** - The current firmware version does not allow the Row Status parameter to be configured.

### *Port-based Authentication*

#### *PAE Port Info*

Displays the system level information for each port supported by the Port Access Entity.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Authenticator PAE Info*

Displays configuration objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - The current firmware version does not allow the Administrative Controlled Directions and Key Transmission Status parameters to be configured.

#### *Authenticator PAE Statistics*

Displays statistics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Authenticator PAE Diagnostics*

Displays diagnostics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Authenticator PAE Session Statistics*

Displays session statistics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns a 'noSuchName' value for the following parameters:

- Port Number
- Received Octets
- Transmitted Octets
- Received Frames
- Transmitted Frames

**Note** - The current firmware version is unable to display any value for the User Name parameter.

### *RADIUS*

#### *Basic Info*

Displays basic RADIUS information.

#### *RADIUS Server Info*

Displays the IP address, UDP port number for authentication and accounting request, and current status of the RADIUS server.

**Note** - The current firmware version does not allow the Usage parameter to be set to 'wireless authentication'.

#### *Authentication Client Info*

Displays the number of RADIUS Access-Response packets received from unknown addresses and the identifier of the RADIUS authentication client.

**Note** - The current firmware version is unable to display any value for the Client ID parameter.

#### *Authentication Server Info*

Displays the list of RADIUS authentication servers with which the client shares a secret.

#### *Accounting Client Info*

Displays the number of RADIUS Access-Response packets received from unknown addresses and the identifier of the RADIUS accounting client.

**Note** - The current firmware version is unable to display any value for the Client ID parameter.

#### *Accounting Server Info*

Displays the list of RADIUS accounting servers with which the client shares a secret.

### TACACS+

#### *Basic Info*

Displays basic TACACS+ information.

#### *TACACS+ Server Info*

Displays information about TACACS+ server.

### Secure Shell

#### *SSH Server*

Displays information about the status of public key authentication and the type of regenerated host key.

**Note** - Configuring the Regenerate Host Key parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred" but a key will still be successfully generated.

#### *SSH Client*

Displays information about the user name ssh client will use and the value of the regenerated self key.



**Note** - The current firmware version accepts up to 60 characters for the User Name parameter.

**Note** - Setting the Regenerate Self Key parameter to "rsa" or "dsa" will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred". Connection with the AT-8000S device will be lost and the only way to re-establish connection will be to perform a manual reset.

**Note** - The current firmware version does not allow the Regenerate Self Key parameter to be set to 'rsa'.

#### *Secure Socket Layer*

##### *Basic Info*

Displays basic SSL information.

**Note** - The current firmware version does not allow the Certificate Save parameter to be configured.

##### *Certificate Generation*

Displays information about the generated keys and self signed certificates.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

##### *Export Certificate*

Displays information about the saved data from RAM and flash.

##### *Import Certificate*

Displays information about the copied external certificate of the device.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

**Note** - The current firmware version does not allow Device Manager to display Utilization information.

### *Interface Info*

#### *Standard*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The current firmware version does not allow the Promiscuous Mode parameter to be configured.

**Note** - The current firmware version returns a "noSuchName" value for the following parameters:

- Received Error Packets
- Transmitted Error Packets
- Transmitted Buffer Length
- Received Bytes (HC)
- Received Unicast Packets (HC)
- Received Multicast Packets (HC)
- Received Broadcast Packets (HC)
- Transmitted Bytes (HC)
- Transmitted Unicast Packets (HC)
- Transmitted Multicast Packets (HC)
- Transmitted Broadcast Packets (HC)

#### *Additional Info*

Displays additional information about the port's interface info.

### *Error Statistics*

#### *Standard*

Displays error statistics for the port.

**Note** - The Ethernet Chip Set parameter is not applicable to the AT-8000S series and should be ignored.

**Note** - The current firmware version returns a "noSuchName" value for the following parameters:

- Alignment Error Frames
- Multi Collision Frames
- SQE Test Errors
- Deferred Transmissions
- Excessive Collisions
- Internal MAC Transmit Errors
- Carrier Sense Errors
- Symbol Errors

#### *Additional Info*

Displays information about a table containing 64-bit versions of error counters.

**Note** - The current firmware version is unable to display any value for the Port Number and Alignment Error Frames (HC) parameters.

**Note** - The current firmware version returns a 'noSuchName' value for the Internal MAC Transmit Errors (HC) and Internal MAC Received Errors (HC) parameters.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Tagged Mode
- Default Priority
- Row Status
- Port Flow Control Config
- Port Speed
- Reactivate
- Combo Ethernet Config

**Note** - Device Manager does not handle 8-bit string parameters correctly. As a result, the Autonegotiation Capabilities Config parameter will display an unrecognizable value and will not be configurable. The Autonegotiation Capabilities Status and Remote Autonegotiation Capabilities parameters will also display unrecognizable values.

**Note** - The Physical Address Type parameter is not applicable to the AT-8000S series and should be ignored.

**Note** - The combo ports will not display the Port Context Menu on right-mouse click if logged-on in SNMPv3 mode using a user account with no read-write access to the Transceiver Type parameter.

## Spanning Tree Info

### STP

#### Standard

Displays the port's spanning tree parameters.

#### Additional Info

Displays a list of information maintained by every port about the Spanning Tree Protocol state for that port.

### MSTP

#### MSTI

Displays a list of information maintained by every pair <msti, port> about the Spanning Tree Protocol state for that pair.

#### CIST

Displays a list of information maintained by every port of the CIST.

### Enable

Enables the port.

### Disable

Disables the port.

### Port Lock

#### Basic Info

Displays basic information about port lock.

#### Interfaces Range

Displays information about port lock interfaces range.

### MAC Control

#### MAC Control Sublayer

Displays information about the MAC Control sublayer on a single ethernet-like interface.

**Note** - The current firmware version returns a 'noSuchName' value for the Unknown Opcodes Received and Unknown Opcodes Received (HC) parameters.

#### MAC Control PAUSE

Displays information about the MAC Control PAUSE function on a single ethernet-like interface.

**Note** - Valid MIB Set values for the PAUSE Config parameter are "disabled" and "enabledXmitAndRcv". Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version returns a "noSuchName" value for the Received Frames (HC) and Transmit Frames (HC) parameters.

### *Port Trunking*

#### *Basic Info*

Displays basic information about port trunking.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

#### *Balancing Criteria*

Displays information about Aggregate Index.

**Note** - The current firmware version does not allow the Balance Layer, Used Addresses and Broadcast Type parameters to be configured.

#### *Aggregator Info*

Displays information about every Aggregator that is associated with this system.

**Note** - Valid MIB Set values for the Actor Administrative Key parameter are in the range [1 - 65535] inclusive. Attempting to set this parameter to a value outside of the valid range will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Aggregator Port List*

Displays Link Aggregation Control information for every Aggregation Port associated with this device.

#### *Aggregation Port Info*

Displays a list of Link Aggregation Control configuration parameters for each Aggregation Port on this device.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - Device Manager does not handle 8-bit string parameters correctly. As a result, the Actor Administrative Status and Partner Administrative Status parameters will display unrecognizable values and will not be configurable. The Actor Operational Status and Partner Operational Status parameters will also display unrecognizable values.

**Note** - The current firmware version does not allow the Actor Administrative Key and Partner Administrative System ID parameters to be configured.

### *Storm Control*

#### *Basic Info*

Displays basic information about storm control.

*Storm Control Protection*

Displays information about the storm control protection per port.

**Note** - Only the Broadcast Enable and Multicast Enable parameters can be configured.

*Storm Control Group*

Displays information about group id for each supported frame type defined per port.

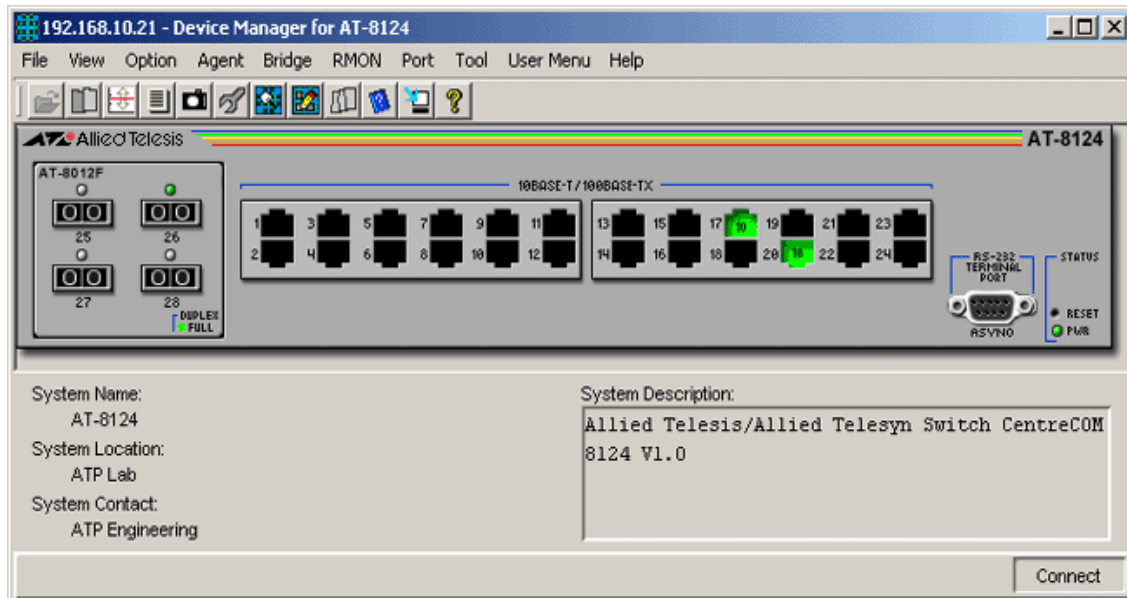
## AT-8124

This section describes Device Manager menus and operations specific to the AT-8124 switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-8124

### Device Manager LEDs for AT-8124

LED	State	Description
PWR	Green	The switch is receiving power.
DUPLEX	Green	The port is operating in full-duplex mode.
	Gray	The port is operating in half-duplex mode.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device or log into the CLI using telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Network Info*

Displays network-related information such as the device's IP address, and the default gateway address.

### *Firmware Info*

Displays the version of the software running on the managed device.

### *Manager Address Info*

Displays the management station's IP address.

### *Reset*

Resets the switch.

### *Hot Reset*

Performs a software reset. This takes less time than a Cold Reset.

### *Cold Reset*

Performs a hardware reset. This takes more time than a Hot Reset.

### *Telnet*

Connects to the switch's Telnet service.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

Displays the Forwarding Database table.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.



### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

**Note** - Since there may be a large quantity of RMON data, it may take some time for the information to appear.

### *Statistics*

Displays traffic statistics about the network segment attached to each port.

### *History Control Table*

Displays the RMON History table.

### *Alarm Table*

Displays the RMON Alarm table.

### *Event Table*

Displays the RMON Event table.

### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

### *Detail Info*

Displays port traffic statistics such as the number of frames received/transmitted on the port.

### *Error Statistics*

Displays error information.

### *Detail Status*

Displays detailed port information such as duplex mode.

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*Enable*

Enables the port.

*Disable*

Disables the port.

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AT-8124

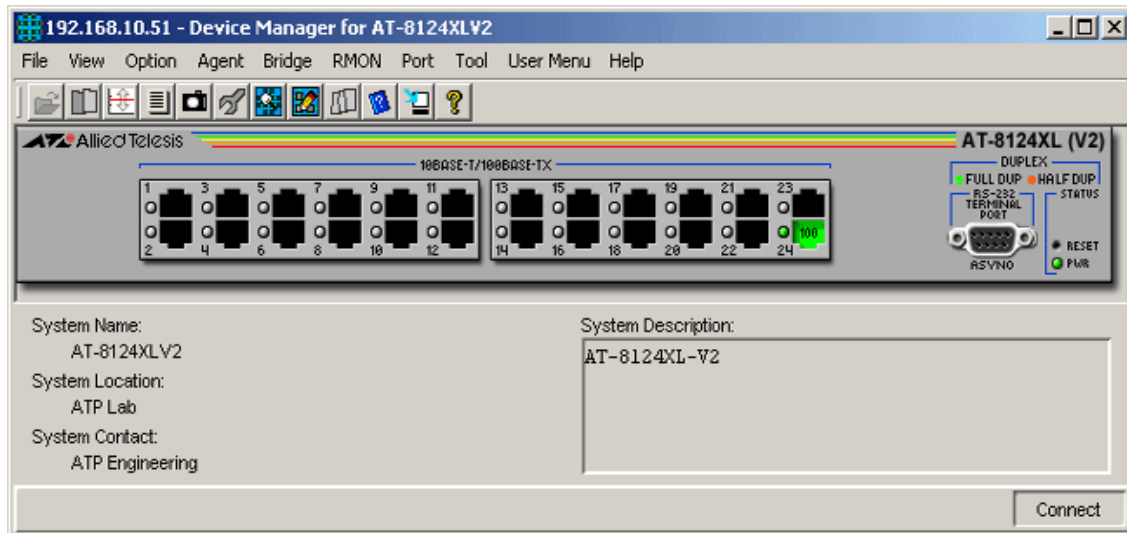
## AT-8124XL (V2)

This section describes Device Manager menus and operations specific to the AT-8124XL (V2) switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

### Main Window



AT-8124XL (V2)

#### Device Manager LEDs for AT-8124XL (V2)

LED	State	Description
PWR	Green	The switch is receiving power.
DUPLX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter up to 255 characters for the System Contact, System Name, and System Location parameters but truncates them to 64 characters. NULL values are not accepted.

### *Firmware Info*

Displays firmware version.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *DHCP Info*

Displays DHCP information including the DHCP System Group and DHCP Timer Group.

### *Manager Address Info*

Displays the IP address of the management station.

### *Reset*

Resets the switch.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

Displays the Forwarding Database table.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. All other values are ignored.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - Enabling/Disabling the Port STP Configuration parameter for one port enables/disables STP for all ports.

**Note** - Attempting to modify the Port Speed and Mode parameter from 'auto sense' to '1Gbps half-duplex' or '1Gbps full-duplex' will result in the following:

- An error message: "The error occurred with 'Set' operation. Error: gen Error"
- Port Speed and Mode parameter value changing to '100Mbps half-duplex'

**Note** - The current firmware version does not allow the Port Bridge ID parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - When a port is set to 'auto sense' and is connected to a half duplex port on another device, its corresponding Duplex LED on the device image turns green instead of orange.

**Note** - The current firmware version does not allow the Port Back Pressure parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

**Note** - The Port Transmit Pacing Configuration parameter is not applicable to the AT-8124XL (V2).

**Note** - The current firmware version does not allow the Port VLAN Tag Priority and the Port QoS Priority parameters to be configured. Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - Valid MIB Set values for the Port State parameter are 'enabled' and 'disabled'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

### *Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source, and destination.

### *IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

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AT-8124XL (V2)

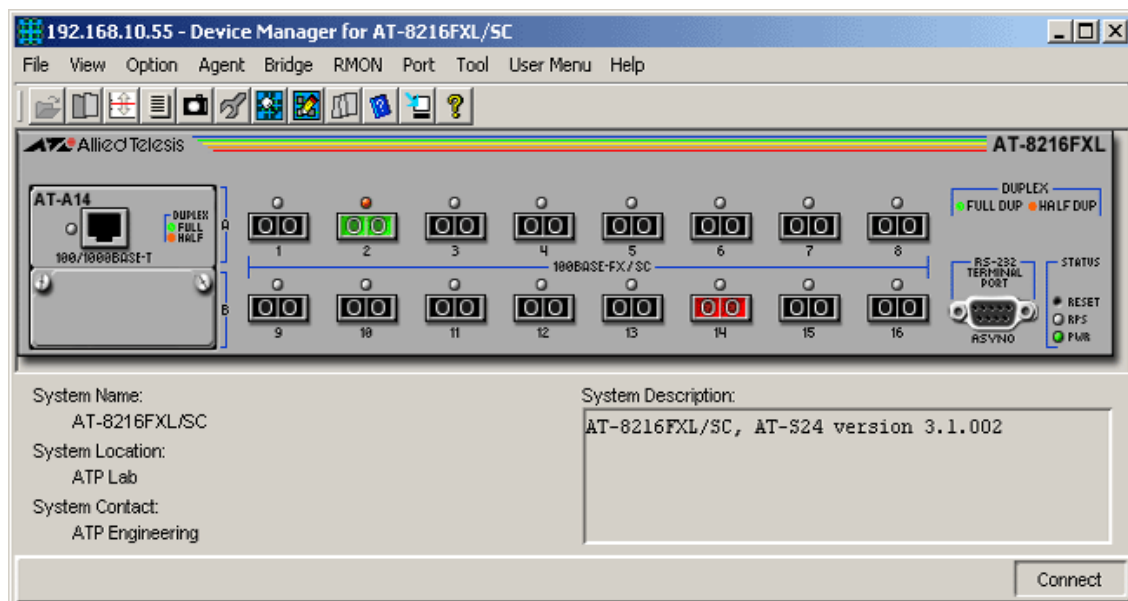
## AT-8200XL Series

This section describes Device Manager menus and operations specific to the AT-8216FXL/SC and AT-8224XL switches.

Topics:

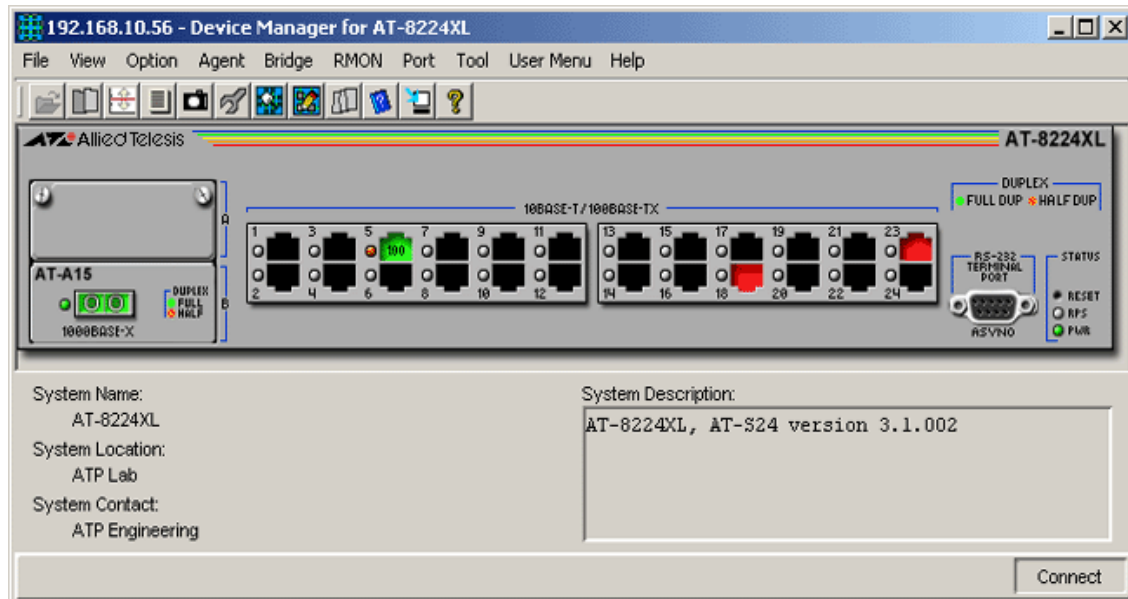
- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Expansion Module Notes](#)

## Main Window



AT-8216FXL/SC





AT-8224XL

Device Manager LEDs for AT-8200XL Series		
LED	State	Description
PWR	Green	The switch is receiving power.
RPS	Green	An optional redundant power supply is connected to the switch.
	Gray	There is no redundant power supply connected to the switch.
DUPLEX	Green	The port is operating at full-duplex mode.
	Orange	The port is operating at half-duplex mode.

**Note** - Please refer to [Uplink Modules](#) for the operations and behavior of the expansion modules installed on these devices.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version allows the user to enter up to 64 characters for the System Contact and the System Location parameters and up to 20 characters for the System Name parameter.

**Note** - The current firmware version appends a period '.' and the value of the Default Domain Name parameter to the value of the System Name parameter.

#### *Firmware Info*

Displays the firmware version of the switch.

#### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

#### *Manager Address Info*

Displays the IP address of the management station.

#### *Device Info*

Displays general information about the switch.

**Note** - The Security Action parameter has a fixed value of 'do nothing' and cannot be modified.

**Note** - The Security Configuration parameter has a fixed value of 'disabled' and cannot be modified.

**Note** - Valid MIB Set values for the HOL Configuration and Logging Configuration parameters are 'on' and 'off'. Attempting to set these parameters to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - Valid MIB Set values for the QoS Configuration parameter are:

- mode 1
- mode 2
- mode 3
- mode 4
- mode 5
- mode 6
- mode 7
- mode 8

Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

#### *DHCP Info*

Displays the DHCP information about the switch.

### *Diagnostics*

Displays the operating status of the switch's components such as power supply and system fans.

**Note** - The current firmware version returns 'non-supported' for the following parameters:

- Fan Speed 3
- 3.3V Power
- 2.5Va Power
- 2.5Vb Power
- 2V Power
- CPU Temperature

### *Reset*

Resets the switch.

### *Console Settings*

Displays the current settings of the console.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

**Note** - The current firmware version is unable to display the AT-8216FXL/SC device image in the Omega web management session interface.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Bridge Info*

Displays basic bridge information such as the LAN ID, bridge address, number of parts controlled by the bridging entity and the bridge type.

### *Forwarding Database*

Displays the Forwarding Database table.

**Note** - The current firmware version does not allow the VLAN Name parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Error Statistics*

Displays error statistics.

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The Port Flow Control parameter has a fixed value of 'not supported' and cannot be modified.

**Note** - When the Port Speed and Mode parameter of an AT-8224XL fixed port is set to 'auto sense' and the port is connected to a full duplex port on another device, its corresponding Duplex LED on the device image turns orange instead of green.

**Note** - The current firmware version allows active ports to be disabled. However, the disabled ports' Port Link State parameter retains the value 'on-line'.

**Note** - Valid MIB Set values for the Port State parameter are 'enabled' and 'disabled'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - Attempting to configure the Port Speed and Mode parameter of an AT-8216FXL/SC fixed port to '10Mbps half-duplex' or '10Mbps full-duplex' will automatically set it to '100Mbps half-duplex' or '100Mbps full-duplex' respectively.

**Note** - The following parameters are not applicable to the AT-8200XL Series:

- Port Transmit Pacing Configuration
- Port MDI Configuration
- Port VDSL Rate Configuration
- Port VDSL Link Mode

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

### *Port Mirroring*

Displays the information about port mirroring.

## Expansion Module Notes

- When the Port Speed and Mode parameter of an AT-A14 expansion module port is set to 'auto sense' and the port is connected to a 100Mbps full duplex port on another device, its corresponding Duplex LED on the device image turns orange instead of green.
- The current firmware version does not allow the Port Speed and Mode parameter of the AT-A14 expansion module port to be set to any value other than 'auto-sense'.
- A GBIC image is always visible on the GBIC slot of the AT-A15 expansion module image even if there is no GBIC physically present in the slot.
- The Port Speed and Mode parameter of an AT-A15 expansion module port must match the duplex mode of the port to which it is connected in order to establish connection.
- The current firmware version does not allow Device Manager to distinguish the AT-A16, AT-A17, and AT-A19 expansion modules from each other. With the connector type (VF-45, SC, MT-RJ) being the only difference among them, all three expansion modules have been made to share the same GIF image.
- Attempting to configure the Port Speed and Mode parameter of an AT-A16/AT-A17/AT-A19 expansion module port to '10Mbps half-duplex' or '10Mbps full-duplex' will automatically set it to '100Mbps half-duplex' or '100Mbps full-duplex' respectively.
- The current firmware version does not allow the Port Speed and Mode parameter of the AT-A17 expansion module ports to be set to 'auto sense'.
- When the Port Speed and Mode parameter of an AT-A18 expansion module port is set to 'auto sense' and the port is connected to a full duplex port on another device, its corresponding Duplex LED on the device image turns orange instead of green.

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AT-8200XL Series

## AT-8324

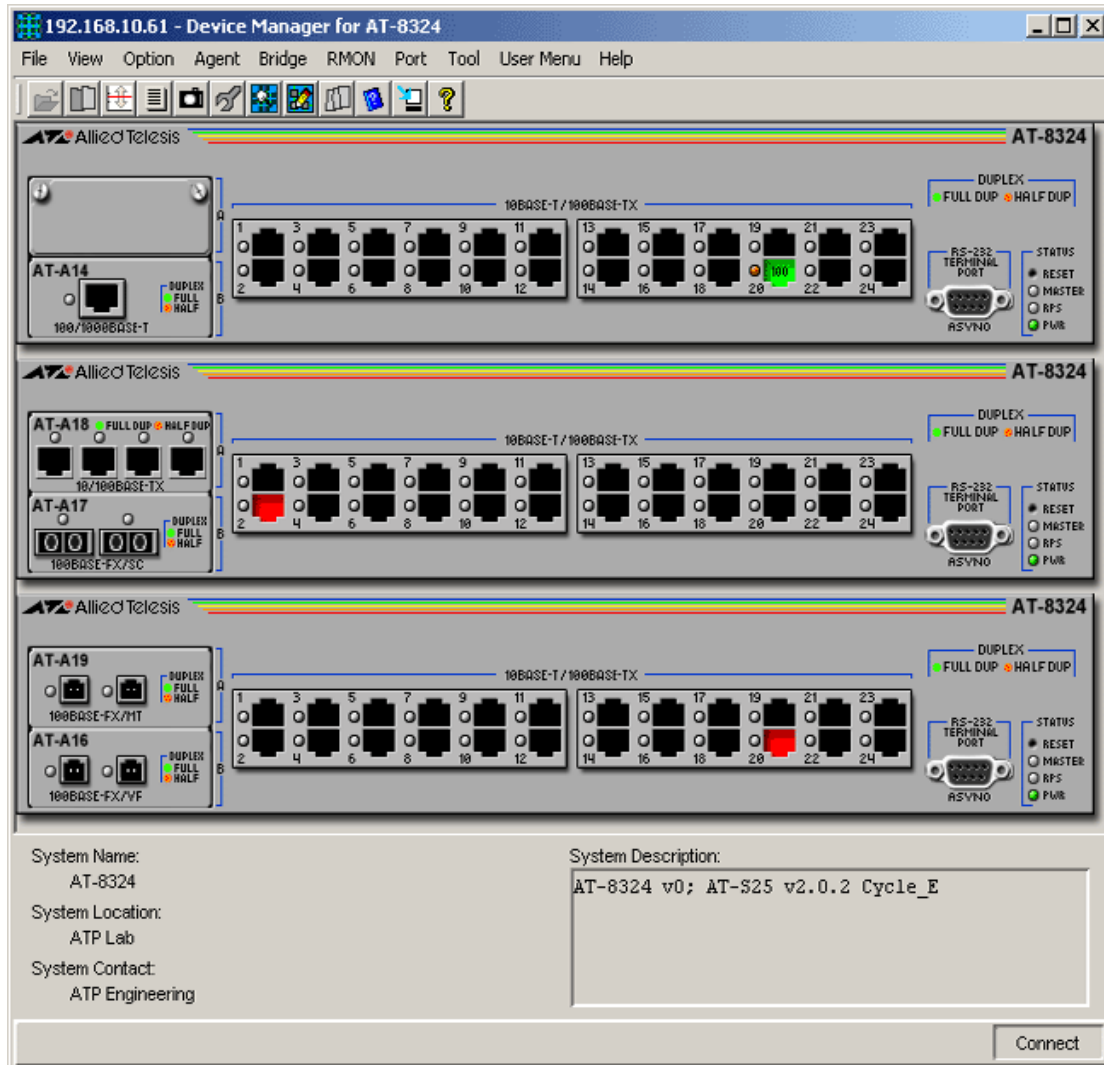
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This section describes Device Manager menus and operations specific to the AT-8324 switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Expansion Module Notes](#)

### Main Window



## AT-8324

Supports up to 8 stacked AT-8324 switches.

Device Manager LEDs for AT-8324		
LED	State	Description
PWR	Green	The switch is receiving power.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - Please refer to [Uplink Modules](#) for the operations and behaviour of the expansion modules installed on this device.

**Note** - The current firmware version does not allow Device Manager to support the RPS and MASTER LEDs.



**Note** - When a port is configured to auto-negotiate, the current firmware version does not always update its Port Duplex Status parameter with the correct negotiated mode. As a result, the port's Duplex LED may show up as green when it should really be orange and vice-versa.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Attempting to enter more than 39 characters for the System Contact, System Name, and System Location parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *Manager Address Info*

Displays the IP address of the management station.

### *Device Info*

Displays general information about the switch.

### *Reset*

Resets the switch.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

Displays the Forwarding Database table.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because of lack memory or the entry's aging timer has expired.

**Note** - The current firmware version accepts values in the range [8-512] inclusive for the Aging Time parameter. However, if the value entered is not a multiple of 8, the firmware will convert it to the largest multiple of 8 less than the entered value.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - When STP/RSTP is enabled, the current firmware version sets the Port State parameter of all inactive ports to 'blocking'. As a result, inactive ports will turn yellow in Device Manager.

**Note** - When enabling/disabling STP/RSTP, connection to the AT-8324 is temporarily lost. As a result, the following error message appears: "The error occurred with 'Set' operation. Error: time out occurred." This will not affect the application in any way.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

**Note** - The current firmware version is unable to retrieve the correct information for the History Control Table. As a result, the following error message appears: "Failed to get MIB data."

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

**Note** - The current firmware version does not allow Device Manager to support the following features:

- Spanning Tree Info
- Class of Service
- IGMP Snooping

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The Port Type parameter returns '???(62)'.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

### *Error Statistics*

Displays error statistics.

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The current firmware version accepts from 0 up to 19 characters for the Port Name parameter.

**Note** - The current firmware version (AT-S25 v2.0.2) supports `atiStackSwitch.mib v1.0`. However, Device Manager supports `atiStackSwitch.mib v2.13`. As a result, the following additional port parameters will appear:

- Port MDIO
- Port HOL Limit
- Port Back Pressure Limit
- Port STP State

These parameters are defined in v2.13 but will return 'noSuchName.' because they do not exist in v1.0.

**Note** - The current firmware version does not allow the Port State parameter to be set to 'enabled'. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: bad value." To enable a port, click on the Enable option under the Port menu.

**Note** - 4 ports are allotted for each expansion module slot. This means that ports on expansion modules will always be numbered starting from 25 if inserted in Slot A and from 29 if inserted in Slot B. As a result, the Detail Info MIB variable window for port numbers that do not have corresponding physical ports on the expansion module inserted will display 'noSuchName.' for all parameters.

#### *Enable*

Enables the port.

**Note** - The current firmware version (AT-S25 v2.0.2) supports atiStackSwitch.mib v1.0 while Device Manager supports atiStackSwitch.mib v2.13. In v1.0, the Port State parameter has 6 possible states with the enabled state having an ordinal value of 3. In v2.13, the Port State parameter has only 2 possible states with the enabled state having an ordinal value of 1. Since Device Manager continues to use the ordinal value 3, which does not exist in v2.13, the confirmation message will appear as "May I set up 'atiStkSwPortState.x.y' to '???(3)'?" However, clicking on the OK button will still enable the port successfully. This is because the actual Set operation is performed on the device whose firmware supports v1.0 and thus, recognizes the ordinal value 3.

#### *Disable*

Disables the port.

#### *Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source, and destination.

## Expansion Module Notes

- Expansion module ports cannot be enabled/disabled. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".
- The Port Speed and Mode parameter of the 100/1000Base-T port on the AT-A14 expansion module can only be set to 'auto'. Attempting to set this to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".
- A GBIC image is always visible on the GBIC slot of the AT-A15 expansion module even if there is no GBIC physically inserted.
- The Port Speed and Mode parameter of the 1000Base-X port on the AT-A15 expansion module can only be set to '1Gbps full-duplex'. Attempting to set this to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".
- The Port Speed and Mode parameter of the 100Base-FX port on the AT-A16, AT-A17, and AT-A19 expansion modules can only be set to '100Mbps full-duplex'. Attempting to set this to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

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AT-8324

## AT-8324SX

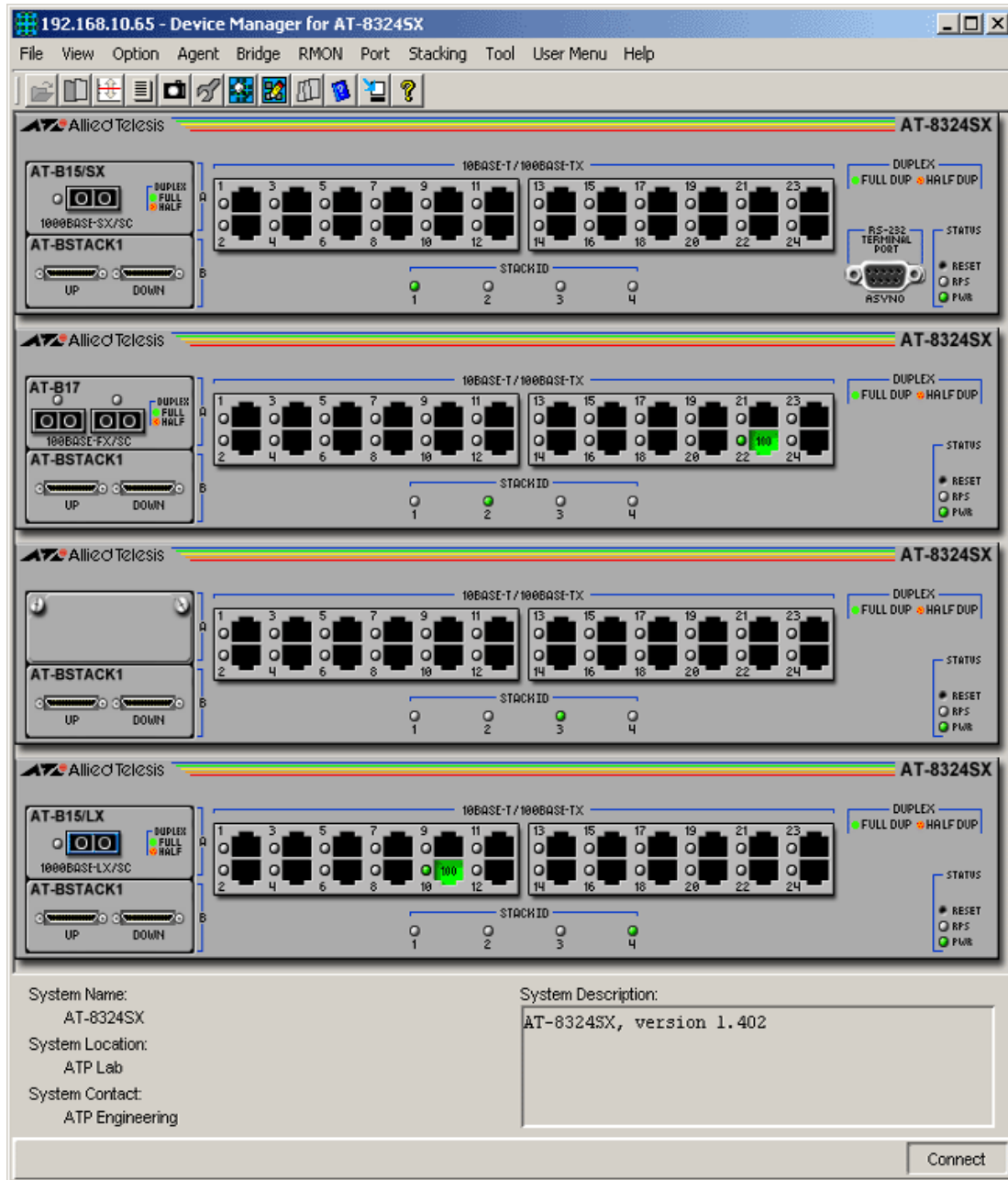
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This section describes Device Manager menus and operations specific to the AT-8324SX switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)

### Main Window



192.168.10.65 - Device Manager for AT-8324SX

File View Option Agent Bridge RMON Port Stacking Tool User Menu Help

Allied Telesis AT-8324SX

AT-B15/SX 100BASE-SX/SC

AT-BSTACK1 UP DOWN

10BASE-T/100BASE-TX

1 3 5 7 9 11 13 15 17 19 21 23

2 4 6 8 10 12 14 16 18 20 22 24

STACKID 1 2 3 4

DUPLEX FULL DUP HALF DUP

RS-232 TERMINAL PORT STATUS RESET RFS PWR

Allied Telesis AT-8324SX

AT-B17 100BASE-FX/SC

AT-BSTACK1 UP DOWN

10BASE-T/100BASE-TX

1 3 5 7 9 11 13 15 17 19 21 23

2 4 6 8 10 12 14 16 18 20 22 24

STACKID 1 2 3 4

DUPLEX FULL DUP HALF DUP

STATUS RESET RFS PWR

Allied Telesis AT-8324SX

AT-BSTACK1 UP DOWN

10BASE-T/100BASE-TX

1 3 5 7 9 11 13 15 17 19 21 23

2 4 6 8 10 12 14 16 18 20 22 24

STACKID 1 2 3 4

DUPLEX FULL DUP HALF DUP

STATUS RESET RFS PWR

Allied Telesis AT-8324SX

AT-B15/LX 100BASE-LX/SC

AT-BSTACK1 UP DOWN

10BASE-T/100BASE-TX

1 3 5 7 9 11 13 15 17 19 21 23

2 4 6 8 10 12 14 16 18 20 22 24

STACKID 1 2 3 4

DUPLEX FULL DUP HALF DUP

STATUS RESET RFS PWR

System Name: AT-8324SX

System Location: ATP Lab

System Contact: ATP Engineering

System Description: AT-8324SX, version 1.402

Connect

## AT-8324SX

Supports up to 4 stacked switches.

Device Manager LEDs for AT-8324SX		
LED	State	Description
PWR	Green	The switch is receiving power.
RPS	Green	Redundant power is ON.
	Gray	Redundant power is OFF.
DUPLEX	Gray	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
STACK ID	Green	The switch's position in the switch stack.

**Note** - When multiple units of AT-8324SX are stacked together, port numbering is continuous. This means that the first unit on the stack will have ports numbered from 1 to 32. The second unit on the stack will have ports numbered from 33 to 64. The third unit will have ports numbered from 65 to 96 and the fourth unit from 97 to 128. It is assumed that the maximum number of ports per unit is 32, 24 fixed ports plus up to 8 uplink ports.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter up to 255 characters for the System Contact, System Name, and System Location parameters.

### *TFTP Download Management*

Displays TFTP information.

**Note** - Device Manager allows the user to enter up to 80 characters for the TFTP File Name parameter but truncates it to 47 characters.

**Note** - Device Manager does not allow the user to set the Download Mode parameter to 'temporary'. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Reset*

Displays the reset table that allows you to configure reset parameters before restarting the management agent.



#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information, such as the forwarding database and spanning tree status.

#### *Forwarding Database*

Displays the Forwarding Database table.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

**Note** - Valid MIB Set values for the Aging Time parameter should range from 10 to 412. However, the current firmware version allows it to be set to a value greater than 412 all the way up to 1000000.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## RMON Menu

From the RMON menu, you can view and edit the RMON mib.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON history table.

#### *Alarm Table*

Displays the RMON alarm table.

#### *Event Table*

Displays the RMON event table.

#### *Event Log*

Displays the RMON event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

**Note** - The current firmware version does not allow Port Menu to support the Class of Service.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the following error message: "The error occurred with 'Set' operation. Error: bad value." This will not affect the application in any way.

#### *Error Statistics*

Displays error statistics.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The current firmware version does not support port naming.

**Note** - When the Port Speed and Mode parameter of a fixed port is set to 'auto sense', the current firmware version is unable to provide information on the negotiated mode of the port. As a result, the port's Duplex LED may show up as green when it should really be orange and vice-versa.

**Note** - Valid MIB Set values for the Port Speed and Mode parameter of the AT-B17 expansion module ports are '100Mbps full-duplex' or '100Mbps half-duplex'. Attempting to set this to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - Valid MIB Set values for the Port Speed and Mode parameter of the AT-B15 expansion module port are 'auto sense', '1Gbps full-duplex' or '1Gbps half-duplex'. Attempting to set this to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - The Module ID and Port Number parameters return 'noSuchName'.

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

### *Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source, and destination.

### *IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

**Note** - Valid MIB Set values for the IGMP Report Delay parameter should range from 5 to 30. However, the current firmware version does not allow it to be set to a value greater than 10. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

## Stacking Menu

From the Stacking menu, you can view basic switch information as well as stacking information.

### *Stacking Info*

Displays information such as Hardware Version, Firmware Version, Expansion Slot, and Role In System for all switches in the stack.

## AT-8300GB Series

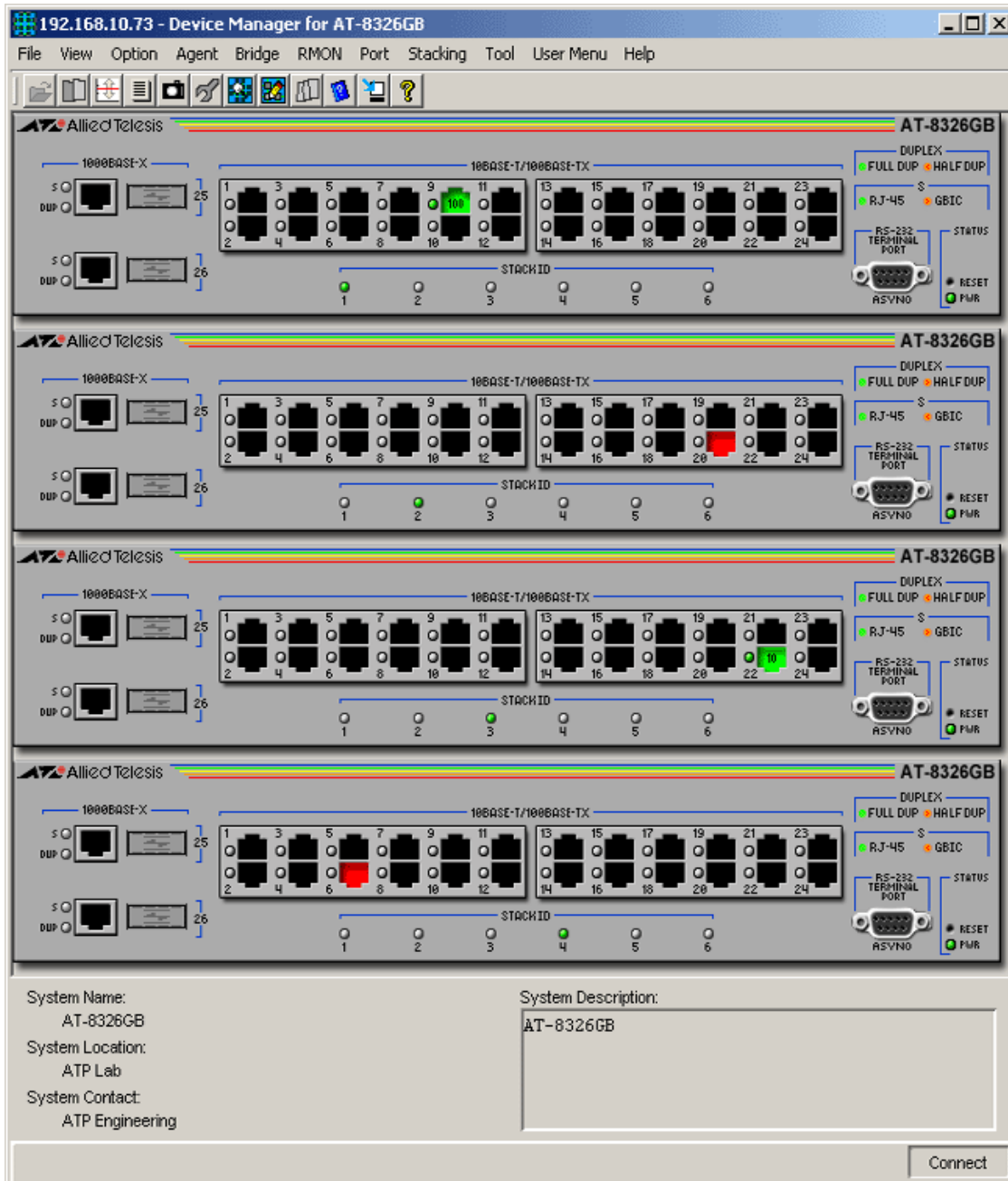
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This section describes Device Manager menus and operations specific to the AT-8300GB Series.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)

### Main Window

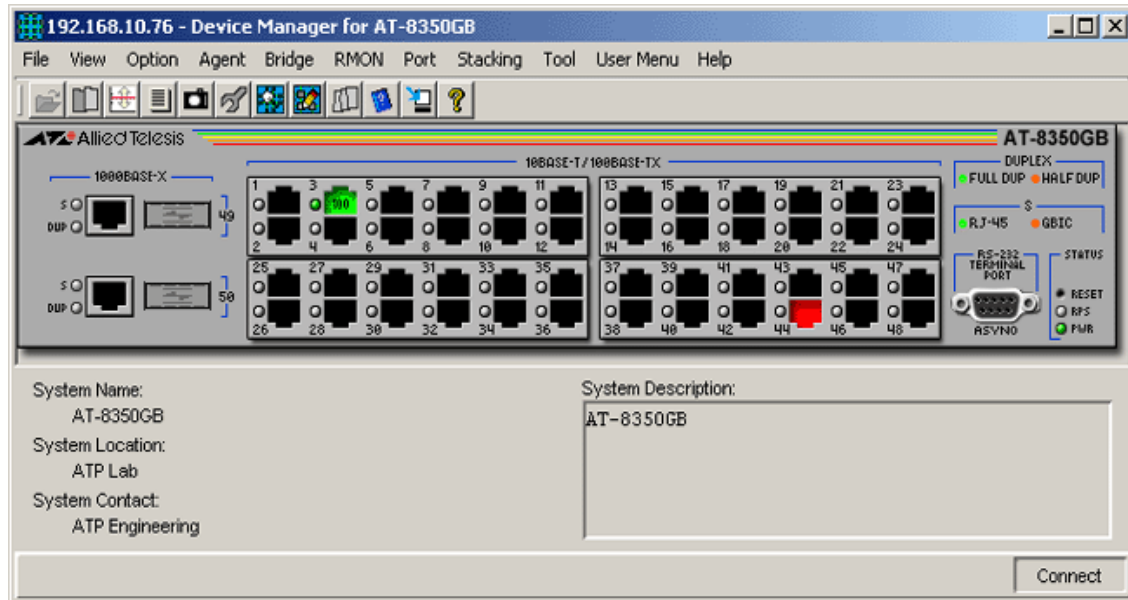


### AT-8326GB

The AT-8326GB supports up to 6 AT-8326GB stacked switches or any of the following mixed stack combinations of AT-8326GB and AT-8350GB switches:

- Two AT-8326GB switches and one AT-8350GB switch
- Two AT-8326GB switches and two AT-8350GB switches
- Three AT-8326GB switches and one AT-8350GB switch
- Four AT-8326GB switches and one AT-8350GB switch

**Note** - When 3 or more AT-8326GB devices are stacked together, expect the twisted pair port image of Port 26 on the last device on the stack to turn green. This is because the current firmware version returns 'on-line' for the Port Link State parameter of the port even if there is no link established.



AT-8350GB

The AT-8350GB supports up to 3 stacked AT-8350GB switches.

**Note** - The current firmware version does not allow Device Manager to support the RPS LED.

**Note** - The current firmware version does not allow Device Manager to support expansion modules that may be installed on the AT-8350GB.

Device Manager LEDs for AT-8300GB Series		
LED	State	Description
PWR	Green	The switch is receiving power.
STACK ID	Green	The switch's position in the switch stack.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - Status information for the gigabit ports will always be reflected on the RJ-45 gigabit port images regardless of whether the gigabit ports have been set to operate as GBIC ports or as Twisted Pair ports.

**Note** - When Global STP is enabled, the current firmware version sets the Port State parameter of inactive ports to 'blocking'. As a result, expect port images for inactive ports to turn yellow in Device Manager .

**Note** - The current firmware version does not allow Device Manager to detect the presence or absence of a GBIC module in any of the GBIC slots. As a result, the GBIC slots on the device image will remain empty regardless of whether or not GBIC modules are physically present in the slots.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version does not allow multiple-word values for the System Name parameter.

**Note** - Device Manager allows the user to enter up to 255 characters for the System Contact, System Name and System Location parameters but the current firmware version truncates them to 64 characters.

### *Firmware Info*

Displays the version of the software running on the managed device.

### *Network Info*

Displays network-related information such as the device IP address and the default gateway address.

**Note** - The current firmware version does not save changes made to the DNS Server and the Default Domain Name parameters.

### *DHCP Info*

Displays DHCP information including the DHCP System Group and DHCP Timer Group.

### *Manager Address Info*

Displays the IP address of the management station.

### *Reset*

Resets the switch.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because of lack of memory or the entry's aging timer has expired.

**Note** - The current firmware version accepts values in the range [10-1000000] inclusive for the Aging Time parameter.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

### *Statistics*

Displays traffic statistics in the network segment attached to each port.

### *History Control Table*

Displays the RMON History table.

### *Alarm Table*

Displays the RMON Alarm table.

### *Event Table*

Displays the RMON Event table.



### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The Port Transmit Pacing Configuration parameter is not applicable to the AT-8300GB Series.

**Note** - The Port VLAN Tag Priority parameter has a fixed value of 'use vlan priority' and cannot be modified.

**Note** - The current firmware version does not allow the Port Bridge ID parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - When a port's Port Speed and Mode parameter is set to 'auto sense', the current firmware version does not update its Port Duplex Status parameter with the negotiated mode. As a result, the port's Port Duplex Status parameter will always display 'auto sense' and its corresponding Duplex LED will always be green regardless of the actual connection mode.

**Note** - The Port Name parameter is not applicable to the AT-8300GB Series.

**Note** - Valid MIB Set values for the Port State parameter are 'enabled' and 'disabled'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

*Enable*

Enables the port.

*Disable*

Disables the port.

*QoS*

Displays QoS parameters and allows enabling of QoS status and setting priority queue.

*Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source and destination.

*IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

## Stacking Menu

From the Stacking menu, you can view basic switch information as well as stacking information.

*Stacking Info*

Displays information such as Product Type, Port Count, and Uplink Types for all switches in the stack.

**Note** - The Uplink Port A MDA Type and Uplink Port B MDA Type parameters return incorrect values.

**Note** - The Security Action parameter returns '???(0)' when the Security Configuration parameter is set to 'disabled'.

## AT-8400

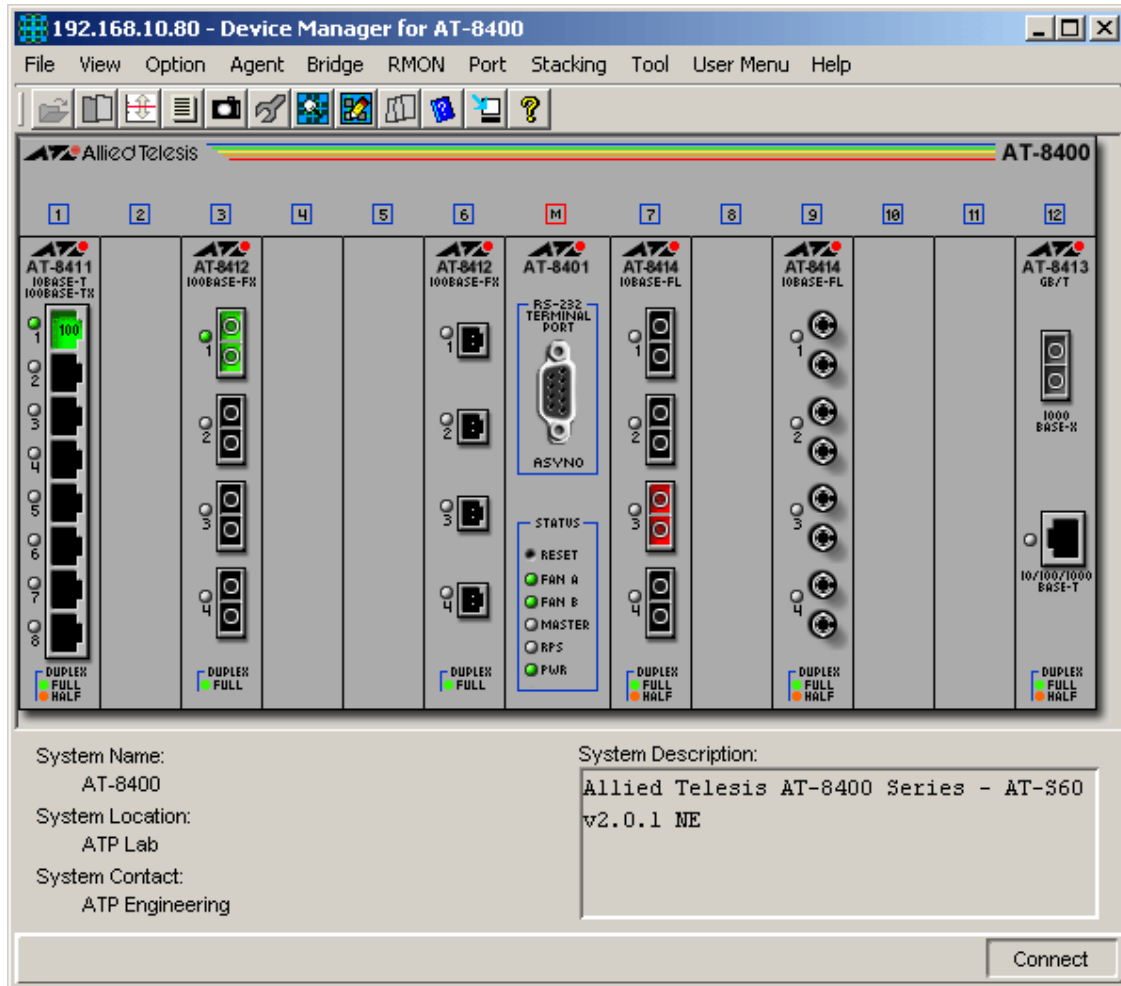
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This section describes Device Manager menus and operations specific to the AT-8400 switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)

## Main Window



AT-8400

Device Manager LEDs for AT-8401 Management Module		
LED	State	Description
FAN A	Green	FAN TRAY A is installed and is operating correctly.
	Gray	FAN TRAY A is not installed.
FAN B	Green	FAN TRAY B is installed and is operating correctly.
	Gray	FAN TRAY B is not installed.
MASTER	Green	The switch is the master of an enhanced stack.
	Gray	The switch is either a slave switch of an enhanced stack or the switch is not a member of an enhanced stack.
RPS	Green	The switch is receiving power from the redundant power

Device Manager LEDs for AT-840I Management Module		
LED	State	Description
	Gray	supply (PWR B).  The switch is receiving power from the main power supply (PWR A).
PWR	Green	The switch is receiving power from the main power supply (PWR A).
	Gray (Only if RPS is installed)	The main power supply is not functioning.

**Note** - Please refer to [AT-8400 Line Cards](#) for the operations and behavior of the line cards installed on the chassis.

**Note** - The FAN A and FAN B LEDs are always green regardless of whether or not fan trays are actually installed.

**Note** - The PWR LED is always green and the RPS LED is always gray regardless of whether the switch is receiving power from the main power supply or the redundant power supply.

**Note** - Some parameters, when configured, may at times cause a temporary loss of connection. When this happens, the following error message appears: "The error occurred with 'Set' operation. Error: time out occurred.". This will not affect the application in any way.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

**Note** - The current firmware version does not allow the DNS Server and Default Domain Name parameters to be configured. Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error.".

### *Chassis Info*

Displays chassis information including the firmware information.

**Note** -The current firmware version does not allow the Power A Status and Power B Status parameters to be configured. Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *Line Card Info*

Displays information for each line card including line card type and line card temperature.

#### *MAC Address Table*

Displays a list of static MAC address configured on the switch.

**Note** - Valid MIB Set values for the MAC Address Entry Status parameter are 'active', 'not in service' and 'destroy'. Attempting to set this parameter to any other value will result in error message: "The error occurred with 'Set' operation. Error: bad value".

#### *Reset*

Resets the switch.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

Displays the Forwarding Database table.

**Note** - It may take some time to retrieve Forwarding Database information. As a result, some Forwarding Database parameters may not show any value. To avoid this, click on File > Property > Polling options and set the Polling Interval parameter to 25 seconds or longer.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as spanning tree status and spanning tree version.

**Note** - When setting the Spanning Tree Status parameter to 'enabled', connection to the AT-8400 is temporarily lost. As a result, the following error message appears: "The error occurred with 'Set' operation. Error: time out occurred."

**Note** - Setting the value of the Spanning Tree Version parameter to 'stp' will result in a permanent loss of connection. To re-establish connection, restart the device.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

**Note** - Ports are numbered continuously from top to bottom, across all installed line cards, starting from the leftmost line card all the way through the rightmost line card.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment.

#### *History Control Table*

Displays the RMON History table.

**Note** - The current firmware version does not support the "historyControlTable" MIB object of RFC1757. As a result, Device Manager displays the error message "Failed to get MIB data." when the History Control Table option is selected from the RMON menu.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

**Note** - Ports are numbered continuously from top to bottom, across all installed line cards, starting from the leftmost line card all the way through the rightmost line card. This applies to the following submenu options:

- Utilization

- Interface Info -> Standard
- Error Statistics -> Standard
- Spanning Tree Info

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Error Statistics*

Displays error statistics such as alignment error frames and carrier sense errors.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The current firmware version does not allow the Port Name parameter to be set to NULL. Attempting to set this parameter to NULL will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Spanning Tree Info*

Displays the port's spanning tree parameters.

**Note** - The current firmware version does not allow the Port parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: readOnly".

#### *Port Security*

Displays the port security attributes for each physical port present in the switch.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

#### *Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state and port's source list.

**Note** - Valid MIB Set values for the Port Mirroring Configuration Entry Status parameter are 'active', 'not in service' and 'destroy'. Attempting to set this



parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

## Stacking Menu

From the Stacking menu, you can view basic switch information as well as stacking information.

### *Stacking Info*

Displays information such as Stack Switch ID, Stack Switch MAC Address, Stack Switch Name, Stack Switch Mode, Stack Switch Software Version and Stack Switch Model for all switches in the stack.

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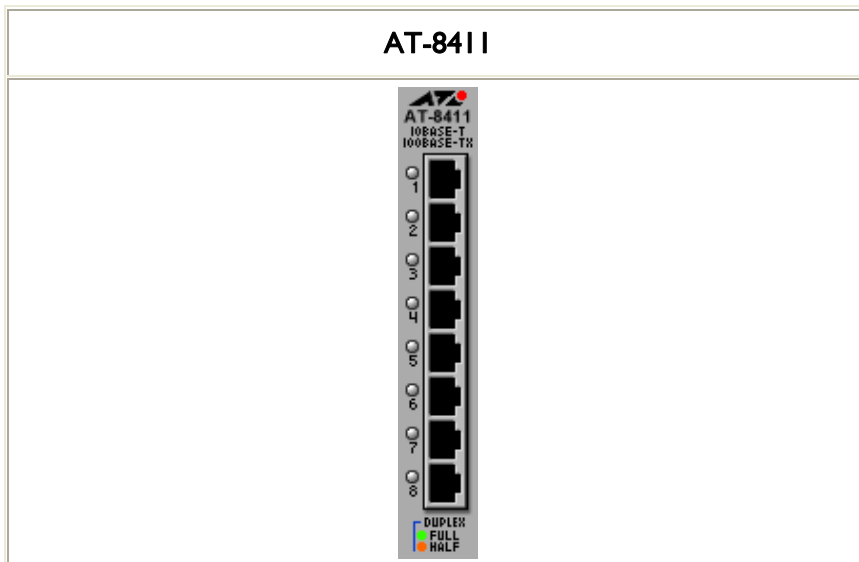
AT-8400

## AT-8400 Line Cards

This section describes the AT-8400 Line Cards supported by Device Manager. If line cards are installed on the AT-8400 chassis at the time Device Manager is called, they will be displayed in their corresponding slots on the chassis image.

- [AT-8411](#)
- [AT-8412](#)
- [AT-8413](#)
- [AT-8414](#)

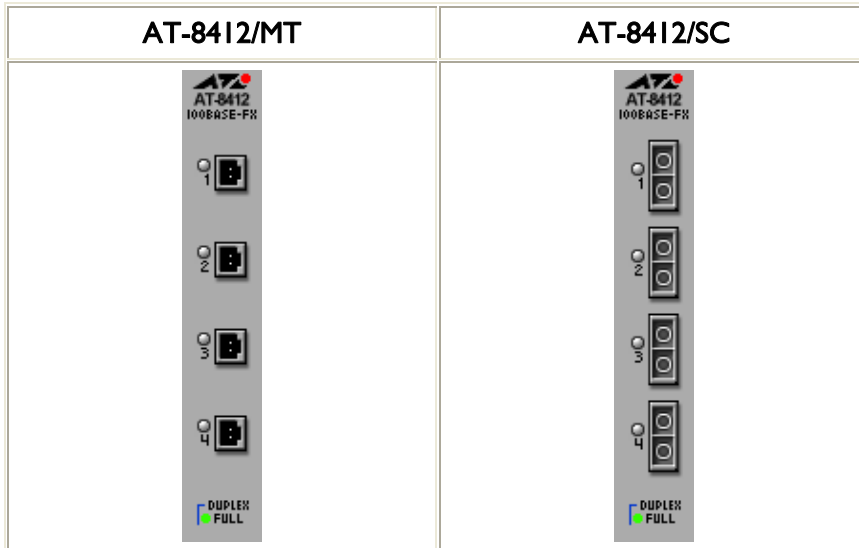
### AT-8411



LED	State	Description
DUPLEX	Green	The port is operating in full-duplex.
	Orange	The port is operating in half-duplex.

**Note** - When a port on the AT-8411 line card is configured to auto-negotiate and is connected to a 10/100 Mbps full-duplex port on another device, the current firmware version returns the value 'half-duplex' for the Port Duplex Status parameter. As a result, the Duplex LED turns orange instead of green.

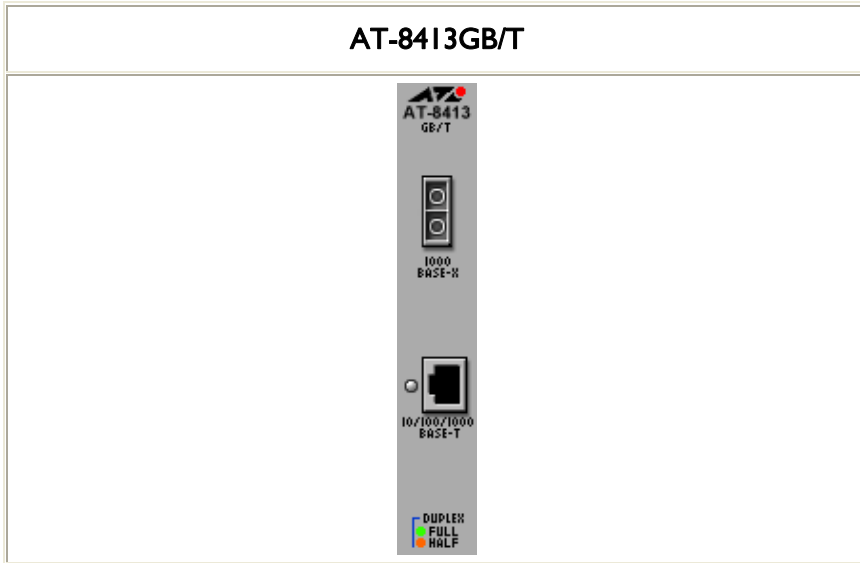
## AT-8412



LED	State	Description
DUPLEX	Green	The port is operating in full-duplex.

**Note** - The current firmware version does not allow the Port Flow Control parameter of ports on the AT-8412/MT and AT-8412/SC line cards to be set to 'auto'. Attempting to set this parameter to 'auto' will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

## AT-8413



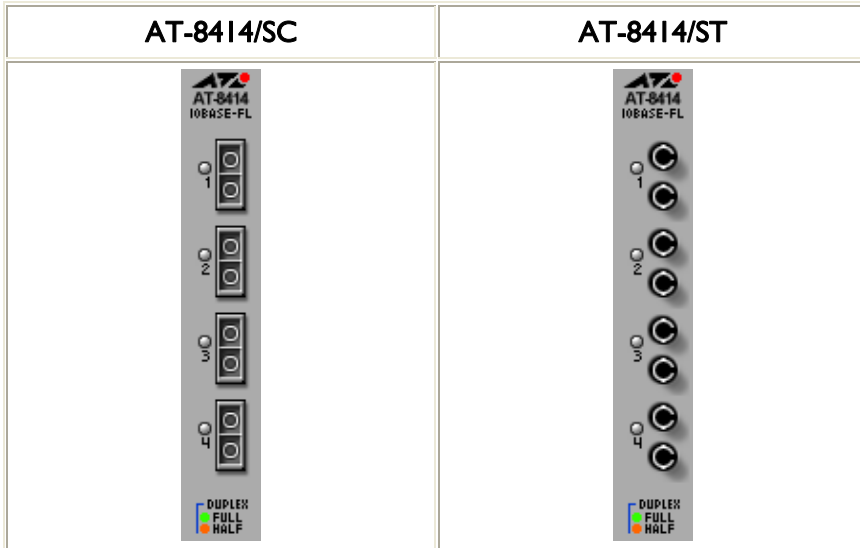
LED	State	Description
DUPLEX	Green	The port is operating in full-duplex.
	Orange	The port is operating in half-duplex.

**Note** - A GBIC image is always visible on the GBIC slot of the AT-8413GB/T line card image even if there is no GBIC physically present in the slot.

**Note** - Status information for the AT-8413GB/T ports will always be reflected on the RJ-45 port image regardless of whether the port that is in actual use is the GBIC port or the twisted pair port.

**Note** - When the 10/100/1000Base-T port of the AT-8413GB/T line card is configured to auto-negotiate and is connected to a 10/100Mbps full-duplex port on another device, the current firmware version returns the value 'half-duplex' for the Port Duplex Status parameter. As a result, the Duplex LED turns orange instead of green.

## AT-8414



LED	State	Description
DUPLEX	Green	The port is operating in full-duplex.
	Orange	The port is operating in half-duplex.

**Note** - The Port Negotiation parameter of ports on the AT-8414/SC and AT-8414/ST line cards has a fixed value of '10Mbps full-duplex' and cannot be modified.

---

AT-8400 Line Cards

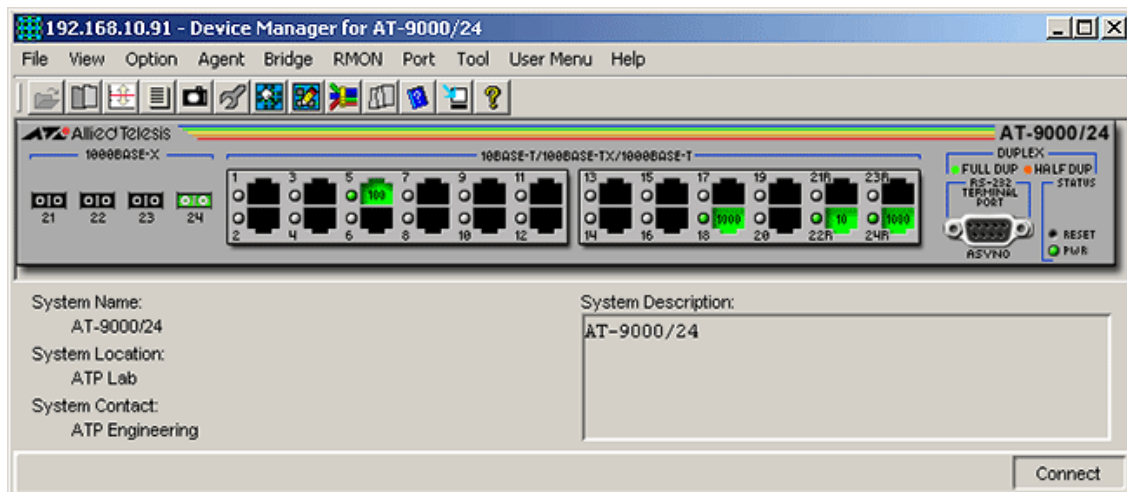
## AT-9000/24

This section describes Device Manager menus and operations specific to the AT-9000/24 switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

### Main Window



AT-9000/24

Device Manager LEDs for AT-9000/24		
LED	State	Description
PWR	Green	The switch is receiving power.
DUPLEX	Green	The port is operating at full-duplex mode.
	Orange	The port is operating at half-duplex mode.

**Note** - Disabled ports will not turn red.

**Note** - The current firmware version does not allow Device Manager to detect the presence or absence of an SFP module in any of the SFP slots. As a result, the SFP slots on the device image will always show SFP images regardless of whether or not SFP modules are physically present in the slots.

**Note** - Status information for ports 21 to 24 will always be reflected on both the RJ-45 port images and the SFP port images regardless of whether it is the RJ-45 or the SFP ports that are actually in operation. However, if Device Manager detects that the established link speed is less than 1 Gbps, only the RJ-45 port images will turn green.

**Note** - When Global RSTP is enabled, the current firmware version sets the Port State parameter of inactive ports to 'blocking'. As a result, expect port images for inactive ports to turn yellow in Device Manager.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version accepts up to 64 characters for the System Contact, System Name and System Location parameters.

### *Firmware Info*

Displays firmware version.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *Manager Address Info*

Displays the IP address of the management station.

**Note** - The current firmware version does not return the correct values for the Trap Destination IP Address parameters if these are retrieved in bulk. As a result, all Trap Destination IP Address parameters will display a value of '0.0.0.0' upon initial display of the Manager Address Info table. To retrieve the correct values, a Get MIB Value must be performed on each Trap Destination IP Address parameter, one at a time. The same is true if their values need to be modified. A Set MIB Value would have to be performed on each instance of the parameter, one at a time.

### *DHCP Info*

Displays DHCP information including the DHCP System Group and DHCP Timer Group.

#### *Reset*

Resets the switch.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the spanning tree status.

#### *Bridge Info*

##### *General*

Displays basic bridge information such as the LAN ID, bridge address, number of ports and the bridge type.

#### *Port*

Displays basic bridge information on a per port basis such as the LAN ID, port number, circuit, delay exceeded discards and MTU exceeded discards.

**Note** - The current firmware version returns a NULL value for the Circuit parameter.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - Values entered for the Root Maximum Aging Time, Root Hello Time and Root Forward Delay Time parameters must be multiples of 100. Values that are not multiples of 100 will be automatically rounded down to the nearest hundreds.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

##### *Standard*

Displays traffic statistics in the network segment attached to each port.



**Note** - The current firmware version does not support RFC1757. As a result, Device Manager will display the error message "Failed to get MIB data."

#### *Additional Info*

Displays additional traffic statistics in the network segment such as frames received/sent, collisions, broadcast frames and multicast frames.

#### *Error*

Displays error statistics in the network segment such as CRC errors, alignment errors, bad frames received late collisions and total transmit errors.

**Note** - There may be times when Device Manager will not be able to successfully retrieve error statistical information. When this happens, all parameters in this table will display the value "retry over occurred". To prevent this from happening, do the following:

- Go to File -> Property.
- Click on the Settings button in the Polling Options area.
- Increase the value of the Timeout parameter in the Retry area.

#### *History Control Table*

Displays the RMON History table.

**Note** - The current firmware version does not support RFC1757. As a result, Device Manager will display the error message "Failed to get MIB data."

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

##### *Standard*

Displays port statistics such as the number of packets received and transmitted on the port, bytes received and transmitted on the port and port status.

**Note** - The current firmware version does not support the Specific Media MIB parameter.

*Additional Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port and port status.

*Error Statistics*

Displays error statistics.

*Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The Port State parameter always returns the value 'enabled' even if the physical port is actually disabled.

**Note** - When an auto-negotiated link is established on a redundant port (RJ-45), its Port Speed parameter, as well as its port image, may not always reflect the correct negotiated speed if there is an established link on any of the other three SFP ports.

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*Enable*

Enables the port.

*Disable*

Disables the port.

*Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source and destination.

*IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

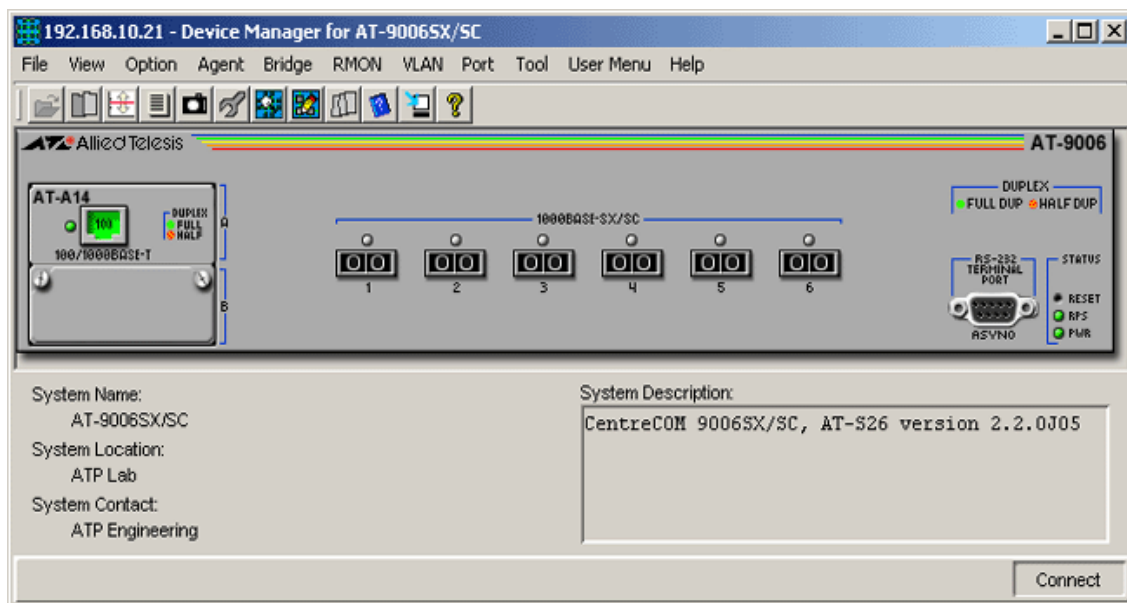
## AT-9006 Family

This section describes Device Manager menus and operations specific to the AT-9006SX/SC and AT-9006T switches.

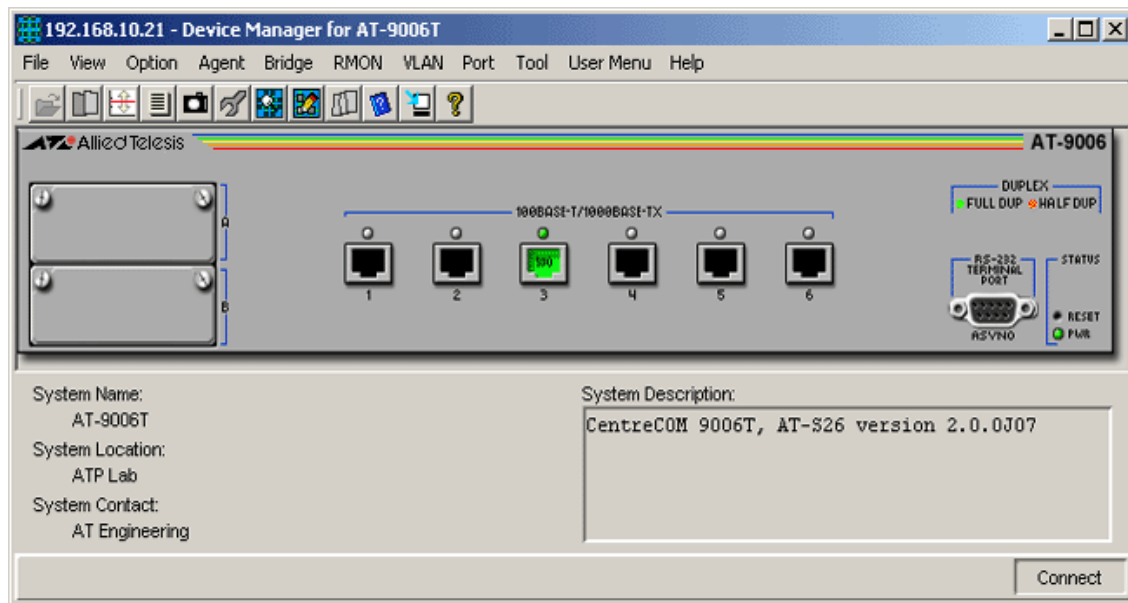
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [VLAN Menu](#)
- [Port Menu](#)

## Main Window



AT-9006SX/SC



AT-9006T

### Device Manager LEDs for AT-9006 Family

LED	State	Description
PWR	Green	The switch is receiving power.
RPS	Green	An optional redundant power supply is connected to the switch.
	Gray	There is no redundant power supply connected to the switch.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - Ports on the expansion modules are numbered starting from 7. Slot A's leftmost port has the smallest number and Slot B's rightmost port has the largest number.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

### Firmware Info

Displays firmware version.

#### *Network Info*

Displays network-related information such as agent's and default gateway address.

#### *Manager Address Info*

Displays management station's IP address.

#### *Reset*

Reset the switch.

#### *Telnet*

Connect to the switch's telnet service.

## Bridge Menu

From the Bridge menu, you can view and edit information such as forwarding database and spanning tree status.

#### *Forwarding Database*

Displays forwarding database table.

#### *Discard/Aging Time Info*

Displays information about number of address entry that was learned but discarded because of the reason such as memory shortage and entry's aging time.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics of frames received/transmitted on the switch port.

## RMON Menu

From the RMON menu, you can view and edit RMON MIB.

**Note** - Since RMON data may be large, it may take some time for information to appear.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays RMON History table.

#### *Alarm Table*

Displays RMON Alarm table.

#### *Event Table*

Displays RMON Event table.

*Event Log*  
Displays RMON Event log.

## VLAN Menu

From the VLAN menu, you can view the list of VLAN and member ports.

**Note** - You cannot modify VLAN configuration on the AT-9006 Family using the VLAN menu.

*Name List*  
Displays configured VLAN names.

*Port Info*  
Displays VLAN to which the port belongs.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

*Utilization*  
Displays port's utilization information.

*Interface Info*  
Displays port statistics such as number of frames received/transmitted on the port, bytes received/transmitted on the port and port status.

*Error Statistics*  
Displays error statistics.

*Detail Info*  
Displays detailed port information such as duplex mode, speed, spanning tree protocol status and switching mode.

*Spanning Tree Info*  
Displays port's spanning tree parameters.

*Enable*  
Enables the port.

*Disable*  
Disables the port.

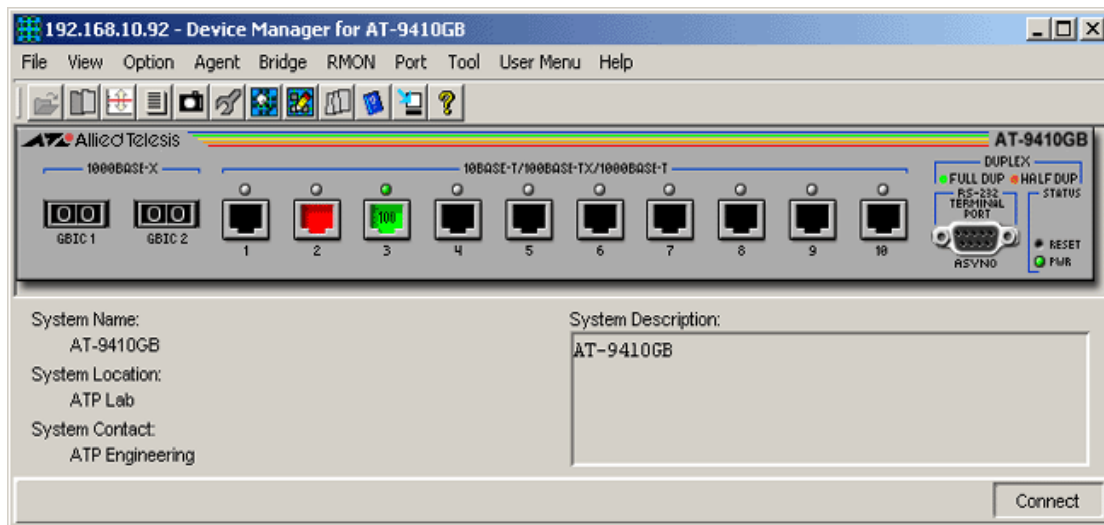
## AT-9410GB

This section describes Device Manager menus and operations specific to the AT-9410GB switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

### Main Window



AT-9410GB

Device Manager LEDs for AT-9410GB		
LED	State	Description
PWR	Green	The switch is receiving power.
DUPLX	Green	The port is operating at full-duplex mode.
	Orange	The port is operating at half-duplex mode.

**Note** - When Global STP is enabled, the current firmware version sets the Port State parameter of inactive ports to 'blocking'. As a result, expect port images for inactive ports to turn yellow in Device Manager.

**Note** - When a port on the AT-9410GB is set to 'auto sense' and is connected to a half-duplex port on another device, its corresponding Duplex LED on the device image turns green instead of orange.

**Note** - A GBIC image is always visible on each of the GBIC slots of the device image even if there are no GBICs physically inserted.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version does not allow the user to enter multiple-word values for the System Name parameter.

**Note** - Device Manager allows the user to enter up to 255 characters for the System Contact, System Name, and System Location parameters but truncates them to 64 characters.

### *Firmware Info*

Displays firmware version.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

**Note** - The current firmware version does not save changes made to the DNS Server and the Default Domain Name parameters.

### *Manager Address Info*

Displays the IP address of the management station.

### *Device Info*

Displays general information about the switch.

**Note** - The Security Action parameter returns '???(0)' when the Security Configuration parameter is set to 'disabled'.

### *DHCP Info*

Displays DHCP information including the DHCP System Group and DHCP Timer Group.



#### *Reset*

Resets the switch.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Bridge Info*

Displays basic bridge information such as the LAN ID, bridge address, number of ports and the bridge type.

#### *Forwarding Database*

Displays the Forwarding Database table.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

**Note** - The current firmware version accepts values in the range [10-1000000] inclusive for the Aging Time parameter.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch's ports.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *Error Statistics*

Displays error statistics.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - The Port Name parameter is not applicable to the AT-9410GB.

**Note** - The current firmware version does not allow the Port VLAN Tag Priority parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The Port Transmit Pacing Configuration parameter is not applicable to the AT-9410GB.

**Note** - Device Manager allows the user to disable an active port. However, the disabled port's Port Link State parameter retains the value 'on-line'.

**Note** - When connection is established between a twisted pair port that is configured to auto-negotiate and a port on another device that is configured to operate at 10/100Mbps full/half duplex, expect the link to drop when the twisted pair port's speed and mode is changed to match the speed and mode of the port on the other device.

**Note** - Valid MIB Set values for the Port State parameter are 'enabled' and 'disabled'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*Enable*

Enables the port.

*Disable*

Disables the port.

*QoS*

Displays QoS parameters and allows enabling of QoS status and setting priority queue.

*Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring state, source and destination.

*IGMP Snooping*

Displays the current state of IGMP Snooping and allows reconfiguration.

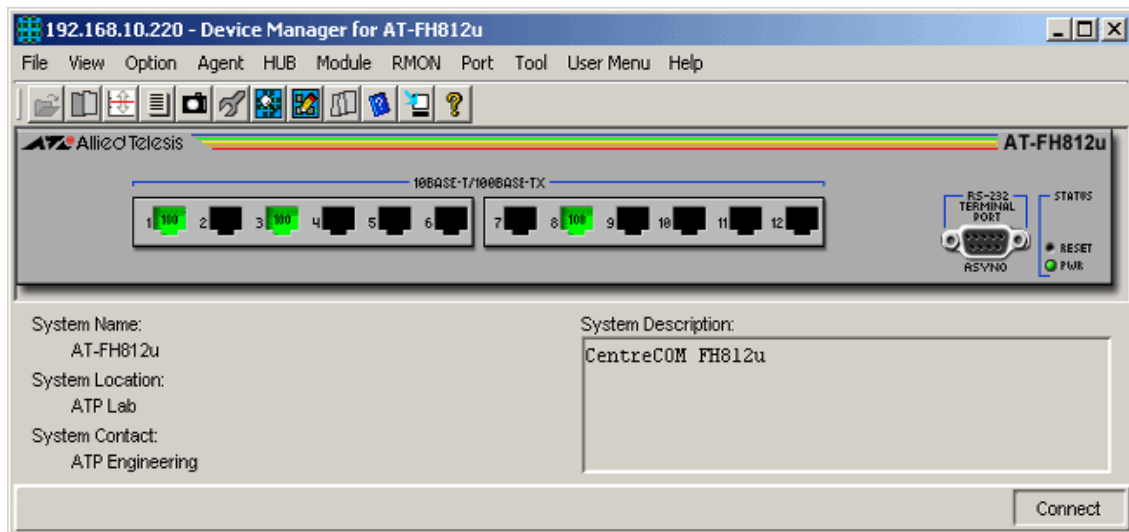
## AT-FH800u Series

This section describes Device Manager menus and operations specific to the AT-FH812u and AT-FH824u hubs.

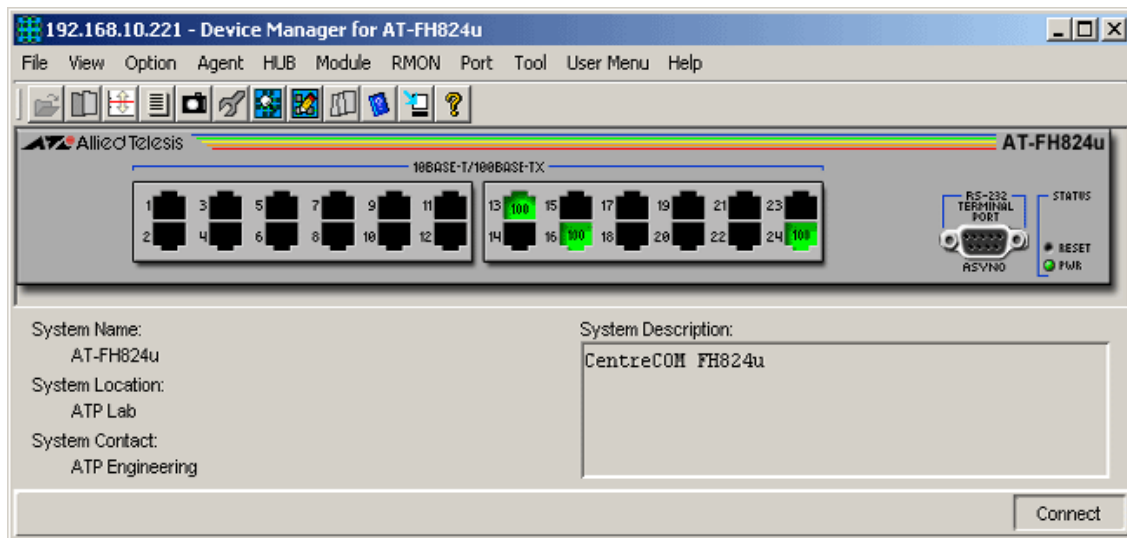
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Hub Menu](#)
- [Module Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-FH812u



AT-FH824u

Device Manager LEDs for AT-FH800u Series		
LED	State	Description
PWR	Green	The hub is receiving power.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

### Network Info

Displays network-related information such as the device's IP address, and the default gateway address.

**Note** - The current firmware version returns 'noSuchName' for the following parameters:

- Server Slip Address
- Host Slip Address
- Temporary Server Slip Address
- Temporary Host Slip Address

### Firmware Info

Displays the version of the software running on the managed device.

### Manager Address Info

Displays the management station's IP address.

**Note** - The current firmware version does not allow the Status parameter to be set to 'under change'. Attempting to set it to 'under change' will result in the error message "The error occurred with 'Set' operation. Error: bad value."

**Note** - By default, the Status parameters are set to 'invalid'. To be able to set them to 'valid', their corresponding IP Address parameters must first be set to valid values. Failing to do so will result in the error message "The error occurred with 'Set' operation. Error: time out occurred."

#### *Reset*

Resets the system

#### *Telnet*

Starts a Telnet connection to the hub.

#### *WEB Browser*

Connects to the hub's HTTP server.

## Hub Menu

From the Hub menu, you can check traffic statistics and hub's status. It also lets you perform a self-test.

#### *Status*

Displays hub information such as stacking status.

## Module Menu

From the Module menu, you can view and edit MIB information about a selected hub in the stacked group.

#### *Status*

Displays information such as operation status and object identifier.

**Note** - The current firmware version returns 'noSuchName' for the following parameters:

- Module Description
- Last Update Time and Date

## RMON Menu

From the RMON menu, you can view and edit RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

*History Control Table*  
Displays RMON History table.

*Alarm Table*  
Displays RMON Alarm table.

*Event Table*  
Displays RMON Event table.

*Event Log*  
Displays RMON Event log.

*Segment Info*  
Displays number of segments and others.

*Segment Status*  
Displays RMON configuration information of each segment.

## Port Menu

From the Port menu, you can view and edit MIB information about hub's ports.

*Statistics*  
Displays port statistics such as number of frames received/transmitted on the port, bytes received/transmitted on the port and port status.

*Status*  
Displays whether the port is enabled or disabled, whether it is partitioned and other status information.

*Detail Status*  
Displays information such as port name, LED status and polarity.

**Note** - A link between a port on the hub and a port on another device can only be established if the port on the other device is configured to auto-negotiate.

*Security Info*  
Displays source MAC addresses of frames received on the port.

**Note** - Valid MIB Set values for the Learn Action parameter are 'inactive' and 'active'. Attempting to set this parameter to any other value will result in the error message "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version does not allow the user to configure the MAC Address parameter. Attempting to configure it will result in the error message "The error occurred with 'Set' operation. Error: bad value."

*Enable*  
Enables the port.

*Disable*  
Disables the port.

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AT-FH800u Series



## AT-AR200E

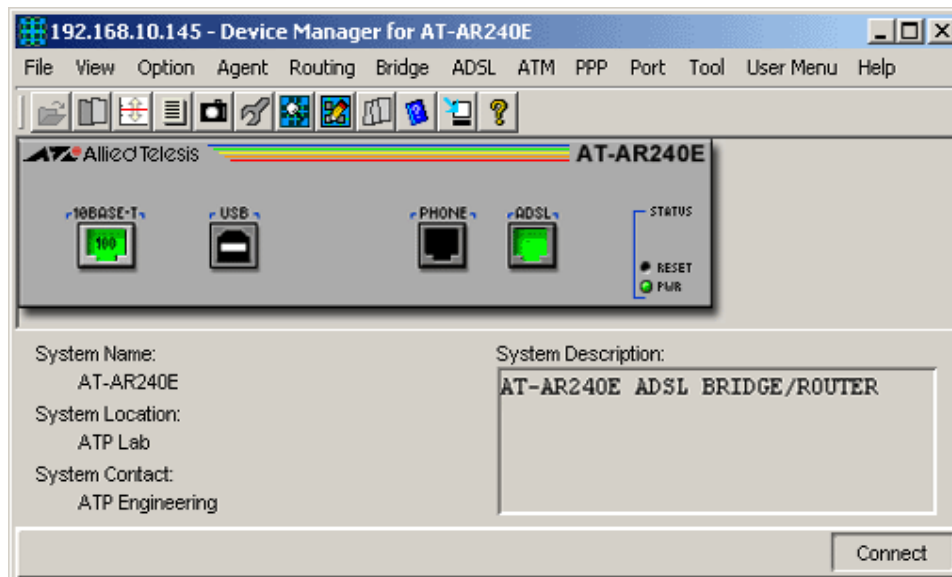
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This section describes Device Manager menus and operations specific to the AT-AR240E, AT-AR250E, and AT-AR255E ADSL bridge/routers.

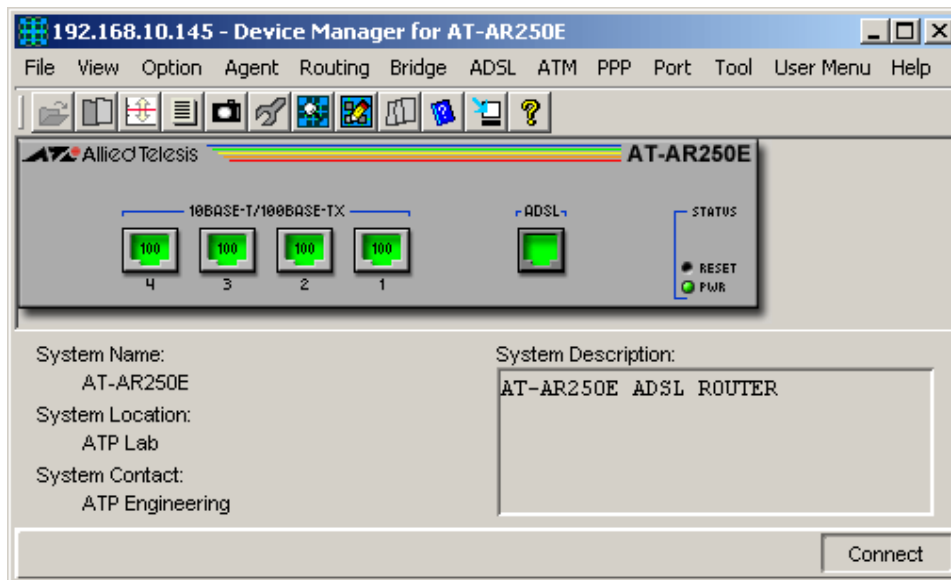
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [ADSL Menu](#)
- [ATM Menu](#)
- [PPP Menu](#)
- [Port Menu](#)

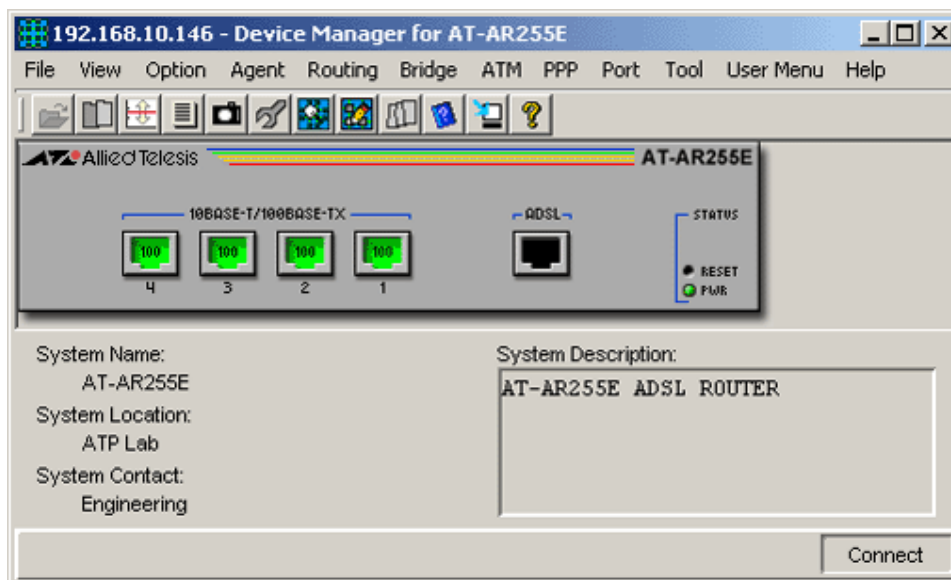
## Main Window



AT-AR240E



AT-AR250E



AT-AR255E

### Device Manager LEDs for ADSL Bridge/Router

LED	State	Description
PWR	Green	The router is receiving power.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

**Note** - The port speed displayed on the Ethernet port images is always '100' even if the Ethernet port is connected to a 10Mbps port on another device.

**Note** - The four Ethernet ports on the AT-AR250E and AT-AR255E operate as a single port. As a result, even if connection is established on just one port, all four ports will turn green.

**Note** - Expect the ADSL port to be green even if there is no physical connection established.

**Note** - The current firmware version does not allow you to disable the Ethernet ports.

**Note** - The current firmware version does not allow you to manually configure the speed of the Ethernet ports.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version returns 'enterprises' instead of the actual OID of the device for the System Unique Object ID parameter.

**Note** - Clicking on the 'Set MIB Value' button several times when configuring System Info parameters will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

**Note** - The current firmware version does not allow System Info parameters to be configured at the same time. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

### *Telnet*

Starts a Telnet connection to the router.

### *WEB Browser*

Connects to the router's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache) on the router.

**Note** - The current firmware version does not allow the user to configure the Physical Address parameter. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the router.

#### *Route Table*

Displays the IP routing table on the router.

**Note** - The current firmware version does not allow the user to configure the Destination Port Number parameter. Attempting to configure this parameter will result in the error messages: "The error occurred with 'Set' operation. Error: gen Error." or "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version does not allow the following parameters to be configured:

- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Next Hop Address
- Routing Type
- Route Updated Seconds
- Routing Mask
- Destination Metric 5

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

**Note** - The current firmware version does not allow the Forwarding Status and the Default TTL parameters to be configured. Attempting to configure these will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *ICMP Statistics*

Displays ICMP statistics.

#### *UDP Statistics*

Displays UDP statistics.

### *TCP Statistics*

Displays TCP statistics.

**Note** - The current firmware version does not allow the user to configure the TCP Connection State parameter. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database, discard/aging time information, and spanning tree status.

### *Forwarding Database*

Displays the Forwarding Database table.

### *Discard Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

## ADSL Menu

From the ADSL menu, you can view and edit ADSL information such as the line attributes, physical layer components, channel information, performance statistics, and configuration profiles.

**Note** - The ADSL Menu does not apply to the AT-AR255E.

### *ADSL Line*

Displays attributes of the ADSL line.

**Note** - The current firmware version does not allow the Configuration Profile and the Alarm Configuration Profile parameters to be configured. Attempting to configure these will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

### *ATU Remote*

#### *ATUR Physical Layer Inventory*

Displays the physical layer parameters of each remote ADSL transmission unit.

#### *ATUR Channels*

Displays ATUR Channel information like interleave delay, transmit rate, and length of the channel data-block.

#### *ATUR Performance Data*

Displays ATUR performance statistics like frame failures, signal failures and power failures.

**Note** - The ATUR Performance Data sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *ATUR Performance Data by Interval*

Displays collection of ATUR performance statistics in 15-minute intervals.

**Note** - The ATUR Performance Data by Interval sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *ATUR Channel Performance Data*

Displays ATUR channel performance statistics like received blocks, transmitted blocks, and error counts.

#### *ATUR Channel Performance Data by Interval*

Displays collection of ATUR channel performance statistics in 15-minute intervals.

**Note** - The ATUR Channel Performance Data sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Configuration Profiles*

Displays a list of parameters that represents the configuration of an ADSL modem.

**Note** - The Configuration Profiles sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Alarm Configuration Profiles*

Displays alarm-related information.

**Note** - The Alarm Configuration Profiles sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

## ATM Menu

From the ATM menu, you can view and edit ATM and AAL5-related information such as ATM interfaces, ATM virtual links, ATM cross-connects, AAL5 entities, and AAL5 connections.

### *Interface Configuration*

Displays ATM interface configuration information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Max VPC
- Max VCC
- Max Active VPI Bits
- Max Active VCI Bits
- ILMI VPI
- ILMI VCI
- Neighbor IP Address
- Neighbor Name

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

### *Interface DS3 PLCP*

Displays DS3 PLCP configuration and state parameters.

**Note** - The Interface DS3 PLCP sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *Interface TC Sublayer*

Displays TC Sublayer configuration and state parameters.

**Note** - The Interface TC Sublayer sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *Traffic Descriptor*

Displays information on the ATM traffic descriptor type and its associated parameters.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Type
- Parameter 1
- Parameter 2
- Parameter 3
- Parameter 4
- Parameter 5
- QoS Class
- Status

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error."

#### *Virtual Path Link (VPL)*

Displays configuration and state information for a bi-directional Virtual Path Link.

**Note** - The Virtual Path Link (VPL) sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Virtual Channel Link (VCL)*

Displays configuration and state information for a bi-directional Virtual Channel Link.

**Note** - AT-AR240E : The current firmware version does not allow the following parameters to be configured:

- Administrative Status
- Receive Traffic Descriptor Index
- Transmit Traffic Descriptor Index
- AAL Type
- AAL5 CPCS Transmit SDU Size
- AAL5 CPCS Receive SDU Size
- AAL5 Encapsulation Type

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

**Note** - AT-AR240E: The Port Number parameter and the Virtual Channel Link (VCL) parameters are not relevant and should be ignored.

**Note** - AT-AR240E : The current firmware version does not allow the Status parameters to be configured. Attempting to configure them will result in the error message: "The error occurred with 'Set' operation. Error: bad value." or "The error occurred with 'Set' operation. Error: gen Error".

**Note** - AT-AR250E/AT-AR255E : The Virtual Channel Link (VCL) sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Virtual Path (VP) Cross Connect*

Displays configuration and state information of all point-to-point , point-to-multipoint, or multipoint-to-multipoint VP cross connect.

**Note** - The Virtual Path (VP) Cross Connect sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.



### *Virtual Channel (VC) Cross Connect*

Displays configuration and state information of a bi-directional VC cross connect.

**Note** - The Virtual Channel (VC) Cross Connect sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *AAL5 Performance Statistics*

Displays performance statistics information associated with an AAL5 virtual channel connection.

**Note** - AT-AR240E : The Port Number parameter is not relevant and should be ignored.

**Note** - AT-AR250E/AT-AR255E : The AAL5 Performance Statistics sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

## PPP Menu

From the PPP menu, you can view and edit Point-to-Point Protocol information such as Link Control Protocol information, Link Quality Report information, PPP tests, MAC Bridging over PPP, IP over PPP, and security protocol.

### *PPP Link Group*

#### *PPP Link Status*

Displays management information about a particular PPP Link.

#### *PPP Link Configuration*

Displays configuration information about a particular PPP Link.

**Note** - The current firmware version does not allow the Initial MRU parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Receive ACC Map
- Transmit ACC Map
- Magic Number
- FCS Size

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

### *PPP Link Quality Report*

#### *LQR Info*

Displays Link Quality Report information for a particular PPP link.

**Note** - The LQR Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *LQR Configuration*

Displays Link Quality Report configuration information for a particular PPP link.

**Note** - The LQR Configuration sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *LQR Extensions*

Displays information on the most recently received Link Quality Report packet for a particular PPP link.

**Note** - The LQR Extensions sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *PPP Tests*

Performs a PPP echo test or PPP discard test.

**Note** - The PPP Tests sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *MAC Bridging over PPP*

#### *Bridging Info*

Displays information indicating whether the Bridge Network Control Protocol has reached an opened state, the type of compression used, and use of LAN identification field in packets.

#### *Bridging Configuration Info*

Displays bridging configuration information for a particular PPP link.

**Note** - The current firmware version does not allow the Administration Status parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Tinygram
- Ring ID
- Line ID
- LAN ID

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Bridge Media Status*

Displays the types of MAC frames that can be sent or received across each of the system's interfaces.

#### *Bridge Media Configuration*

Displays configuration information used to negotiate the MAC types to be sent or received.

**Note** - The current firmware version does not allow the Local Status parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

### *IP over PPP*

#### *IP Info*

Displays IP compression protocol status information for a particular PPP link.

#### *IP Configuration Info*

Displays IP compression protocol configuration information for a particular PPP link.

**Note** - The current firmware version does not allow the Compression parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."

**Note** - The current firmware version does not allow the Administration Status parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

### *PPP Security*

#### *Security Configuration Info*

Displays the security configuration information for a particular PPP link.

**Note** - The current firmware version does not allow the Protocol parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

**Note** - The current firmware version does not allow the Status parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."

#### *Security Secrets*

Displays information on the identities and secrets used by the PPP authentication protocols.

**Note** - The current firmware version does not allow the Protocol parameter to be configured. Attempting to configure this parameter will not result in an error but the new value will not be applied.

**Note** - Setting the Status parameter to 'invalid' clears the corresponding values of the Identity and Secret parameters.

**Note** - Device Manager allows the user to enter up to 63 characters for the Identity and Secret parameters. Entering more than 63 characters will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - Security Secrets parameters return to their default values whenever the device is restarted.

**Note** - The current firmware version does not allow the Direction parameter to be configured. Attempting to configure this parameter will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The Interface Info sub-menu option displays port parameters for 20 ports. By default, the Administration Status parameter is set to 'up' for the first four ports and 'down' for the rest of the ports. For ports 1 to 3, the Administration Status parameter cannot be configured. Its value is fixed to 'up'. For ports 5 to 12, valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The Administration Status parameter always returns to its default value whenever the device is restarted.

### *Error Statistics*

Displays error statistics for the port.

**Note** - The current firmware version returns 'noSuchName' for the Ethernet Chip Set parameter.

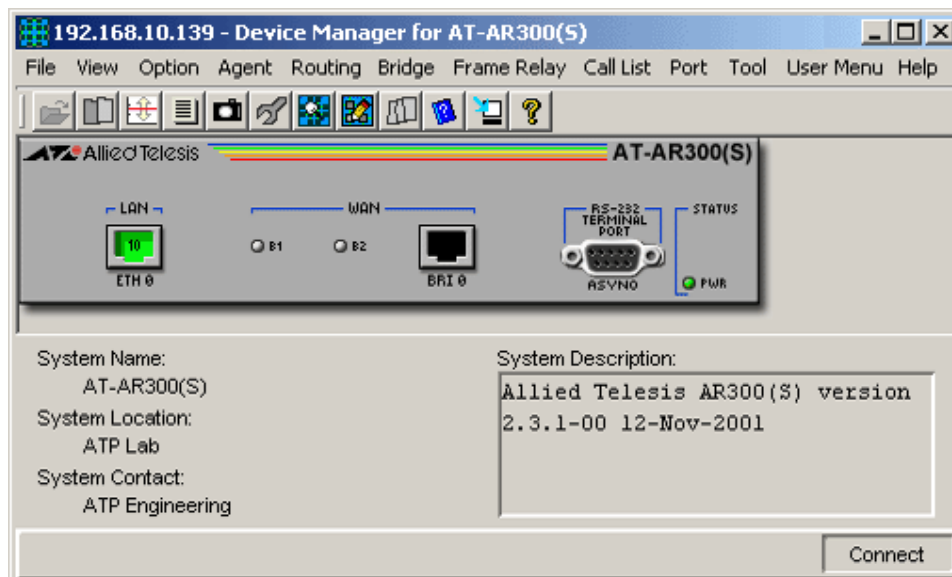
## AT-AR300 Series

This section describes Device Manager menus and operations specific to the AT-AR300 Series.

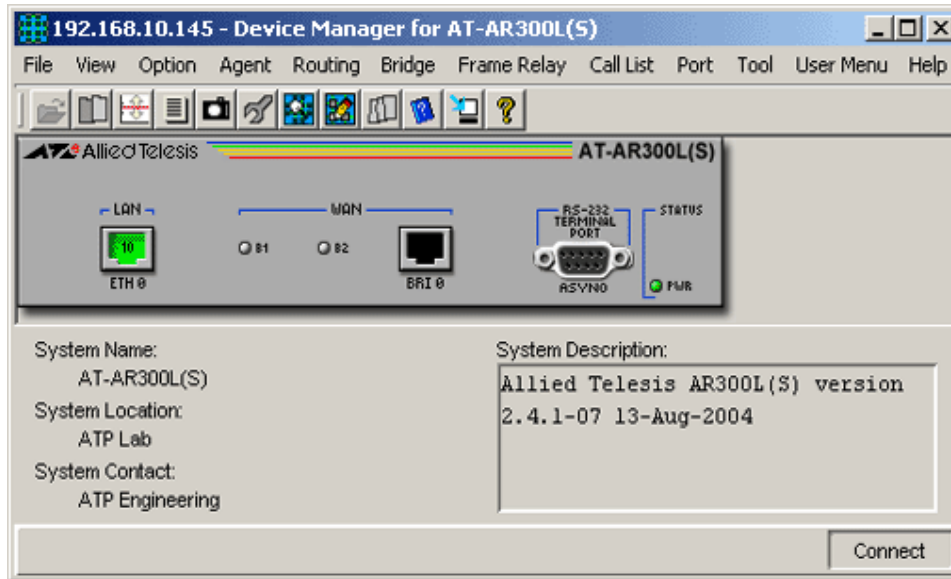
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Frame Relay Menu](#)
- [Call List Menu](#)
- [Port Menu](#)

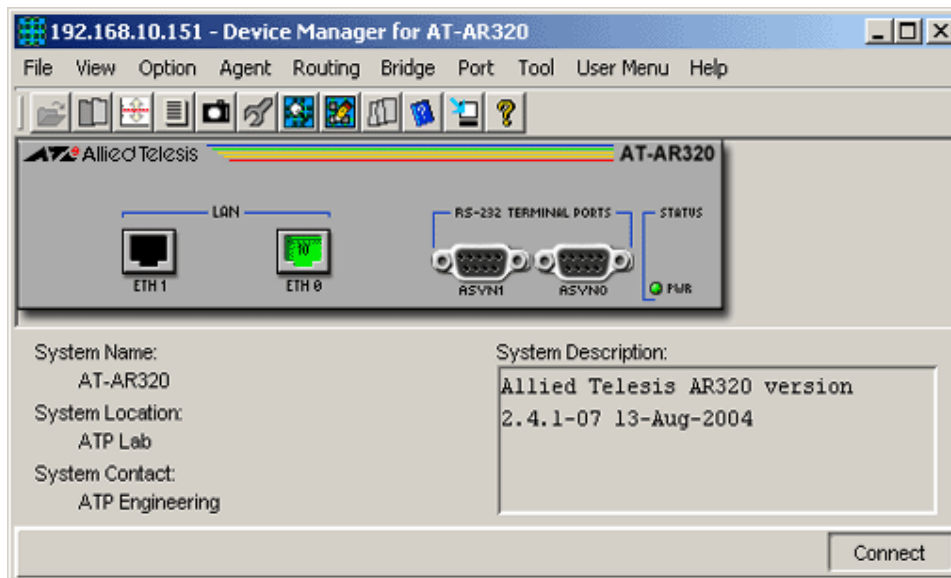
## Main Window



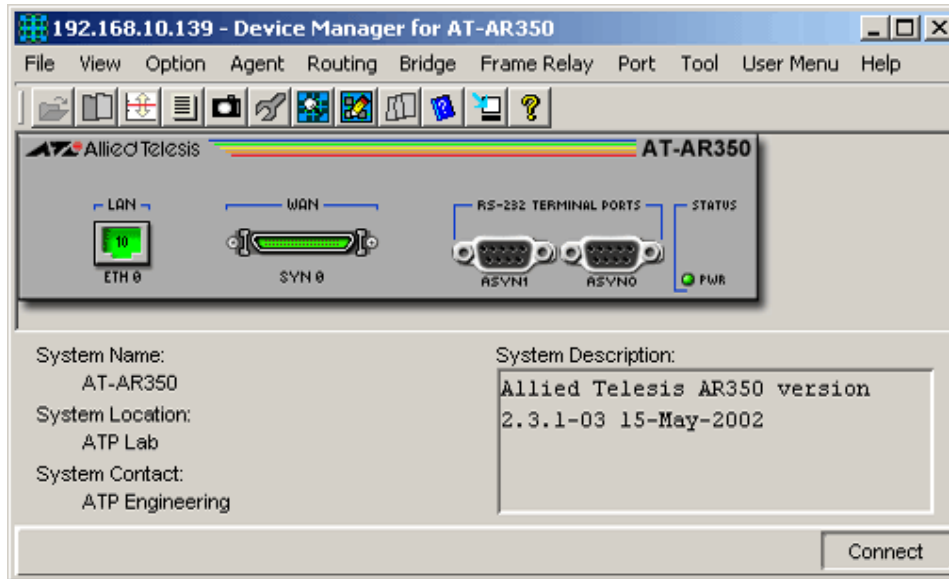
AT-AR300(S)



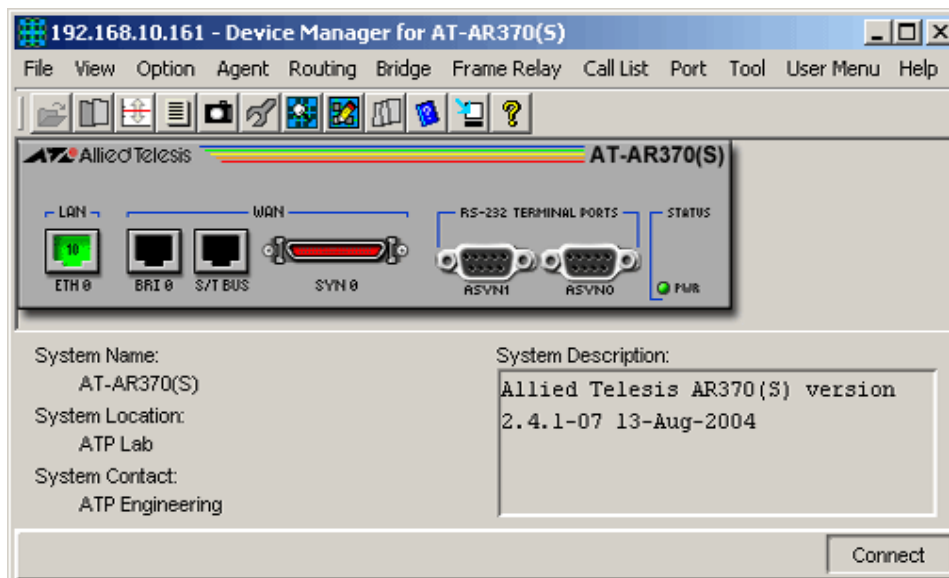
AT-AR300L(S)



AT-AR320

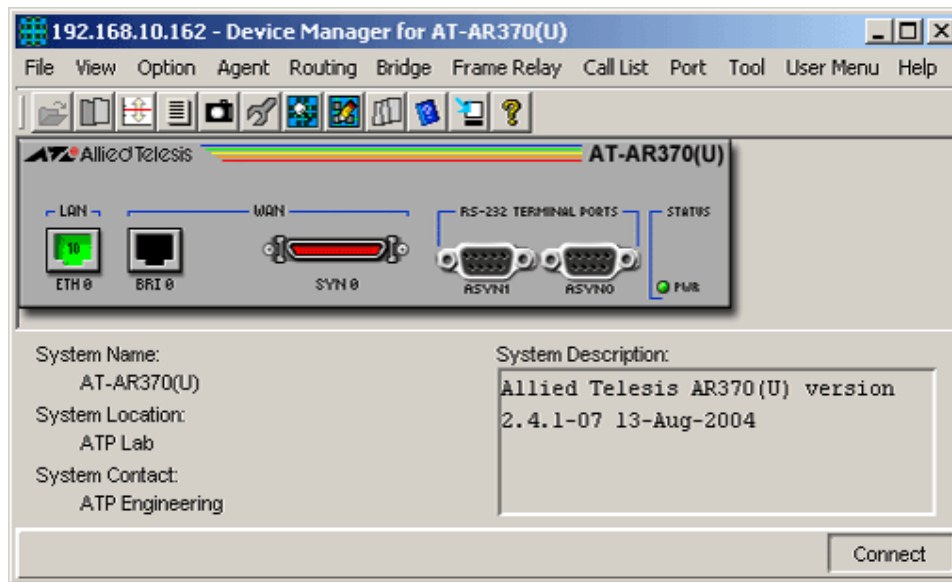


AT-AR350



AT-AR370(S)





AT-AR370(U)

Device Manager LEDs for AT-AR300 Series		
LED	State	Description
PWR	Green	The router is receiving power.
B1	Green	Data or voice is being transmitted over the B1 channel of the ISDN interface.
	Gray	No data or voice is being transmitted over the B1 channel or if the device is connected to a frame relay network.
B2	Green	Data or voice is being transmitted over the B2 channel of the ISDN interface.
	Gray	No data or voice is being transmitted over the B2 channel or if the device is connected to a frame relay network.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

### File List

Displays a list of the files in the router's flash file system.

#### *Config File Name*

Displays the file name of the start-up configuration file.

#### *Telnet*

Starts a Telnet connection to the router.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache) on the router.

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the router.

#### *Route Table*

Displays the IP routing table on the router.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and spanning tree status. The Bridge submenus are greyed out if bridges are not configured.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

## Frame Relay Menu

From the Frame Relay menu you can view and edit Frame Relay information. The Frame Relay submenus are greyed out if Frame Relay is not configured.

**Note** - The Frame Relay Menu does not apply to the AT-AR320 and AT-AR350.

*DLCMI Info*

Displays DLCMI (Data Link Connection Management Interface) information.

*Circuit Info*

Displays Frame Relay circuit statistics.

*Error Info*

Displays information about errors related to the Frame Relay module.

## Call List Menu

From the Call List menu, you can view ISDN call information.

**Note** - The Call List Menu does not apply to the AT-AR320 and AT-AR350.

*Detail Info*

Displays ISDN call information such as ISDN number and call direction.

*Spanning Tree Info*

Displays information about currently active ISDN calls.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

*Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

*Error Statistics*

Displays error statistics for the port.

*Spanning Tree Info*

Displays the port's spanning tree parameters. This option is greyed out if bridge ports are not configured on the router at the time Device Manager is started.

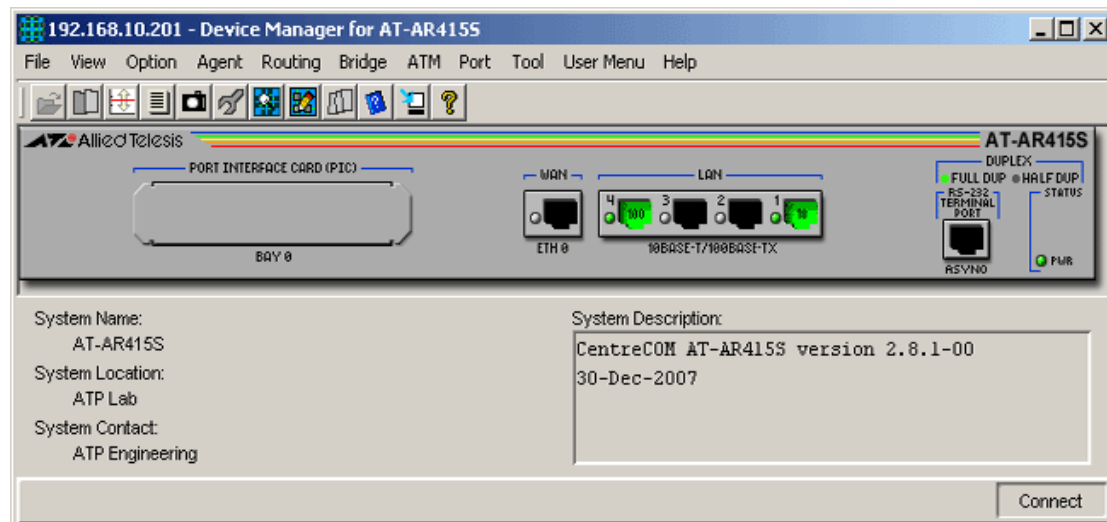
## AT-AR400S Series

This section describes Device Manager menus and operations specific to the AT-AR400S Series.

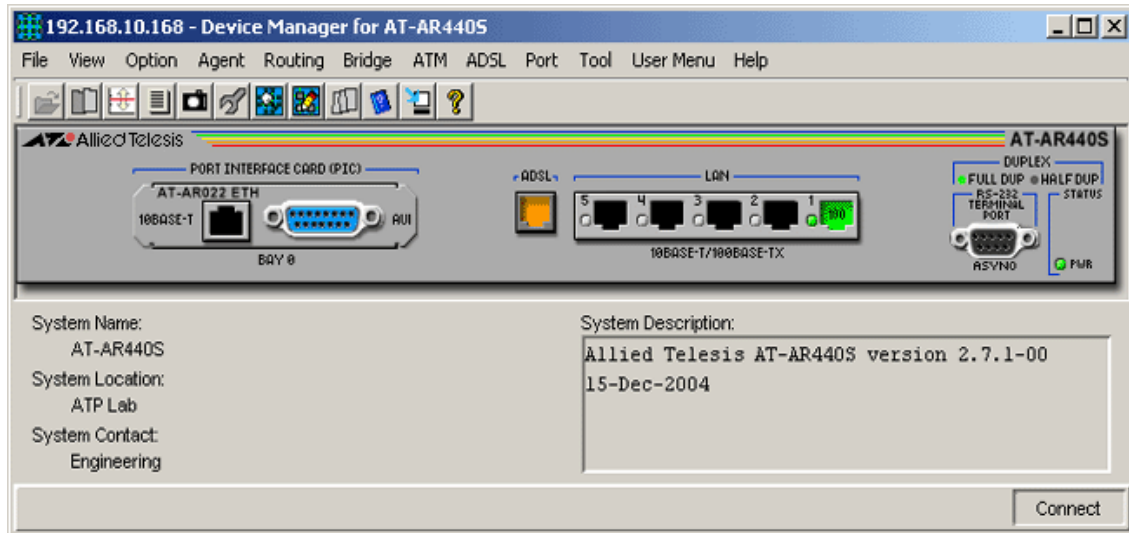
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [ATM Menu](#) (not applicable to the AT-AR450S)
- [ADSL Menu](#) (AT-AR440S and AT-AR441S only)
- [SHDSL Menu](#) (AT-AR442S only)
- [Port Menu](#)

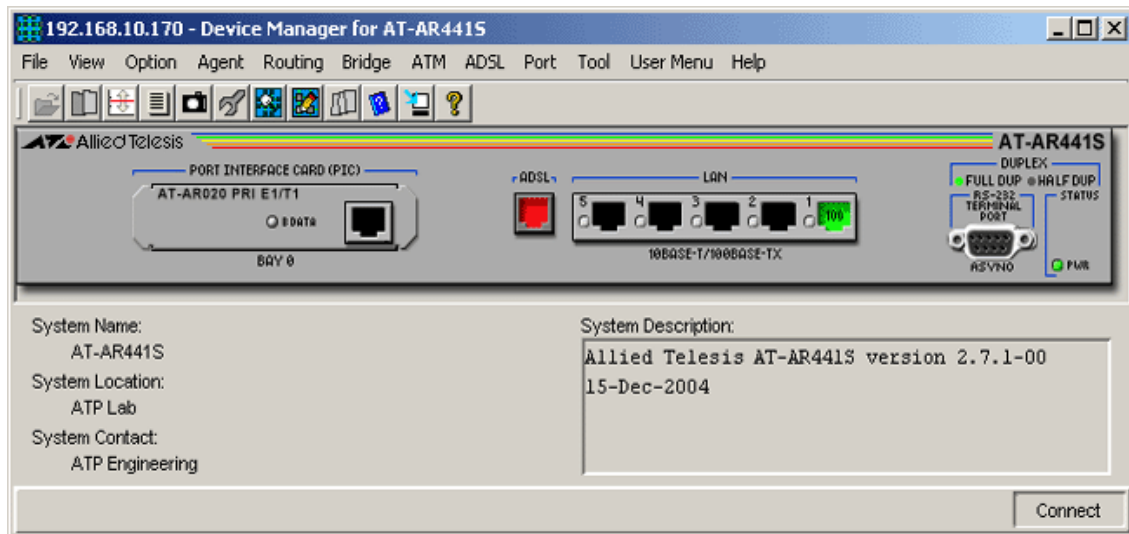
## Main Window



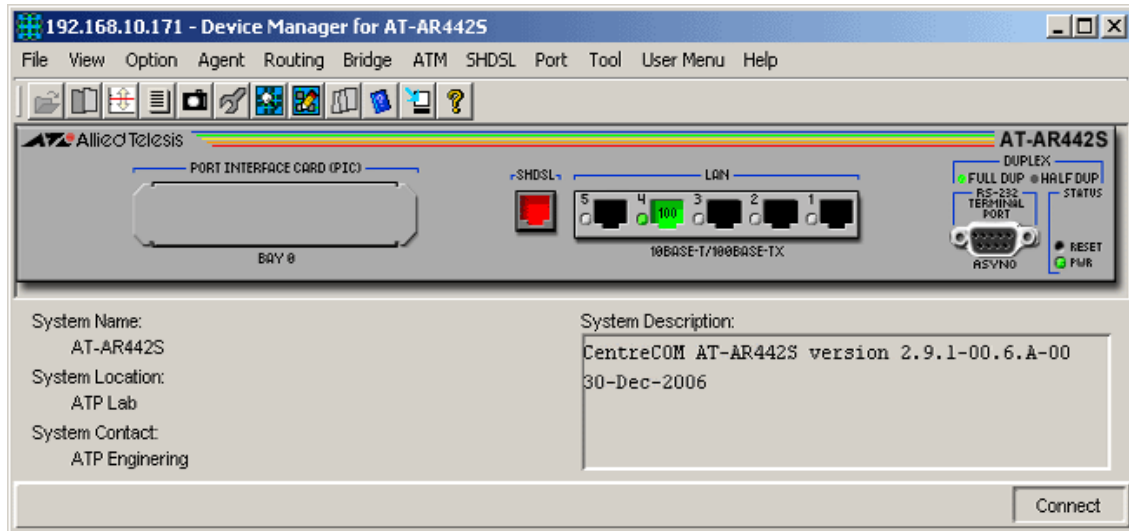
AT-AR415S



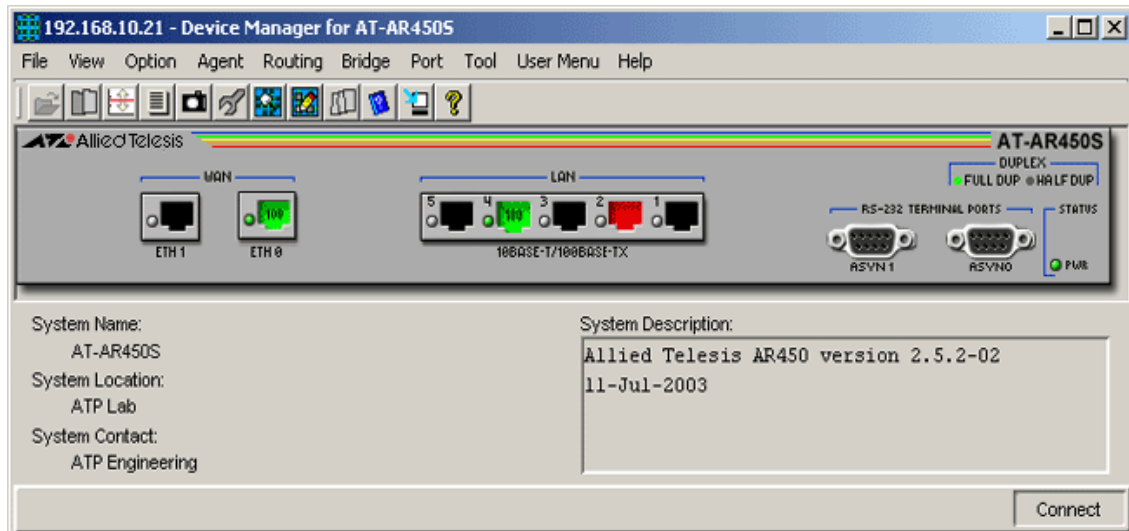
AT-AR440S



AT-AR441S



AT-AR442S



AT-AR450S

### Device Manager LEDs for AT-AR400S Series

LED	State	Description
PWR	Green	The router is receiving power.
DUPLX	Green	The port is operating at full-duplex.
	Gray	The port is either inactive or is operating at half-duplex.
ADSL	Green	The interface is enabled and the link is up.
	Orange	The interface is enabled and is handshaking. The interface is enabled and is training to negotiate the link.

Device Manager LEDs for AT-AR400S Series		
LED	State	Description
	Black	The interface is enabled and the link is down.
	Red	The interface is disabled.

**Note** - Please refer to [Port Interface Cards \(PICs\)](#) for the operations and behavior of the Port Interface Cards installed in these devices.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *File List*

Displays a list of the files in the router's flash and NVS file systems.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Telnet*

Starts a Telnet connection to the router.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache) on the router.

### *Address Table*

Displays the list of IP interfaces and their IP addresses on the router.

#### *Route Table*

Displays the IP routing table on the router.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and spanning tree status. The Bridge submenus are greyed out if bridges not configured.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

## ATM Menu

From the ATM menu you can view and edit ATM information. The ATM instance submenus are greyed out if no ATM instances are configured. The ATM channel submenus are greyed out if no ATM channels are configured.

#### *Instance Configuration*

Displays ATM Instance configuration information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Max VPC
- Max VCC
- Max Active VPI Bits
- Max Active VCI Bits
- ILMI VPI
- ILMI VCI
- Neighbor IP Address
- Neighbor Name

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."



### *Channel Configuration*

Displays ATM Channel configuration information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Receive Traffic Descriptor Index
- Transmit Traffic Descriptor Index

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."

### *Channel Error Statistics*

Displays information about errors related to ATM channels.

## **ADSL Menu**

From the ADSL menu, you can view ADSL interface information.

### *Line Info*

Displays information about the ADSL line.

### *Physical Info*

Displays information about the ADSL physical layer parameters.

### *Performance Statistics*

Displays ADSL event counters.

### *Interval Statistics*

Displays ADSL interval counters.

## **SHDSL Menu**

From the SHDSL menu, you can view SHDSL interface information.

### *Status*

Displays overall status information of the HDSL2/SHDSL spans.

### *Performance*

Displays status and performance information for segment endpoints in HDSL2/SHDSL Lines.

### *Line Configuration*

Displays span configuration profiles for SHDSL lines.

### *Alarm Configuration*

Displays alarm configuration profiles for HDSL2/SHDSL segment endpoints.

## **Port Menu**

From the Port menu, you can view and edit MIB information about selected ports.

### *Utilization*

Displays the port's utilization information.

**Note** - Utilization menu does not apply for AT-AR450S devices.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

### *Error Statistics*

Displays error statistics for the port.

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

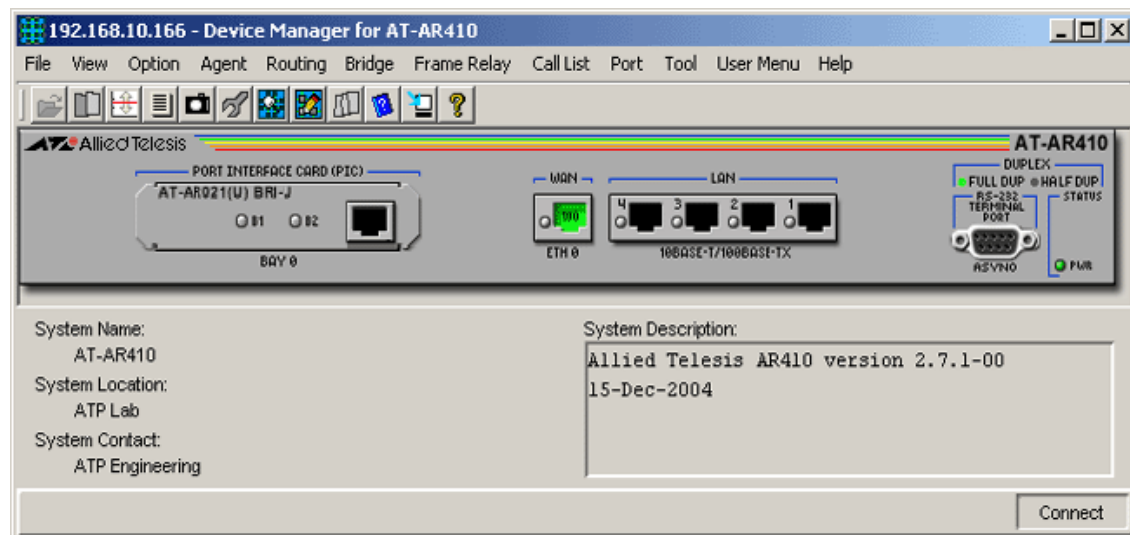
## AT-AR410

This section describes Device Manager menus and operations specific to the AT-AR410 router.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Frame Relay Menu](#)
- [Call List Menu](#)
- [Port Menu](#)

## Main Window



*AT-AR410 with PIC installed*

Device Manager LEDs for AT-AR410		
LED	State	Description
PWR	Green	The router is receiving power.
DUPLEX	Green	The port is operating at full-duplex.
	Gray	The port is either inactive or is operating at half-duplex.

**Note** - Please refer to [Port Interface Cards \(PICs\)](#) for the operations and behavior of the Port Interface Cards installed in this device.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *File List*

Displays a list of the files in the router's flash and NVS file systems.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Telnet*

Starts a Telnet connection to the router.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache) on the router.

### *Address Table*

Displays the list of IP interfaces and their IP addresses on the router.

### *Route Table*

Displays the IP routing table on the router.

### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

### *ICMP Statistics*

Displays ICMP statistics.

## **Bridge Menu**

From the Bridge menu, you can view and edit bridge information such as the forwarding database and spanning tree status. The Bridge submenus are greyed out if bridges not configured.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

## **Frame Relay Menu**

From the Frame Relay menu you can view and edit Frame Relay information. The Frame Relay submenus are greyed out if Frame Relay is not configured.

### *DLCMI Info*

Displays DLCMI (Data Link Connection Management Interface) information.

### *Circuit Info*

Displays Frame Relay circuit statistics.

### *Error Info*

Displays information about errors related to the Frame Relay module.

## **Call List Menu**

From the Call List menu, you can view ISDN call information. The Call List submenus are unavailable if the device is not configured for ISDN calls.

### *Detail Info*

Displays ISDN call information such as ISDN number and call direction for active calls.

### *Active call*

Displays information about currently active ISDN calls.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

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AT-AR410

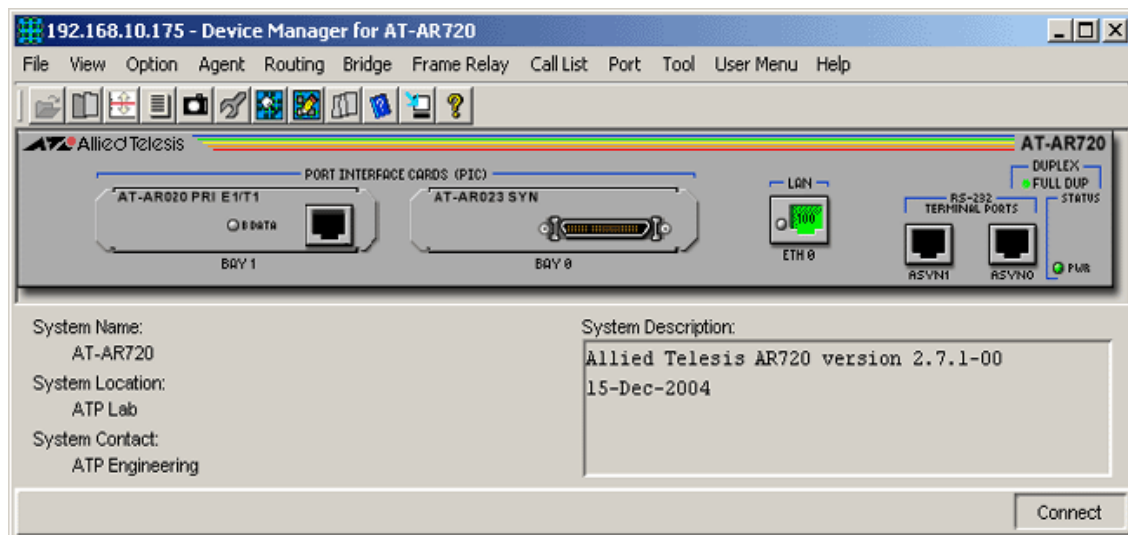
## AT-AR700 Series

This section describes Device Manager menus and operations specific to the AT-AR700 Series.

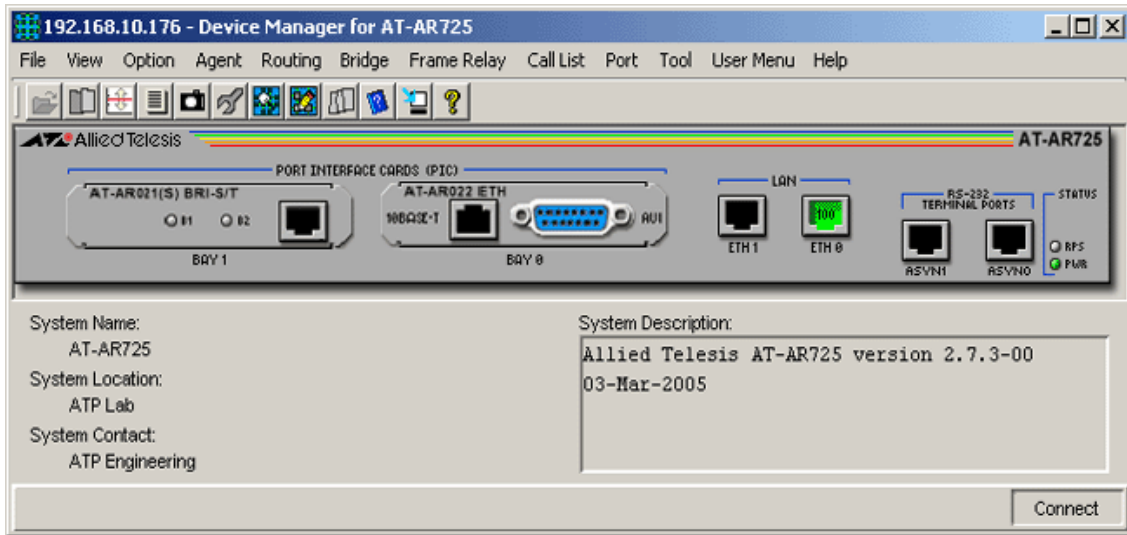
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Frame Relay Menu](#)
- [Call List Menu](#)
- [Port Menu](#)

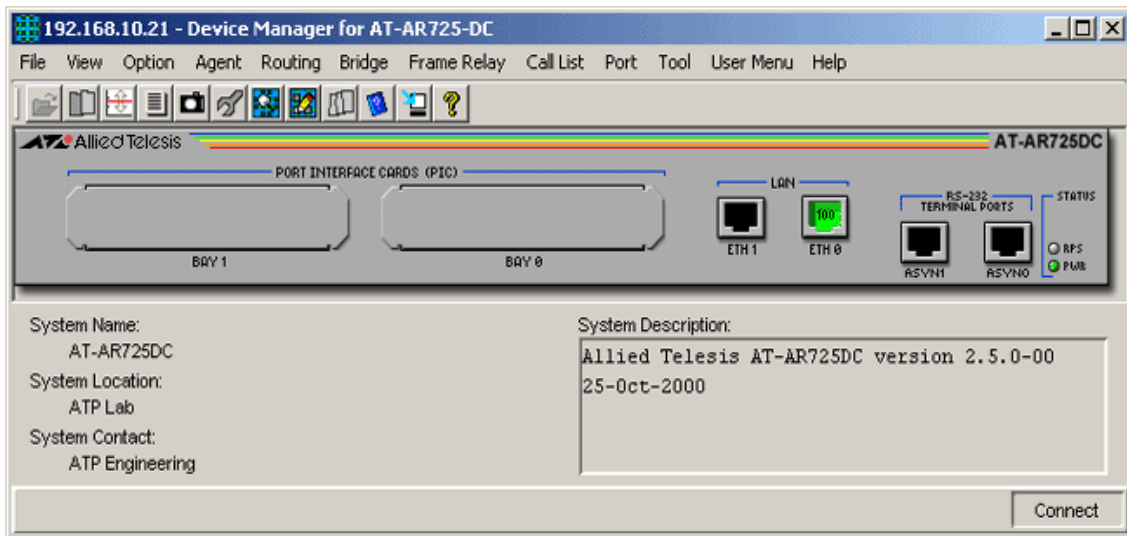
## Main Window



*AT-AR720 with PICs installed*

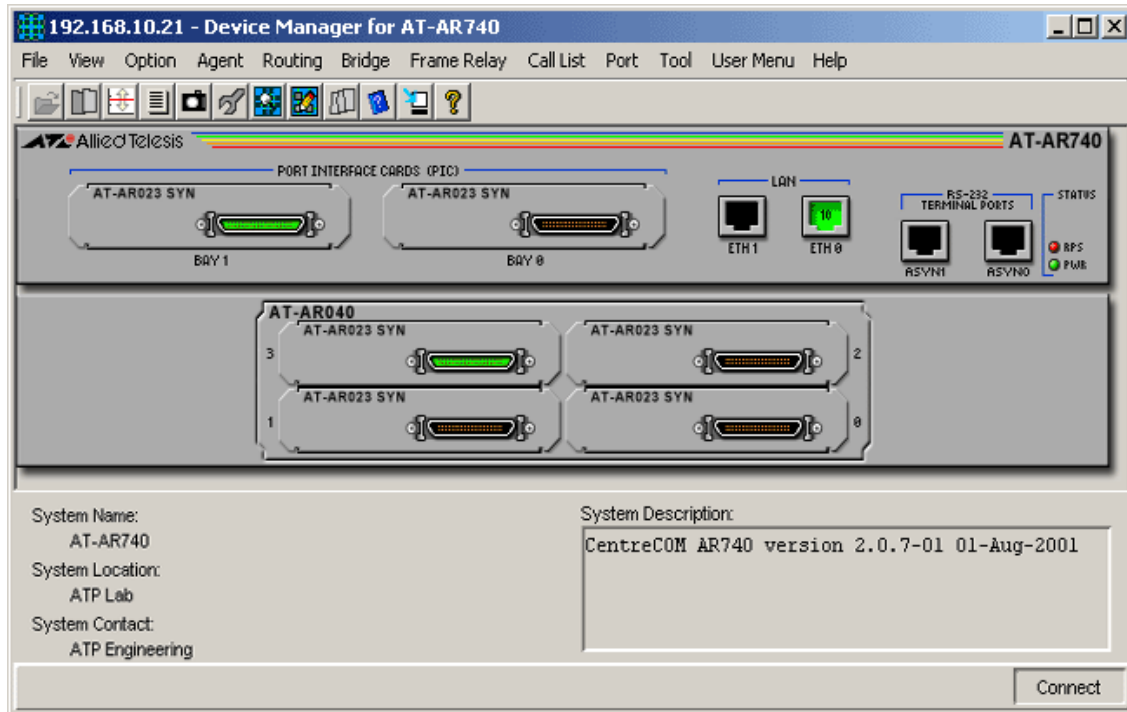


AT-AR725 with PICs installed

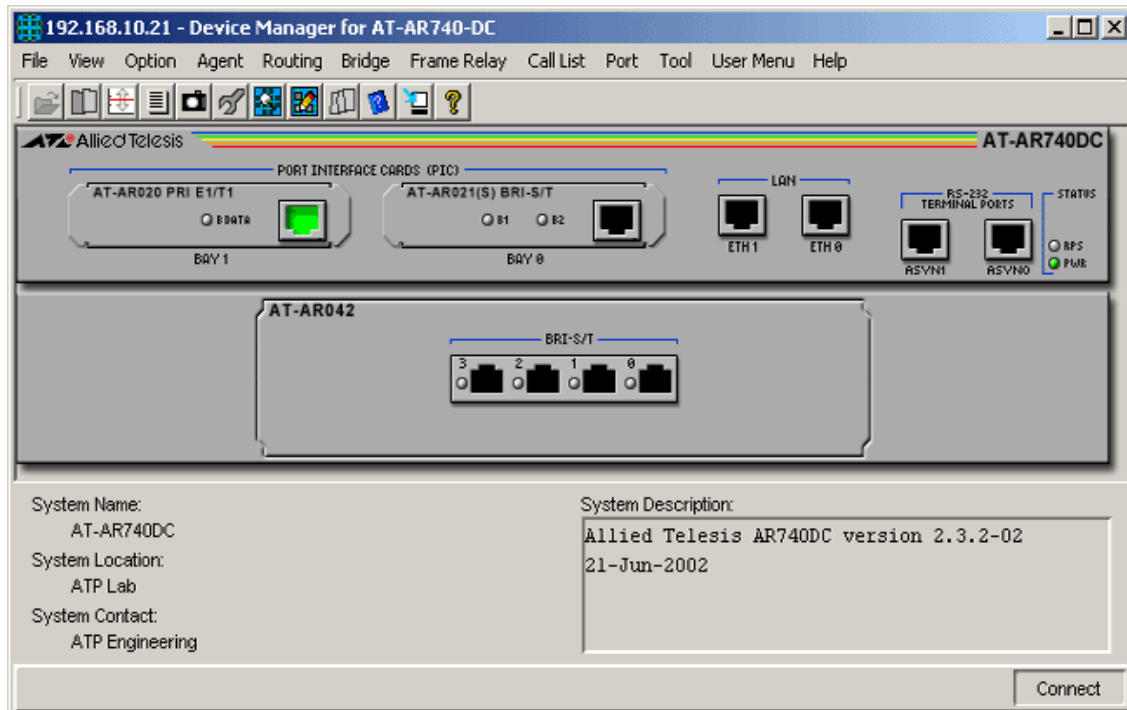


AT-AR725-DC

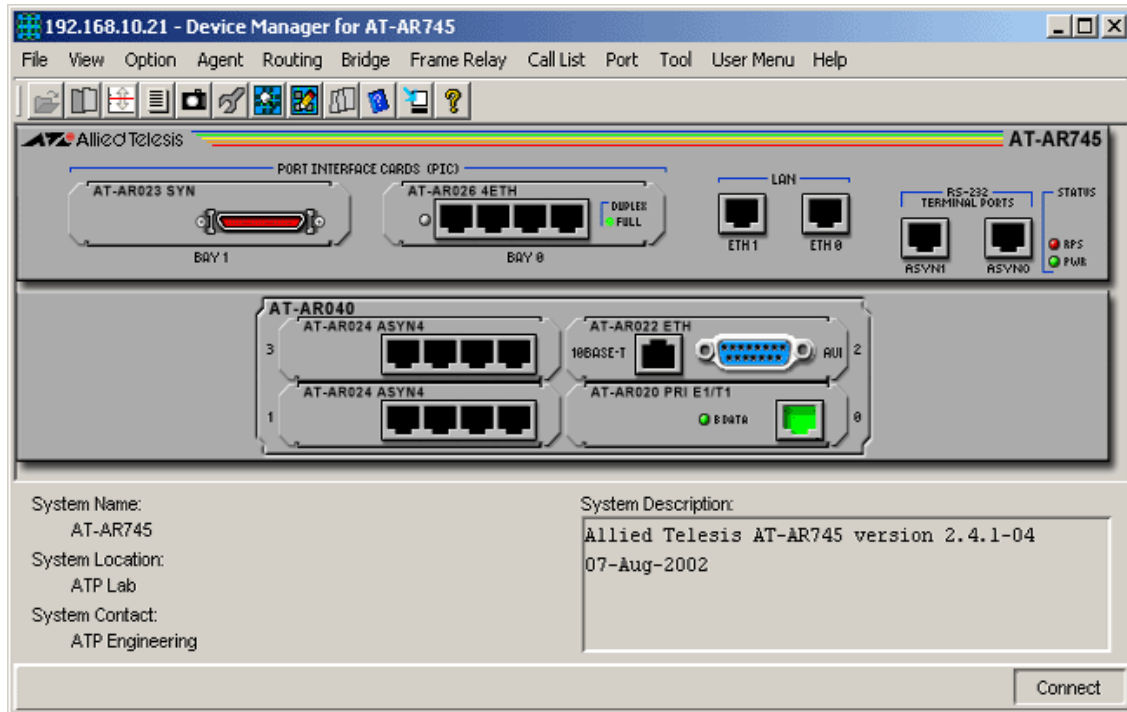




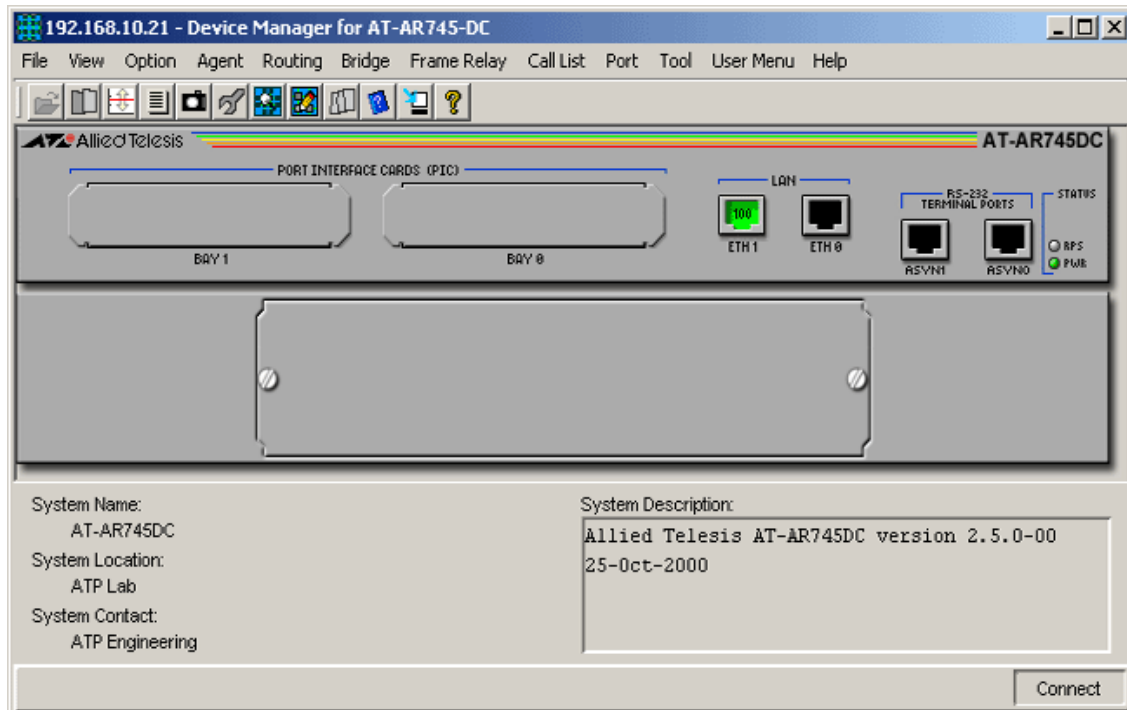
AT-AR740



AT-AR740-DC



AT-AR745



AT-AR745-DC

Device Manager LEDs for AT-AR700 Series		
LED	State	Description
PWR	Green	The router is receiving power from the main power supply unit.
	Red	The main PSU has failed.
RPS	Green	The router is receiving power from the redundant power supply.
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full-duplex.

**Note** - Please refer to [Port Interface Cards \(PICs\)](#) for the operations and behavior of the Port Interface Cards installed in these devices.

**Note** - Please refer to [Network Service Modules \(NSMs\)](#) for the operations and behavior of the Network Service Modules installed in these devices.

**Note** - Before hotswapping an NSM, make sure periodic device polling is enabled (File menu -> Properties).

**Note** - To turn RPS monitoring on or off on the router, enter the command SET SYSTEM RPSMONITOR={ON|OFF} from the command line interface. To see whether RPS monitoring is on, use the command SHOW SYSTEM. To turn on RPS monitoring using SNMP, set the fanAndPsRpsMonitoringStatus variable to on.

**Note** - The current firmware version does not allow Device Manager to support the RPS LED on the DC models.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

### File List

Displays a list of the files in the router's flash file system.

### Config File Name

Displays the file name of the start-up configuration file.

### Telnet

Starts a Telnet connection to the router.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache) on the router.

### *Address Table*

Displays the list of IP interfaces and their IP addresses on the router.

### *Route Table*

Displays the IP routing table on the router.

### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and spanning tree status. The Bridge submenus are greyed out if bridges are not configured.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

## Frame Relay Menu

From the Frame Relay menu you can view and edit Frame Relay information. The Frame Relay submenus are greyed out if Frame Relay is not configured.

#### *DLCMI Info*

Displays DLCMI (Data Link Connection Management Interface) information.

#### *Circuit Info*

Displays Frame Relay circuit statistics.

#### *Error Info*

Displays information about errors related to the Frame Relay module.

## Call List Menu

From the Call List menu, you can view ISDN call information. The Call List submenus are greyed out if an ISDN interface is not installed, and the device is not configured to use ISDN.

#### *Detail Info*

Displays ISDN call information such as ISDN number and call direction for active calls.

#### *Active call*

Displays information about currently active ISDN calls.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

#### *Error Statistics*

Displays error statistics for the port.

#### *Spanning Tree Info*

Displays the port's spanning tree parameters. This option is greyed out if bridge ports are not configured on the router at the time Device Manager is started.

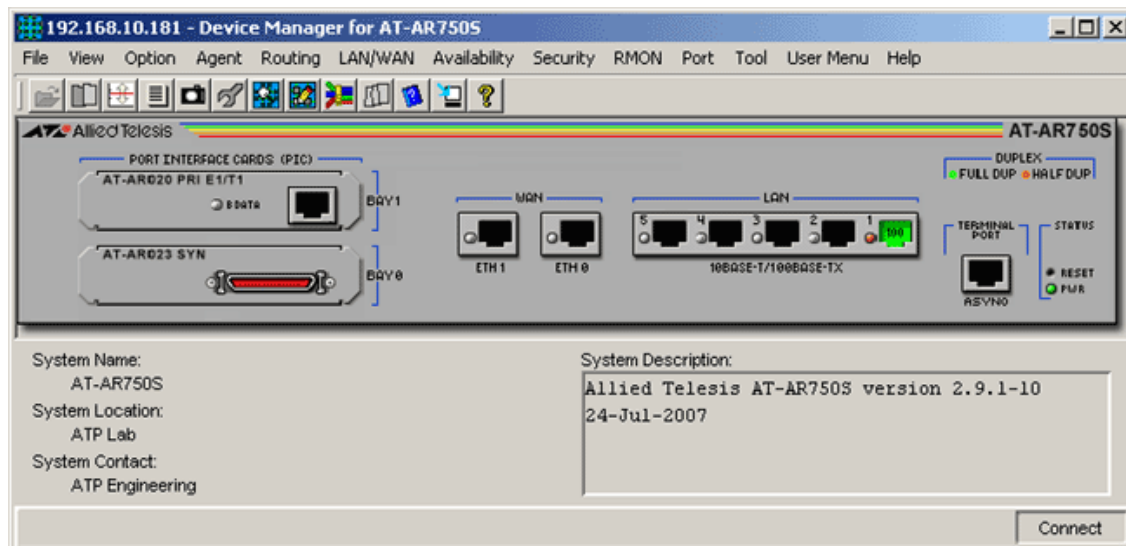
## AT-AR700S Series

This section describes Device Manager menus and operations specific to the AT-AR700S Series routers.

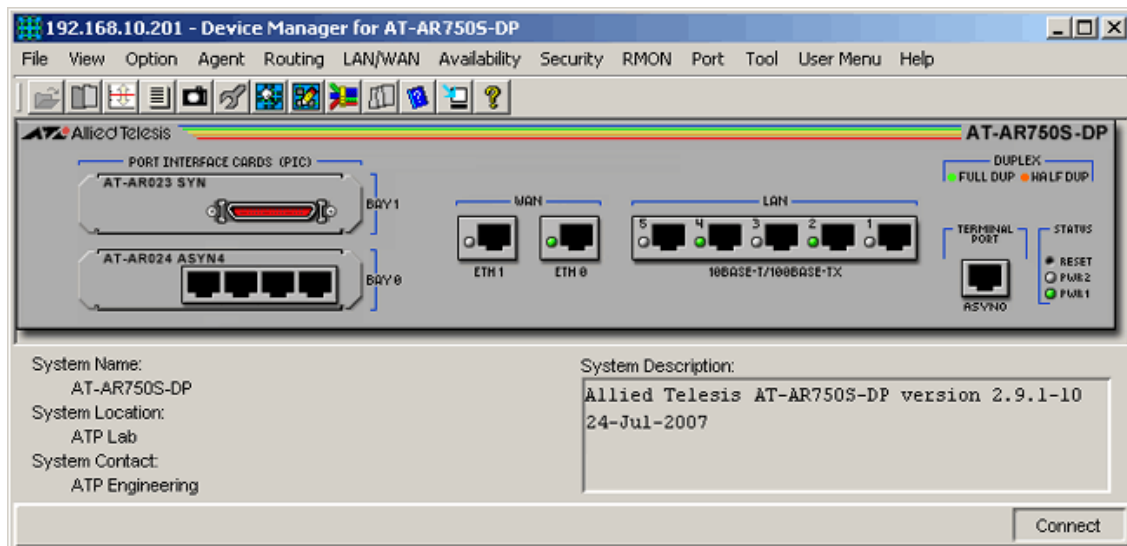
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [LAN/WAN Menu](#)
- [Availability Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

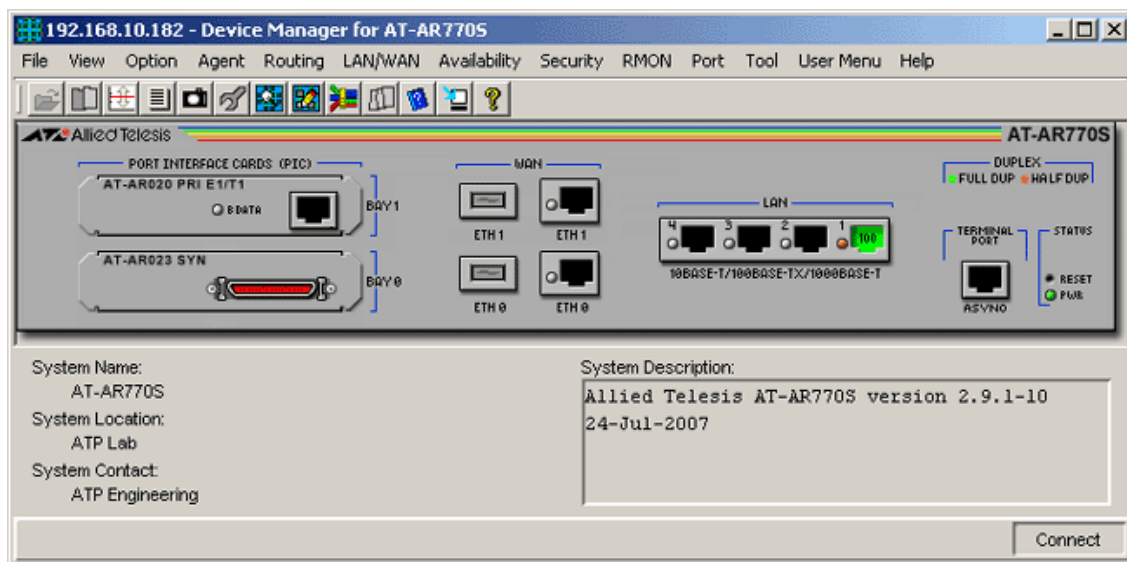
## Main Window



AT-AR750S



AT-AR750S-DP



AT-AR770S

**Note** - AT-AR770S: DUP LEDs of active ports will always be orange regardless of the actual duplex mode of the ports. This is because the current firmware version always returns a half-duplex value for the Duplex Mode parameter of these ports.

Device Manager LEDs for the AT-AR700S Series		
LED	State	Description
PWR	Green	The router is receiving power from the main power supply unit.
DUPLEX	Green	The port is operating at full-duplex.
	Gray	The port is either inactive or is operating at half-duplex.

**Note** - Please refer to [Port Interface Cards \(PICs\)](#) for the operations and behavior of the Port Interface Cards installed on these devices.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### *System Info*

#### *Standard*

Displays basic system information, including system name, location, contact and description.

#### *Enterprise*

##### *CPU Utilization*

Displays information about the CPU utilization over different periods of time.

#### *Temperature*

Displays information about the temperature monitored by the temperature sensors in the device.

**Note** - The current firmware version does not allow the Temperature Threshold parameter to be configured.

#### *Host Resources*

##### *General System Info*

Displays general information about the host resources.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Time and Date parameter will display a sequence of bytes in hexadecimal format instead of the actual date and time of day.

**Note** - The Time and Date and Initial Load Parameter parameters are implemented as 'read-only'.

### *Logical Storage Areas*

Displays resource information about the storage devices.

**Note** - The Storage Size parameter is implemented as 'read-only'.

### *Devices*

Displays resource information about the devices installed in the host.

### *Hardware Info*

#### *Total Boards*

Displays the number of boards that are currently installed.



#### *Board Info*

Displays basic information on the boards that are currently installed.

#### *Slot Info*

Displays information on the Power Supply Bay slots.

#### *Physical Interfaces*

Displays information about the interfaces found in the device.

#### *Firmware Info*

##### *Install Configurations*

Displays information about the Software release currently loaded in the device.

**Note** - The current firmware version returns a 'noSuchName' value for the Release File Exists? and Patch File Exists? parameters.

##### *Install History*

Displays information about the install history.

##### *Configuration File*

Displays the Configuration file name.

**Note** - The Startup Config and Save Running Config parameters accept inputs from 4 to 38 characters only.

##### *Release Licenses*

Displays a list of software releases installed on the switch.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

#### *File System*

##### *Total Files*

Displays the total number of files stored in the device.

##### *File List*

Displays a list of the files in the switch's file system.

#### *Loader*

##### *Load Status*

Displays the status of the device loader.

##### *Load Parameters*

Displays information about the files to be loaded.

#### *LLDP Configuration*

##### *General Config*

Displays basic LLDP configuration.

### *Port Config*

Displays LLDP configuration for each port.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the TLVs Tx Enable parameter will not be configurable and will display an 8-bit binary string instead of the actual TLV types allowed. However, the TLV types allowed can still be determined by looking at the bits that are on from left to right:

- Bit 0 ? Port Description
- Bit 1 ? System Name
- Bit 2 ? System Description
- Bit 3 ? System Capabilities

### *LLDP Statistics*

#### *Remote Tables*

Displays statistics for the LLDP remote tables.

#### *Port Tx*

Displays statistics for LLDP frames transmitted.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Port Rx*

Displays statistics for received LLDP frames.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

### *Local System Data*

#### *General Info*

Displays information about the local LLDP system.

#### *Port Info*

Displays information on the LLDP of local ports.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

### *Management Addresses*

Displays management addresses of the local LLDP system.

**Note** - The current firmware version returns the value 'NULL' for the OID parameter.

#### *Reset Cold*

Initiates a cold restart on the switch.

#### *Reset Warm*

Initiates a warm restart on the switch.

#### *Reset Info*

Displays information about the restart.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

### *IP*

#### *ARP Table*

Displays the ARP cache on the switch.

**Note** - The Physical Address and Mapping Type parameters are implemented as 'read-only'.

#### *Address Table*

Displays the list of IP interfaces on the switch.

#### *Route Number*

Displays the IP routing number on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns the value 'NULL' for the Routing Protocol MIB parameter.

**Note** - The following parameters are implemented as 'read-only':

- Destination Port Number
- Routing Type
- Next Hop AS Number
- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4

- Destination Metric 5
- Row Status

#### *IP Statistics*

Displays statistics about IP, such as the number of IP datagrams received.

#### *UDP*

##### *Listener Info*

Displays UDP listener information.

##### *UDP Statistics*

Displays UDP statistics.

#### *TCP*

##### *Connection Info*

Displays TCP connection-specific information.

**Note** - The Connection Status parameter is implemented as 'read-only'.

#### *TCP Statistics*

Displays TCP statistics.

#### *ICMP Statistics*

Displays ICMP statistics.

#### *DHCP Ranges*

Displays information about the DHCP module.

#### *BGP*

##### *General Info*

Displays information about the BGP module.

##### *Peer Info*

Displays BGP Peer information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Connect Retry Interval
- Configured Hold Time
- Configured Keep Alive
- Min AS Origination Interval
- Min Route Advertisement Interval

#### *Path Attributes*

Displays the BGP path attributes.

## LAN/WAN Menu

From the LAN/WAN menu, you can view and edit information for the LAN/WAN such as the frame relay and ISDN-related information. The submenus are unavailable if the proper PICs are not installed.

### *Bridging*

#### *Forwarding Database*

Displays the Forwarding Database table as returned by the device.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

### *Basic Bridge Info*

Displays basic bridge information.

### *Bridge Port Info*

Displays bridge port information.

**Note** - The current firmware version returns the value 'NULL' for the Circuit parameter.

### *ISDN*

#### *Call Details*

Displays ISDN call information such as ISDN number and call direction for active calls.

**Note** - The Remote Call parameter does not allow input values that contain hyphens.

**Note** - If the In CLI (Calling Line Info) Search parameter is set to 'list', the In CLI (Calling Line Info) List Check parameter gives the index of the CLI list to search. The value of CLI list indices ranges from 1 to 100. The value 0 is returned if the In CLI (Calling Line Info) Search parameter is not set to 'list'. When the In CLI (Calling Line Info) List Check parameter is set to 0, the In CLI (Calling Line Info) Search parameter is internally set to 'off'. Subsequently setting it to a non-zero value will set the In CLI (Calling Line Info) Search parameter to 'list'. Note that when using the command line interface, CLI List indices range from 0 to 99, but when using Device Manager, they range from 1 to 100. This is because SNMP will not allow a table index to have the value 0, and the command line usage of indices from 0 to 99 is too well established to change.

**Note** - If the In CLI (Calling Line Info) Check parameter is set to 'present' or 'required', the In CLI (Calling Line Info) Check List parameter gives the index of the CLI list to check against. The value of CLI list indices ranges from 1 to 100. The value 0 means that no list to check against is defined and the check immediately fails. Note that when using the command line interface, CLI list indices range from 0 to 99, but when using Device Manager, they range from 1 to 100. This is because SNMP will not allow a table index to have the value 0, and the command line usage of indices from 0 to 99 is too well established to change.

**Note** - The PPP Template parameter specifies the PPP template to use when creating dynamic PPP interfaces for calls generated. The value 33 represents a default PPP template while the values 1 to 32 represent PPP templates that are currently defined in the router. Note that when using the command line interface, PPP template indices range from 0 to 31, but when using Device Manager, they range from 1 to 32. This is because SNMP will not allow a table index to have the value 0.

#### *CLI List*

Displays the Calling Line Information list.

#### *Active Calls*

Displays information about currently active ISDN calls.

#### *Call Log*

Displays the call logs.

#### *Call Detail Attachments*

Displays call detail attachment information.

#### *B Channel Attachments*

Displays B Channel attachment information.

#### *BRI Interfaces*

Displays BRI interface information.

#### *BRI Channels*

Displays BRI channels information.

#### *PRI Interfaces*

Displays PRI interface information.

#### *PRI Channels*

Displays PRI channels information.

#### *Frame Relay*

##### *DLC Management Interfaces*

Displays DLCMI (Data Link Connection Management Interface) information.

**Note** - The DLCMI Status and Row Status parameters are not applicable to the AT-AR700S series and should be ignored.

**Note** - The following parameters are implemented as 'read-only':

- DLCMI State
- Address Type
- Address Length
- Polling Interval of Successive Status
- Polling Interval of Full Status Enquiry
- Error Threshold
- Monitored Error Events
- Max Supported VC Numbers
- Multicast Type

#### *Virtual Circuits*

Displays Frame Relay circuit statistics.

**Note** - The following parameters are not applicable to the AT-AR700S series and should be ignored:

- Multicast Type
- Type
- Discards
- Received DEs
- Sent DEs
- Logical Interface Index
- Row Status

**Note** - The following parameters are implemented as 'read-only':

- State
- CIR
- Maximum Line Speed
- Throughput

#### *Errors*

Displays information about errors related to the Frame Relay module.

**Note** - The Faults and Fault Time parameters are not applicable to the AT-AR700S series and should be ignored.

#### *DSI*

##### *DSI Config*

Displays DSI configuration.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - The following parameters are implemented as 'read-only':

- Line Type
- Line Coding
- Send Code
- Circuit ID
- Loopback Config
- Signal Mode
- Transmit Clock Source
- Facilities Data Link
- Line Length
- Change Status Trap
- Channelization

#### *Near-End*

##### *Current 15-Min Interval Statistics*

Displays near-end DSI statistics every 15 minutes.

##### *Statistics for Past 24 Hours*

Displays near-end DSI statistics for the past 24 hours.

##### *Cumulative Statistics*

Displays accumulated near-end DSI statistics.

#### *Far-End*

##### *Current 15-Min Interval Statistics*

Displays far-end DSI statistics every 15 minutes.

##### *Statistics for Past 24 Hours*

Displays far-end DSI statistics for the past 24 hours.

##### *Cumulative Statistics*

Displays accumulated far-end DSI statistics.

## Availability Menu

From the Availability menu you can view and edit Server Load Balancing and Ping Polling information.

#### *Server Load Balancing*

##### *General Info*

Displays basic server load balancing information.

##### *Resources*

Displays server load balancing resources information.

##### *Resource Pools*

Displays server load balancing resource pools information.



#### *Virtual Balancers*

Displays virtual balancers information.

#### *Affinity Tables*

Displays load balancer affinities information.

#### *Open TCP Connections*

Displays open TCP connections information.

### *Ping Polling*

#### *Ping Status*

Displays the status of the Ping polling.

**Note** - The current firmware version does not allow the Ping Status parameter to be configured.

#### *Ping Parameters*

Displays basic information of the Ping module.

**Note** - Valid MIB Set values for the Number of Packets parameter should range from 0-4294967595. However, the current firmware version allows the user to enter negative values as well. Furthermore, attempting to set the parameter to 0 will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version accepts values in the range [0-4294967595] inclusive for the Number of Packets and Time Interval parameters.

**Note** - Valid MIB Set values for the Timeout parameter should range from 1 to 65535. However, the current firmware version allows the user to enter values in the range [-65535 to -1, 1 to 65535] inclusive. Attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - The current firmware version does not allow the Address parameter to be configured.

### *Ping Statistics*

Displays statistics of the Ping polling.

## Security Menu

From the Security menu, you can view and edit port access entity information such as the PAE port information and the Supplicant PAE information.

### *Port-based Authentication*

#### *Authentication Status*

Displays the status of the port-based authentication.

#### *PAE Port Info*

##### *Standard*

Displays standard PAE port information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 : Authenticator
- Bit 1 : Supplicant

### *Enterprise*

Displays enterprise PAE port information.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 : Authenticator
- Bit 1 : Supplicant

### *Authenticator PAE Info*

#### *Standard*

Displays standard authenticator PAE information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - The Administrative Controlled Directions and Key Transmission Status parameters are implemented as 'read-only'.

#### *Enterprise*

Displays enterprise authenticator PAE information.

### *Authenticator PAE Statistics*

#### *Standard*

Displays standard statistics for the PAE Authenticator.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Enterprise*

Displays enterprise statistics for the PAE Authenticator.

#### *Supplicant PAE Info*

Displays supplicant PAE information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Supplicant PAE Statistics*

Displays the statistics for the PAE supplicant.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *MAC-based Authentication*

##### *PAE Port Info*

Displays PAE port information.

**Note** - The Initialize parameter is implemented as 'read-only'.

##### *Authenticator PAE Info*

Displays authenticator PAE information.

#### *Firewall Session Statistics*

Displays the statistics for the firewall sessions.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Alias and Counter Discontinuity Time parameters.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down' only.

**Note** - The Promiscuous Mode parameter is implemented as 'read-only'.

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - AT-AR770S: The current firmware version always returns 'half-duplex' for the Duplex Mode parameter regardless of the actual duplex mode of the port.

### *Error Statistics*

Displays error statistics.

**Note** - The Ethernet Chip Set, Symbol Errors and Duplex Status parameters are not applicable to the AT-AR700S series and should be ignored.

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

**Note** - Valid MIB Set values for the Port Path Cost parameter is in the range [1-65535] inclusive.

### *MAU Info*

Displays interface-related MAU information for the port.

**Note** - The MAU Type List Bits and HC False Carriers parameters are not applicable to the AT-AR700S series and should be ignored.

**Note** - The MAU Status and Default MAU Type parameters are implemented as 'read-only'.

### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

**Note** - The following parameters are not applicable to the AT-AR700S series and should be ignored:

- Capability Bits
- Advertised Bits
- Received Bits
- Remote Fault Advertised
- Remote Fault Received

**Note** - The Administration Status, Advertised Negotiation Capability and Restart parameters are implemented as 'read-only'.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

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AT-AR700S Series

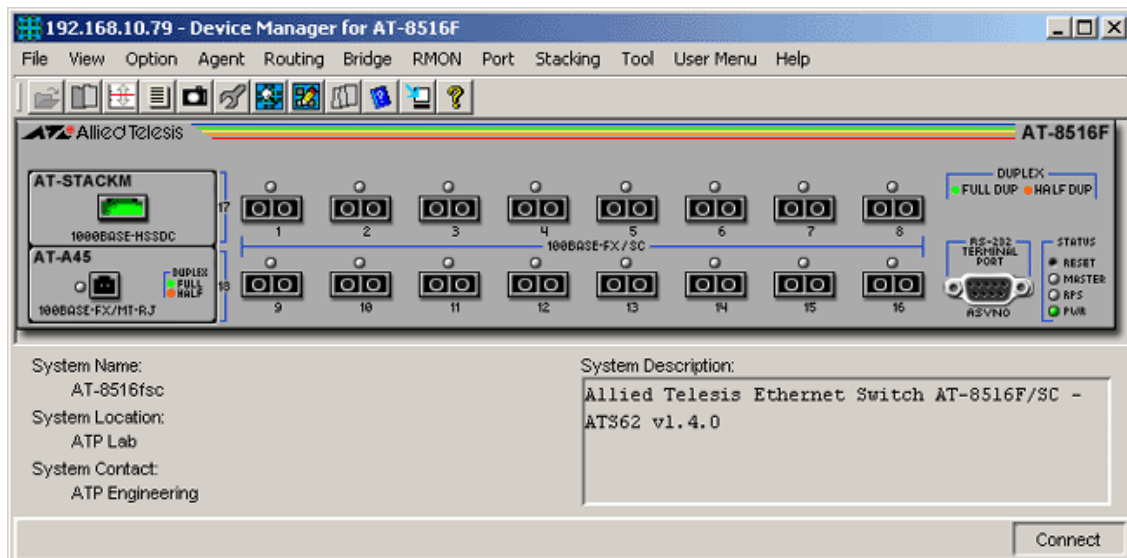
## AT-8500 Series

This section describes Device Manager menus and operations specific to the AT-8500 Series.

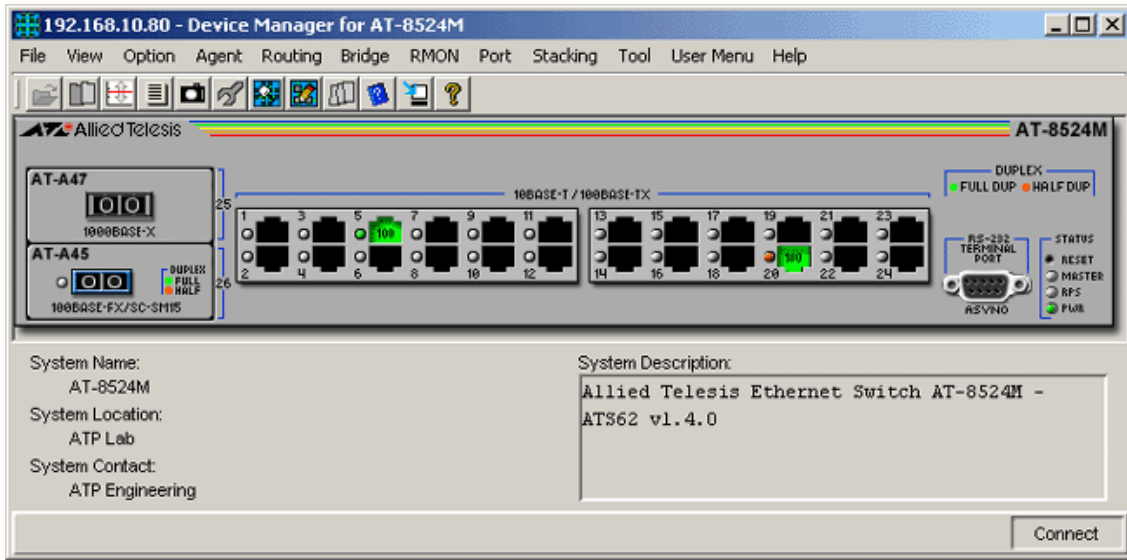
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)
- [Expansion Module Notes](#)

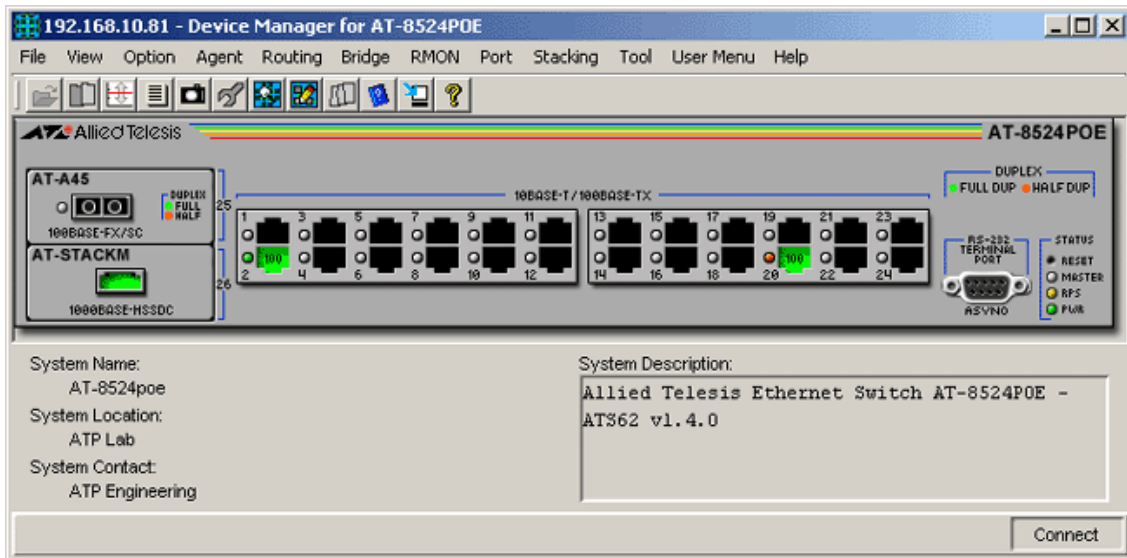
## Main Window



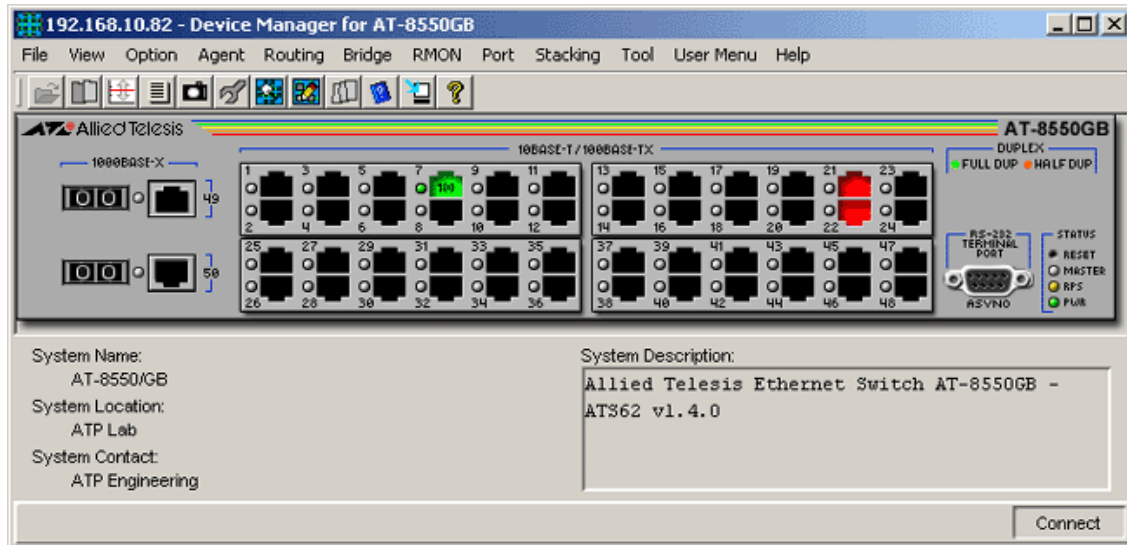
AT-8516F/SC



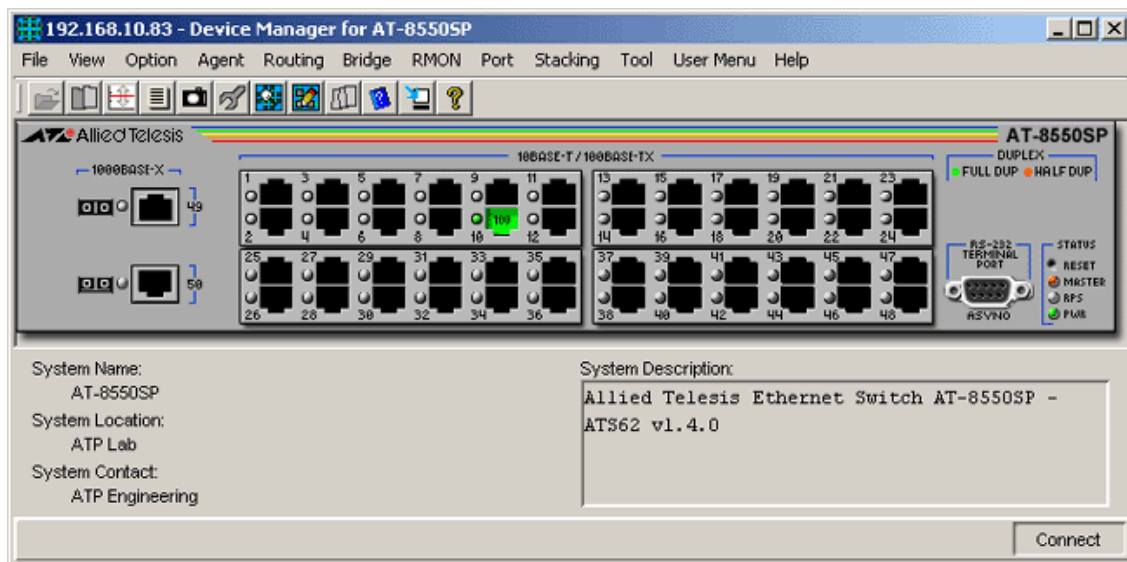
AT-8524M



AT-8524POE



AT-8550GB



AT-8550SP

### Device Manager LEDs for AT-8500 Series

LED	State	Description
PWR	Green	The switch is receiving power.
MASTER	Orange	The switch is the master switch of an enhanced stack.
	Gray	The switch is a slave switch or is not a member of an enhanced stack.



Device Manager LEDs for AT-8500 Series		
LED	State	Description
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
RPS	Green	An optional redundant power supply is connected to the switch and is turned on.
	Gray	There is no redundant power supply connected to the switch.
	Yellow	An optional redundant power supply is connected to the switch but is turned off.

**Note** - Please refer to [Uplink Modules](#) for the operations and behaviour of the expansion modules installed on these devices.

**Note** - When connecting to a slave switch, Device Manager does not automatically replace the master switch image in the main window with the slave switch image. The same is true when returning to the master switch from the slave switch. To view the updated image, click on the Refresh option under the Agent menu.

**Note** - AT-8550SP: If a copper SFP is inserted in either of the SFP module expansion slots, status information will be reflected on its corresponding redundant RJ-45 port image regardless of whether it is the RJ-45 or the SFP port that is actually in operation.

**Note** - The SNMP Client on the device may take a while to respond or may stop responding altogether after several SNMP commands have already been issued. When this happens, it may take a while for device information to be displayed in Device Manager. Error messages may also be encountered during Get MIB Value and Set MIB Value operations.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version allows the user to enter up to 38 characters for the System Location parameter.

**Note** - Configuring the System Contact, System Name and System Location parameters may sometimes result in the error message: "The error occurred with 'Set' operation. Error: gen Error." However, the values are still set successfully.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

**Note** - The current firmware version returns an initial value of '???(0)' for the Action parameter.

**Note** - Valid MIB Set values for the Action parameter are 'reset' and 'defaultConfig'. The 'saveConfig' value is nonfunctional in the current firmware release and selecting it may cause the SNMP client on the device to stop responding to SNMP commands. To save changes made via SNMP to the switch's configuration file, use one of the other management interfaces (i.e. menu, command line, web browser).

### *Device Info*

Displays general information about the switch.

**Note** - AT-8550SP: The current firmware version returns a value of 'other' for the Uplink A Port Type and Uplink B Port Type parameters if copper SFPs are inserted in the SFP module expansion slots.

### *Uplink Info*

Displays uplink information of the switch.

**Note** - The current firmware version returns 'not present' for the Type parameter.

### *MAC Address Table*

Displays a list of static MAC addresses configured on the switch.

**Note** - The MIB (atiStackSwitch.mib v2.28) supported by the current firmware version defines the Module ID, Port ID, and Port List parameters as "read-write". As a result, Device Manager displays these parameters as configurable objects. However, attempting to configure these parameters will show that the firmware does not accept any value.

**Note** - The only valid MIB Set value for the Status parameter is 'destroy'. Attempting to set this parameter to any other value may result in the value being ignored or the error message: "The error occurred with 'Set' operation. Error: bad value."

### *Reset*

Resets the switch.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's routing functions.

### *IP*

#### *ARP Table*

Displays the ARP cache on the switch.

#### *Address Table*

Displays the list of IP interfaces on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

**Note** - The current firmware version does not allow the Default TTL parameter to be configured.

### *UDP*

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP statistics.

### *TCP*

#### *Connection Info*

Displays TCP connection-specific information.

**Note** - The current firmware version does not allow the Connection Status parameter to be configured.

#### *TCP Statistics*

Displays TCP statistics.

### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

## Forwarding Database

**Note** - Changes to the Forwarding Database table caused by dynamic network topology/configuration changes will not be reflected unless the device is restarted.

### Standard View

Displays the Forwarding Database table as returned by the device.

### Enhanced View

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

## Discard/Aging Time Info

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

## Spanning Tree Info

Displays spanning tree parameters such as priority and cost.

**Note** - When the Spanning Tree Status parameter is set to 'enabled' and the Spanning Tree Version parameter is set to 'mstp', the current firmware version continues to return a value of 'forwarding' for the Port STP State parameter of blocking ports. As a result, blocking ports will remain green and will not turn to yellow.

## Statistics

Displays statistics about frames received/transmitted on the switch port.

# RMON Menu

From the RMON menu you can view and edit the RMON MIB.

## Statistics

Displays traffic statistics in the network segment attached to each port.

## History Control Table

Displays the RMON History table.

**Note** - The current firmware version is unable to provide History Control Table information. As a result, the following error message appears: "Failed to get MIB data."

## Alarm Table

Displays the RMON Alarm table.

## Event Table

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

##### *Standard*

Displays port statistics such as the number of packets received and transmitted on the port, bytes received and transmitted on the port and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version does not allow the Promiscuous Mode and Port Alias parameters to be configured.

#### *Additional Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port and port status.

#### *Error Statistics*

Displays error statistics.

#### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - Valid MIB Set values for the Port Flow Control parameter are 'disable' and 'enable'. Attempting to set Port Flow Control to 'unknown' will cause the parameter to be set to 'enable'.

**Note** - Valid MIB Set values for the Port Back Pressure parameter are 'disable' and 'enable'. Attempting to set Port Back Pressure to 'unknown' will cause the parameter to be set to 'enable'.

**Note** - The Port CoS/QoS Priority parameter is not applicable to the AT-8500 series and should be ignored.

**Note** - AT-8550 : The current firmware version allows the Port Speed and Mode parameter of a GBIC or SFP port to be set to '10Mbps full-duplex' or '100Mbps full-

duplex' even if the GBIC or SFP module inserted is not capable of 10/100 Mbps connectivity.

**Note** - AT-8550 : The 10/100/1000Base-T twisted pair ports cannot be manually set to 1000Mbps. However, the current firmware version allows the Port Speed and Mode parameter for these ports to be set to '1 Gbps full-duplex' or '1 Gbps half-duplex'.

**Note** - When the Port Speed and Mode parameter is set to 'auto sense', the Port MDIO parameter is automatically set to 'mdi' and cannot be changed to 'auto mdix'.

**Note** - AT-8516F/SC: The Port Speed and Mode parameter of the 100Base-FX/SC fixed ports can only be set to '100Mbps full-duplex'.

## CoS

Displays Class of Service parameters and allows you to configure CoS for a port, change the default mappings of CoS priorities to egress priority queues and configure a scheduling method for Class of Service.

**Note** - Valid MIB Set values for the CoS Queue parameters are:

- egress-queue-0
- egress-queue-1
- egress-queue-2
- egress-queue-3

Attempting to set these parameters to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version accepts values in the range [1-255] inclusive for the Queue Weight parameters.

## QoS

Displays Quality of Service parameters and allows you to configure Flow Groups, Traffic Classes, and Policies.

### *Flow Groups*

Displays Flow Group parameters used to group similar traffic flows together.

**Note** - The current firmware version accepts up to 32 characters for the Description parameter. NULL values are not allowed.

### *Traffic Classes*

Displays Traffic Class parameters used to provide most of the QoS controls.

**Note** - The current firmware version accepts up to 32 characters for the Description parameter. NULL values are not allowed.

#### *Policies*

Displays Policy parameters.

**Note** - The current firmware version accepts up to 32 characters for the Description parameter. NULL values are not allowed.

**Note** - The Redirect Port parameter is cleared of its value each time the switch is restarted.

**Note** - The current firmware version does not allow the Ingress Port List and Egress Port List parameters to be set to NULL.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

#### *Port Mirroring*

Displays Port Mirroring parameters and allows you to create/delete a port mirror.

**Note** - The Mirroring Source Module, Mirroring Source Port and Mirroring Destination Module parameters are not applicable to the AT-8500 series and should be ignored.

**Note** - Setting the Port Mirroring Status parameter to 'enabled' without setting the Mirroring Destination Port parameter to a valid value first will result in the error message "The error occurred with 'Set' operation. Error: gen Error". However, the value 'enabled' is still set successfully.

**Note** - The current firmware version does not allow the Mirroring Destination Port parameter to be set to 0.

**Note** - The current firmware version does not allow the Mirroring Source Port (Ingress) and Mirroring Source Port (Egress) parameters to be set to NULL.

**Note** - The current firmware version does not allow the Port Mirroring Status parameter to be set to 'enabled' if, upon device startup, the Port Mirroring feature is disabled.

#### *MAC Address Security*

Displays MAC Address Security parameters and allows you to set the security level for dynamic and static MAC addresses learned and assigned to a port.

#### *Intrusion Attack*

Displays the VLAN ID and the MAC Address of each port.

**Note** - The VLAN ID and MAC Address parameters do not return valid values. They return "noSuchName.", "No such instance" or NULL.

#### *DoS Defense*

Displays DoS Defense parameters and allows you to enable/disable a defense mechanism on a port.

**Note** - The Module ID and Port Number parameters under each Attack Type option do not return valid values. They return "noSuchName.", "No such instance" or NULL.

**Note** - The Attack Mirror Port parameter under each Attack Type option is already obsolete and should be ignored.

**Note** - The Attack Mirror Port Status parameter is not applicable to the SYN Flood and Smurf defenses and should be ignored.

## Stacking Menu

From the Stacking menu, you can access slave switches and other Master switches in the enhanced stack.

#### *Stacking Info*

Displays Enhanced Stacking parameters, allows you to set the switch's enhanced stacking status and select a switch to manage in the enhanced stack.

## Expansion Module Notes

- When adding/removing/changing an expansion module, Device Manager does not automatically refresh the device image in the main window to reflect the addition/removal/change. To view the updated device image, click on the Refresh option under the Agent menu.
- The Port Speed and Mode parameter of the 100Base-FX port on the AT-A45/SC, AT-A45/SC-SMI5 and AT-A45/MT expansion modules can only be set to '100Mbps full-duplex'.
- The AT-A46 expansion module port cannot be manually set to 1000Mbps. However, the current firmware version allows the Port Speed and Mode parameter for this port to be set to '1Gbps full-duplex' or '1Gbps half-duplex'.
- The current firmware version allows the Port Speed and Mode parameter of the AT-A47 expansion module port to be set to '10Mbps full-duplex' or '100Mbps full-duplex' even if the GBIC installed is not capable of 10/100 Mbps connectivity.



- The Port Speed and Mode parameter of the AT-STACKM expansion module port should have a fixed value of 'auto sense'. However, the current firmware version allows it to be changed to '10Mbps full-duplex', '100Mbps full-duplex' or '1Gbps full-duplex'.

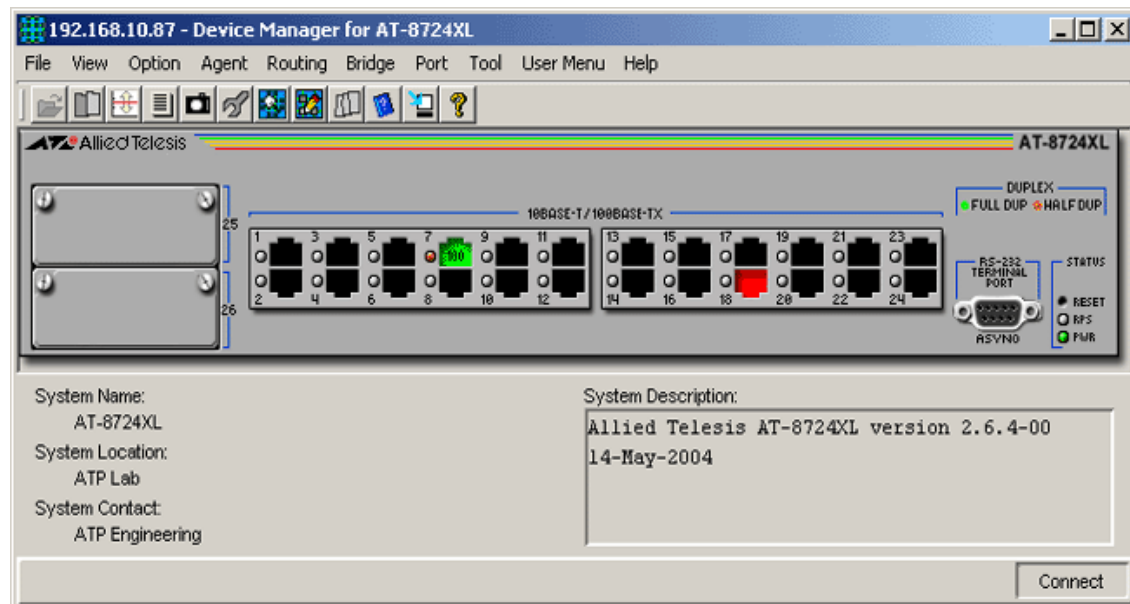
## AT-8700XL Series

This section describes Device Manager menus and operations specific to the AT-8700XL Series of Advanced Layer 2 Switches.

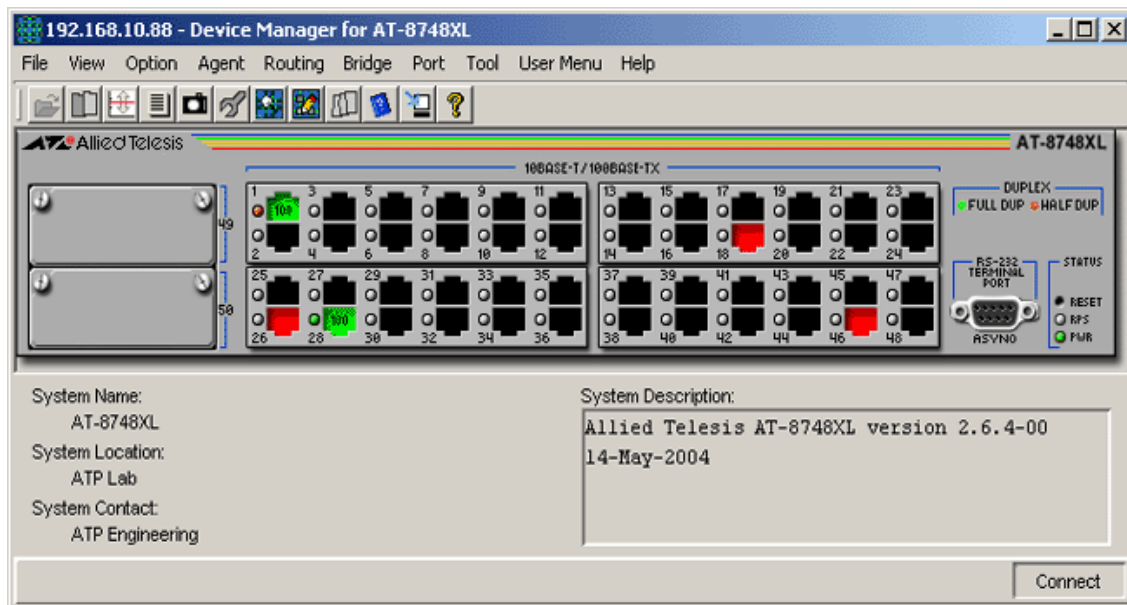
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Port Menu](#)

## Main Window



AT-8724XL



AT-8748XL

Device Manager LEDs for AT-8700XL Series (AC Models)		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
	Red	Main power supply is either off or has failed.
RPS	Green	The switch is receiving power from the redundant power supply.
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

Device Manager LEDs for AT-8700XL Series (DC Models)		
LED	State	Description
PWR	Green	The switch is receiving power.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - AT-8724XL and AT-8724XL-DC share the same device image.

**Note** - AT-8748XL and AT-8748XL-DC share the same device image.

**Note** - Please refer to [Uplink Modules](#) for the operations and behavior of the uplink modules installed on these devices.

**Note** - To turn RPS monitoring on or off on the switch, enter the command SET SYSTEM RPSMONITOR={ON|OFF} from the command line interface. To see whether RPS monitoring is on, use the command SHOW SYSTEM. To turn on RPS monitoring using SNMP, set the fanAndPsRpsMonitoringStatus variable to on.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

**Note** - The current firmware version does not allow Device Manager to support the RPS LED on the DC models.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring. (AC models only)

### *File List*

Displays a list of the files in the switch's flash file system.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache), on the switch.

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, including the number of ICMP datagrams received.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

*Utilization*

Displays the port's utilization information.

*Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

*Error Statistics*

Displays error statistics.

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*Enable*

Enables the port.

*Disable*

Disables the port.

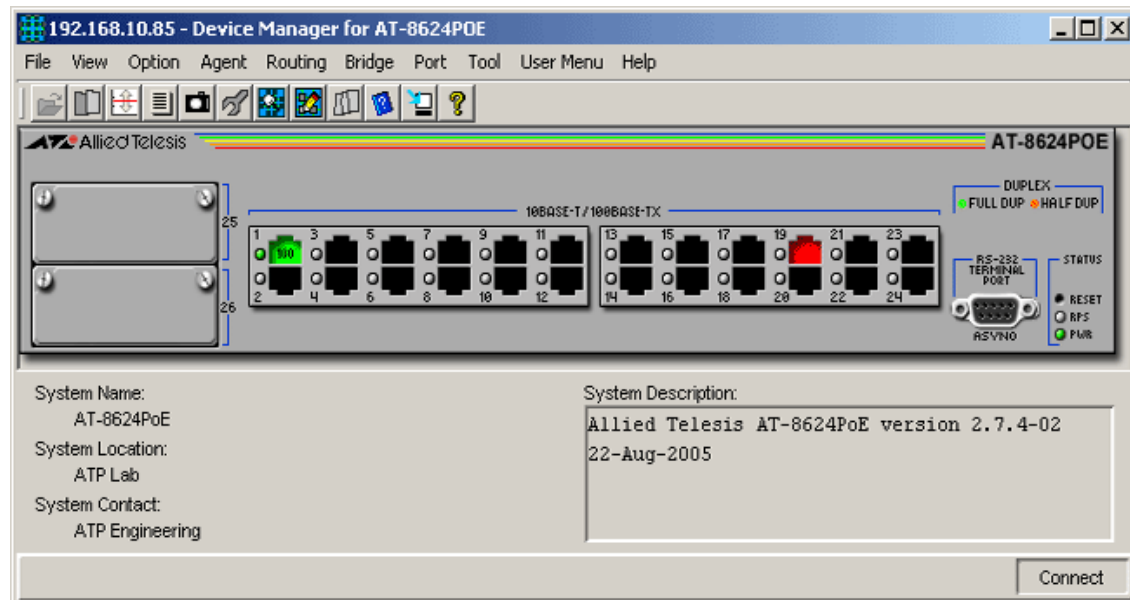
## AT-8600 Series

This section describes Device Manager menus and operations specific to the AT-8600 Series Layer 3 Switch.

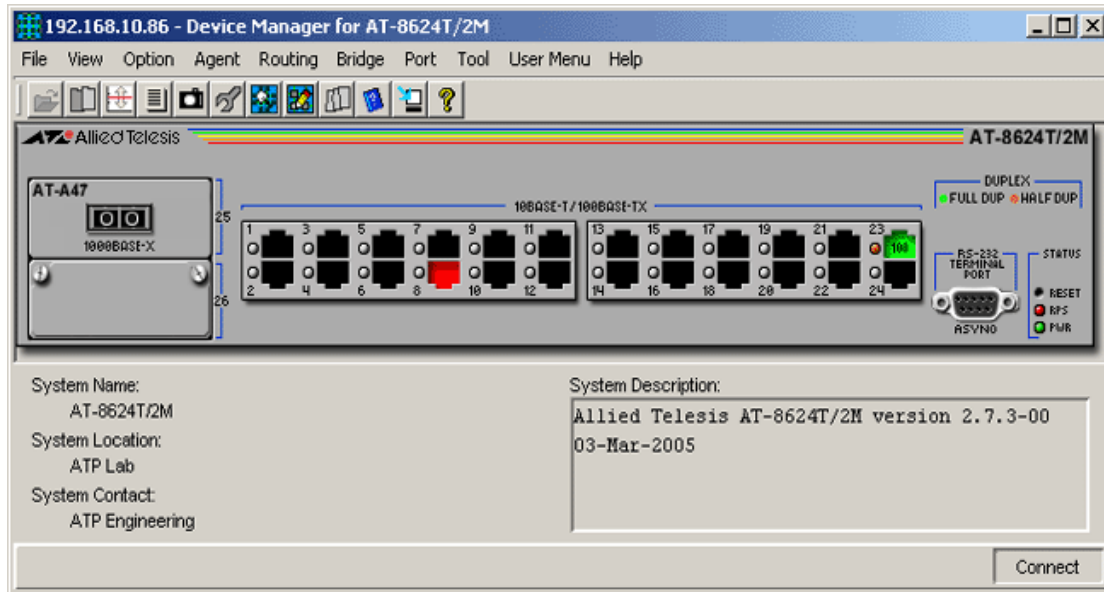
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Port Menu](#)
- [Expansion Module Notes](#)

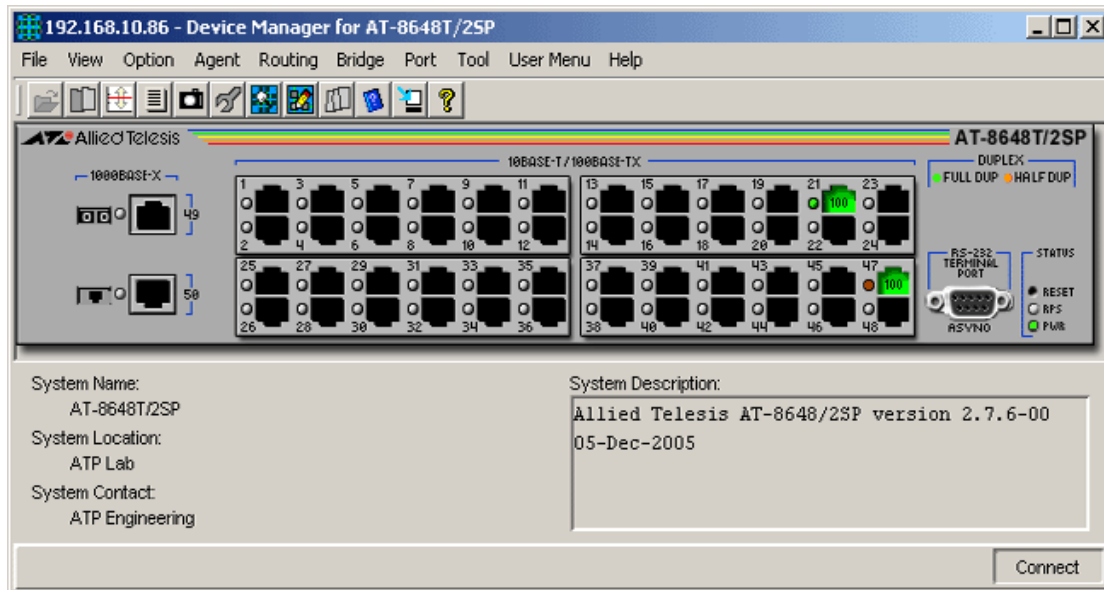
## Main Window



AT-8624POE



AT-8624T/2M



AT-8648T/2SP

### Device Manager LEDs for AT-8600 Series

LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
	Red	Main power supply is either off or has failed.
RPS	Green	The switch is receiving power from the redundant power supply.



Device Manager LEDs for AT-8600 Series		
LED	State	Description
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring.

### *File List*

Displays a list of the files in the switch's file system.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache), on the switch.

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, including the number of ICMP datagrams received.

## **Bridge Menu**

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

#### *Error Statistics*

Displays error statistics.

#### *Spanning Tree Info*

Displays the port's spanning tree parameters.

#### *MAU Info*

Displays interface-related MAU information for the port.

#### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

## **Expansion Module Notes**

- A GBIC image is always visible on the GBIC slot of the AT-A47 expansion module even if there is no GBIC physically inserted.

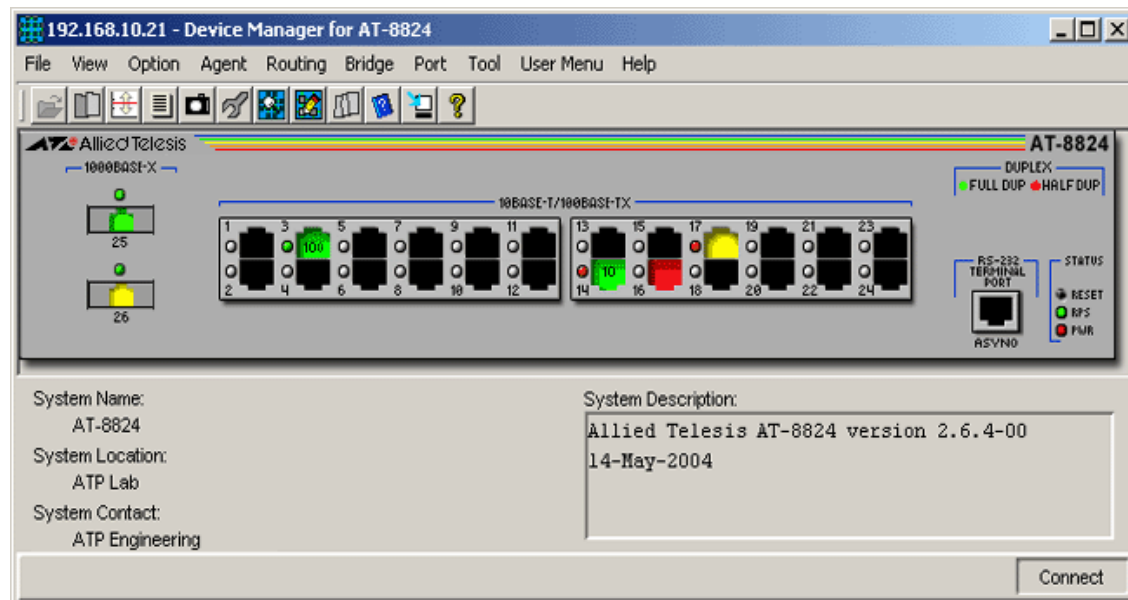
## AT-8800 Series

This section describes Device Manager menus and operations specific to the AT-8800 Series of Intelligent Workgroup Switches.

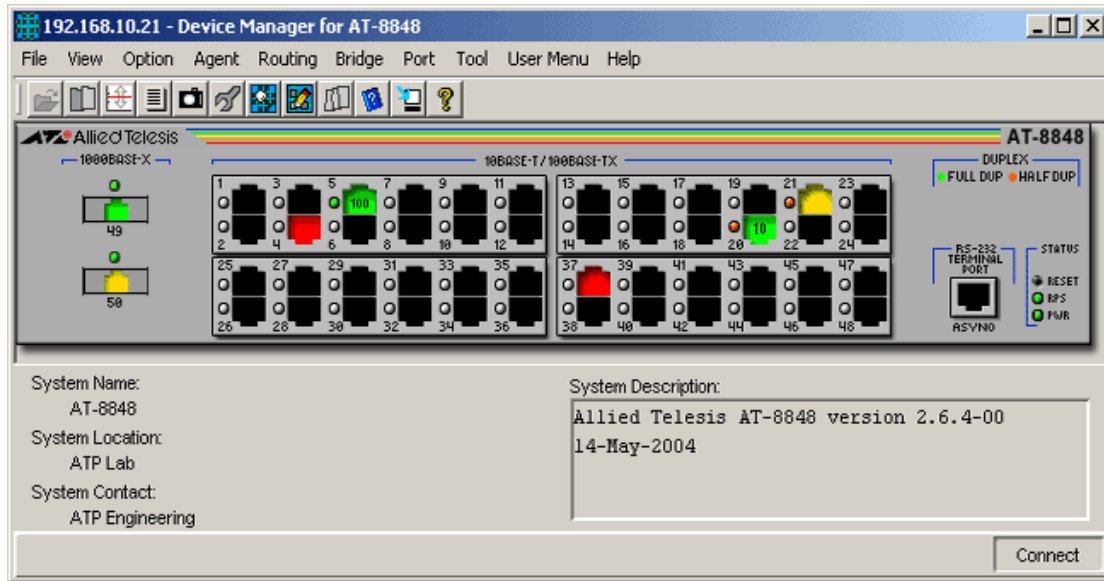
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Port Menu](#)

## Main Window



AT-8824



AT-8848

Device Manager LEDs for AT-8800 Series		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
	Red	Main power supply is either off or has failed.
RPS	Green	The switch is receiving power from the redundant power supply.
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.
	Grey	There is no link over the port.

**Note** - To turn RPS monitoring on or off on the switch, enter the command SET SYSTEM RPSMONITOR={ON|OFF} from the command line interface. To see whether RPS monitoring is on, use the command SHOW SYSTEM. To turn on RPS monitoring using SNMP, set the fanAndPsRpsMonitoringStatus variable to on.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

#### *System Info*

Displays basic system information, including system name, location, contact and description.

#### *Firmware Info*

Displays a list of software releases installed on the switch.

#### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring.

#### *File List*

Displays a list of the files in the switch's file system.

#### *Config File Name*

Displays the file name of the start-up configuration file.

#### *Chassis Temperature Info*

Displays the actual temperature of the switch and the temperature status.

#### *Reset Cold*

Resets the hardware and executes the default configuration file.

#### *Reset Warm*

Performs a warm start of the software modules and executes the default configuration file.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

#### *ARP Table*

Displays the ARP cache on the switch.

#### *Address Table*

Displays the list of IP interfaces on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP, such as the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, such as the number of ICMP datagrams received.

## **Bridge Menu**

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

#### *Error Statistics*

Displays error statistics.

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*MAU Info*

Displays interface-related MAU information for the port.

*MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

*Enable*

Enables the port.

*Disable*

Disables the port.



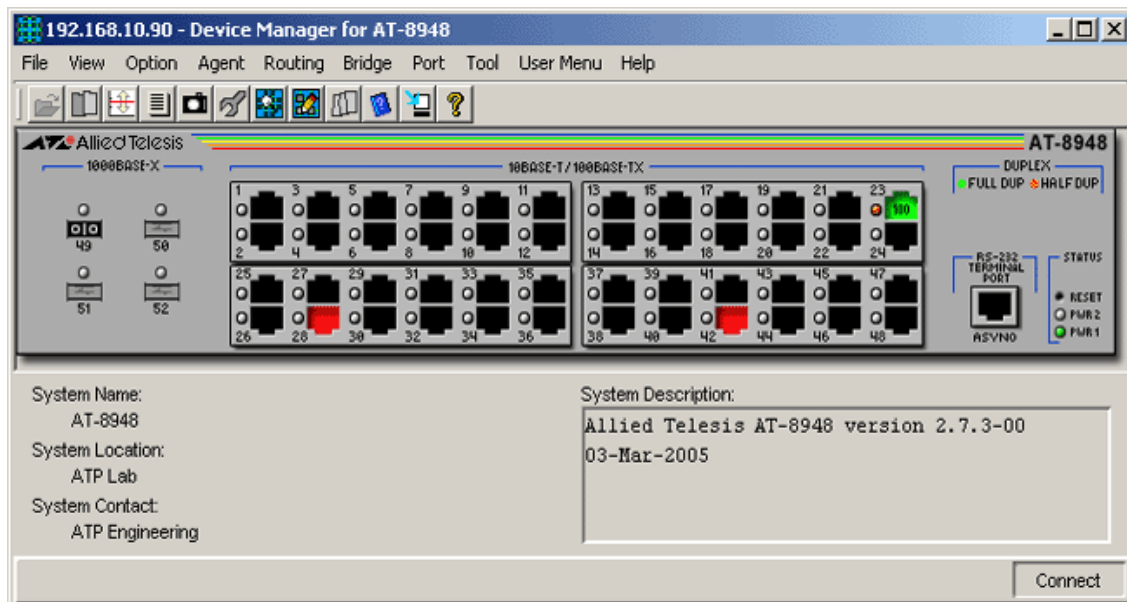
## AT-8948

This section describes Device Manager menus and operations specific to the AT-8948 Enhanced Layer 3+ Switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [LLDP Menu](#)
- [Availability Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-8948

Device Manager LEDs for AT-8948		
LED	State	Description
PWR 1 and PWR 2	Green	There is a power supply unit (PSU) in the PSU bay.
	Gray	There is no power supply unit (PSU) in the PSU bay.
FAN	Green	There is a functioning Fan Only Module (FOM) in the PSU bay.
	Gray	There is no functioning Fan Only Module (FOM) in the PSU bay.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - The current firmware version does not allow Device Manager to display the correct image for SFP module 'AT-SPFXBD-LC-13'. As a result, the SFP image that will be displayed is the generic SFP Fiber image.

**Note** - When a single PSU is installed, it is advised to install it in the device's PSU Bay 2 in order for the Device Manager to display correct information on the Fan and Power Supply modules.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### System Info

#### Standard

Displays basic system information, including system name, location, contact and description.

#### Enterprise

##### CPU Utilization

Displays information about the CPU utilization over different periods of time.

##### Power Supply Info

Displays information about the power supply, redundant power supply and power supply monitoring.

##### Fan and Power Supply

Displays information about type and status of the Fan and PSU.

### *Temperature*

Displays information about the temperature monitored by the temperature sensors in the device.

**Note** - The current firmware version does not allow the Temperature Threshold parameter to be configured.

## *Host Resources*

### *General System Info*

Displays general information about the host resources.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Time and Date parameter will display a sequence of bytes in hexadecimal format instead of the actual date and time of day.

**Note** - The Time and Date and Initial Load Parameter parameters are implemented as 'read-only'.

### *Logical Storage Areas*

Displays resource information about the storage devices.

**Note** - The Storage Size parameter is implemented as 'read-only'.

### *Devices*

Displays resource information about the devices installed in the host.

## *Hardware Info*

### *Total Boards*

Displays the number of boards that are currently installed.

### *Board Info*

Displays basic information on the boards that are currently installed.

### *Slot Info*

Displays information on the Power Supply Bay slots.

### *Physical Interfaces*

Displays information about the interfaces found in the device.

## *Firmware Info*

### *Install Configurations*

Displays information about the Software release currently loaded in the device.

**Note** - The current firmware version returns a 'noSuchName' value for the Release File Exists? and Patch File Exists? parameters.

### *Install History*

Displays information about the install history.

*Configuration File*

Displays the Configuration file name.

**Note** - The current firmware version accepts inputs from 5 to 32 characters for the Startup Config and Save Running Config parameters.

*Release Licenses*

Displays a list of software releases installed on the switch.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

*File System*

*Total Files*

Displays the total number of files stored in the device.

*File List*

Displays a list of the files in the switch's file system.

*Loader*

*Load Status*

Displays the status of the device loader.

*Load Parameters*

Displays information about the files to be loaded.

*DHCP Ranges*

Displays information about the DHCP module.

*Reset Cold*

Initiates a cold restart on the switch.

*Reset Warm*

Initiates a warm restart on the switch.

*Reset Info*

Displays information about the restart.

*Telnet*

Starts a Telnet connection to the switch.

*WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

### IP

#### ARP Table

Displays the ARP cache on the switch.

**Note** - The Physical Address and Mapping Type parameters are implemented as 'read-only'.

#### Address Table

Displays the list of IP interfaces on the switch.

#### Route Table

Displays the IP routing table on the switch.

**Note** - The current firmware version returns the value 'NULL' for the Routing Protocol MIB parameter.

**Note** - The following parameters are implemented as 'read-only':

- Destination Port Number
- Routing Type
- Next Hop AS Number
- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Destination Metric 5
- Row Status

#### IP Statistics

Displays statistics about IP, such as the number of IP datagrams received.

**Note** - The Default TTL parameter is implemented as 'read-only'.

### UDP

#### Listener Info

Displays UDP listener information.

#### UDP Statistics

Displays UDP statistics.

## TCP

### *Connection Info*

Displays TCP connection-specific information.

**Note** - The Connection Status parameter is implemented as 'read-only'.

### *TCP Statistics*

Displays TCP statistics.

### *ICMP Statistics*

Displays statistics about ICMP, such as the number of ICMP datagrams received.

## BGP

### *General Info*

Displays information about the BGP module.

### *Peer Info*

Displays BGP Peer information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Connect Retry Interval
- Configured Hold Time
- Configured Keep Alive
- Min AS Origination Interval
- Min Route Advertisement Interval

### *Path Attributes*

Displays the BGP path attributes.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - Valid MIB Set values for the Port Path Cost parameter is in the range [1-65535] inclusive.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

#### *Basic Bridge Info*

Displays basic bridge information.

#### *Bridge Port Info*

Displays bridge port information.

**Note** - The current firmware version returns the value 'NULL' for the Circuit parameter.

## LLDP Menu

From the LLDP menu, you can view and edit LLDP information such as the LLDP Port Configuration and Local System Data.

#### *LLDP Configuration*

##### *General Config*

Displays basic LLDP configuration.

##### *Port Config*

Displays LLDP configuration for each port.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the TLVs Tx Enable parameter will not be configurable and will display an 8-bit binary string instead of the actual TLV types allowed. However, the TLV types allowed can still be determined by looking at the bits that are on from left to right:

- Bit 0 - Port Description
- Bit 1 - System Name
- Bit 2 - System Description
- Bit 3 - System Capabilities

#### *LLDP Statistics*

##### *Remote Tables*

Displays statistics for the LLDP remote tables.

##### *Port Tx*

Displays statistics for LLDP frames transmitted.

*Port Rx*

Displays statistics for received LLDP frames.

*Local System Data*

*General Info*

Displays information about the local LLDP system.

*Port Info*

Displays information on the LLDP of local ports.

*Management Addresses*

Displays management addresses of the local LLDP system.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Port Tx Enable parameter will display a sequence of bytes in hexadecimal format instead of the actual input value.

**Note** - The current firmware version returns the value 'NULL' for the OID parameter.

## Availability Menu

From the Availability menu you can view and edit Server Load Balancing and Ping Polling information.

*Server Load Balancing*

*General Info*

Displays basic server load balancing information.

*Resources*

Displays server load balancing resources information.

*Resource Pools*

Displays server load balancing resource pools information.

*Virtual Balancers*

Displays virtual balancers information.

*Affinity Tables*

Displays load balancer affinities information.

*Open TCP Connections*

Displays open TCP connections information.

*Ping Polling*



### Ping Status

Displays the status of the Ping polling.

**Note** - The current firmware version only allows the Ping Status parameter to be configured if Protocol parameter under Ping Parameters is set to OSI.

### Ping Parameters

Displays basic information of the Ping module.

**Note** - Valid MIB Set values for the Timeout parameter should range from 1 to 60. However, the current firmware version allows the user to enter values in the range [-9223372036854775808 to -1, 1 to 9223372036854775807] inclusive. But attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - Valid MIB Set values for the Time Interval parameter should range from 0 to 604800. However, the current firmware version allows the user to enter values in the range [-9223372036854775808 to 9223372036854775807] inclusive. But attempting to enter values greater than 999999999 will cause the new value to be converted to its equivalent wrap-around value; i.e., 9999999990 will become 1410065398, 9999999991 will become 1410065399, and so on.

**Note** - Valid MIB Set values for the Number of Packets parameter should range from 1 to 4294967295. However, the current firmware version does not allow Device Manager to display the correct value greater than 2147483647. Attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e. 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

**Note** - The current firmware version only allows the Address parameter to be configured if the Protocol parameter is set to OSI.

**Note** - Valid MIB Set values for the Data Pattern parameter should range from 1 to 4294967295. However, the current firmware version does not allow Device Manager to display the correct value greater than 2147483647. Attempting to enter values greater than 2147483647 will cause the new value to be converted to the following values:

- 4286578688 - 4294934527: 8388608 - 16744447
- 4294934528 - 4294967167: 32768 - 65407
- 4294967168 - 4294967295: 128 - 255

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Address parameter will not be configurable and will display a sequence of bytes in hexadecimal format instead of the actual destination of ping packets.

### *Ping Statistics*

Displays statistics of the Ping polling.

## Security Menu

From the Security menu, you can view and edit port access entity information such as the PAE port information and the Supplicant PAE information.

### *Port-based Authentication*

#### *Authentication Status*

Displays the status of the port-based authentication.

#### *PAE Port Info*

##### *Standard*

Displays standard PAE port information.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 - Authenticator
- Bit 1 - Supplicant

##### *Enterprise*

Displays enterprise PAE port information.

#### *Authenticator PAE Info*

##### *Standard*

Displays standard authenticator PAE information.

**Note** - The Administrative Controlled Directions and Key Transmission Status parameters are implemented as 'read-only'.

##### *Enterprise*

Displays enterprise authenticator PAE information.

#### *Authenticator PAE Statistics*

##### *Standard*

Displays standard statistics for the PAE Authenticator.

##### *Enterprise*

Displays enterprise statistics for the PAE Authenticator.

#### *Supplicant PAE Info*

Displays supplicant PAE information.

*Supplicant PAE Statistics*

Displays the statistics for the PAE supplicant.

*MAC-based Authentication*

*PAE Port Info*

Displays PAE port information.

**Note** - The Initialize parameter is implemented as 'read-only'.

*Authenticator PAE Info*

Displays authenticator PAE information.

*Firewall Session Statistics*

Displays the statistics for the firewall sessions.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

*Statistics*

Displays traffic statistics in the network segment attached to each port.

*History Control Table*

Displays the RMON History table.

*Alarm Table*

Displays the RMON Alarm table.

*Event Table*

Displays the RMON Event table.

*Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

*Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Alias and Counter Discontinuity Time parameters.

### *Detail Info*

#### *Duplex Mode*

Displays the duplex mode of the ports.

#### *Bandwidth Limits*

Displays bandwidth limits of the switch ports.

### *Error Statistics*

Displays error statistics.

**Note** - The following parameters are not applicable to the AT-8948 and should be ignored:

- Ethernet Chip Set
- Symbol Errors
- Duplex Status

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *MAU Info*

Displays interface-related MAU information for the port.

**Note** - The MAU Type List Bits and HC False Carriers parameters are not applicable to the AT-8948.

**Note** - The MAU Status and Default MAU Type parameters are implemented as 'read-only'.

### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

**Note** - The following parameters are not applicable to the AT-8948 and should be ignored:

- Capability Bits
- Advertised Bits
- Received Bits
- Remote Fault Advertised
- Remote Fault Received

**Note** - The Administration Status, Advertised Negotiation Capability and Restart parameters are implemented as 'read-only'.

### *Port Trunking*

#### *Aggregator Port List*

Displays Link Aggregation Control information for every Aggregation Port associated with this device.

**Note** - The following parameters are implemented as 'read-only':

- Actor Operational Key
- Partner Administrative System Priority
- Partner Administrative System ID
- Partner Administrative Key
- Partner Administrative Port
- Partner Administrative Port Priority
- Actor Administrative Status
- Partner Administrative Status

#### *LACP Statistics*

Displays Link Aggregation information for every port that is associated with this device.

#### *LACP Debug*

Displays Link Aggregation debug information for every port that is associated with this device.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

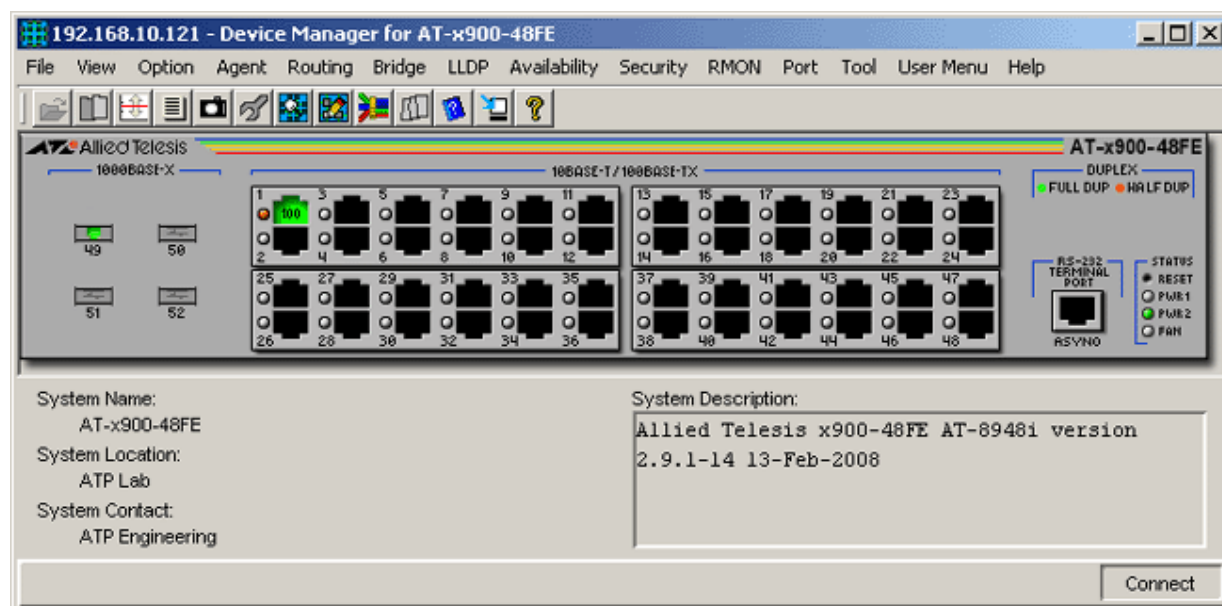
## AT-x900-48 Series

This section describes Device Manager menus and operations specific to the AT-x900-48 Series Enhanced Layer 3+ Switch.

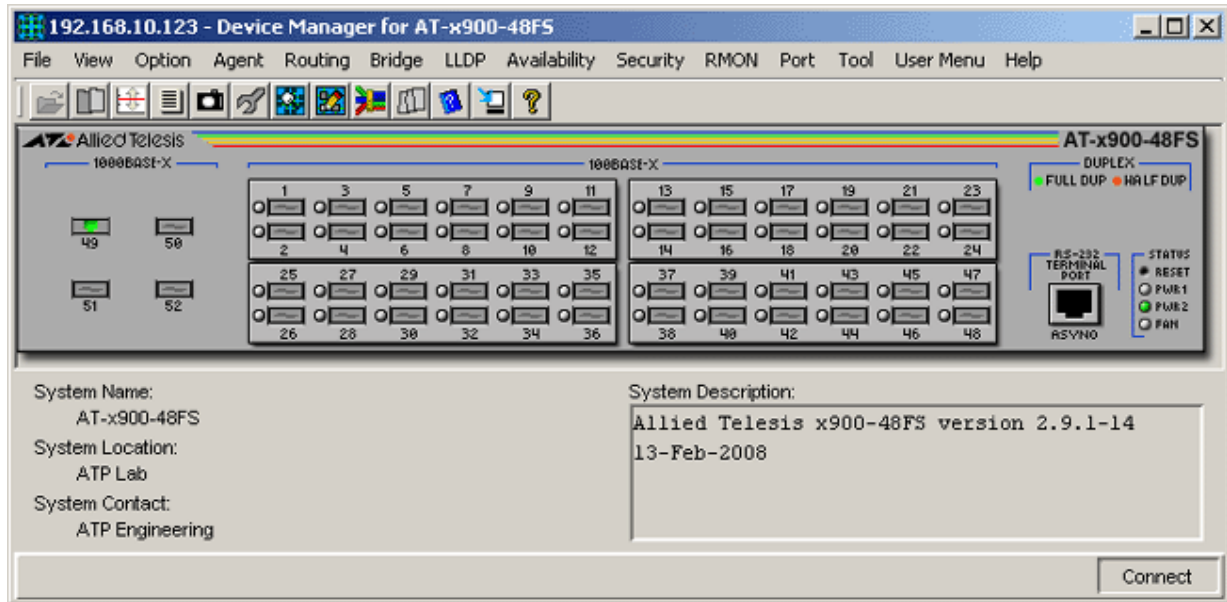
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [LLDP Menu](#)
- [Availability Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-x900-48FE



## AT-x900-48FS

Device Manager LEDs for the AT-x900-48 Series		
LED	State	Description
PWR 1 and PWR 2	Green	There is a power supply unit (PSU) in the PSU bay.
	Gray	There is no power supply unit (PSU) in the PSU bay.
FAN	Green	There is a functioning Fan Only Module (FOM) in the PSU bay.
	Gray	There is no functioning Fan Only Module (FOM) in the PSU bay.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - The current firmware version does not allow Device Manager to display the correct image for SFP module 'AT-SPFXBD-LC-13'. As a result, the SFP image that will be displayed is the generic SFP Fiber image.

**Note** - When a single PSU is installed, it is advised to install it in the device's PSU Bay 2 in order for the Device Manager to display correct information on the Fan and Power Supply modules.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### System Info

### *Standard*

Displays basic system information, including system name, location, contact and description.

### *Enterprise*

#### *CPU Utilization*

Displays information about the CPU utilization over different periods of time.

#### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring.

#### *Fan and Power Supply*

Displays information about type and status of the Fan and PSU.

#### *Temperature*

Displays information about the temperature monitored by the temperature sensors in the device.

**Note** - The current firmware version does not allow the Temperature Threshold parameter to be configured.

### *Host Resources*

#### *General System Info*

Displays general information about the host resources.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Time and Date parameter will display a sequence of bytes in hexadecimal format instead of the actual date and time of day.

**Note** - The Time and Date and Initial Load Parameter parameters are implemented as 'read-only'.

#### *Logical Storage Areas*

Displays resource information about the storage devices.

**Note** - The Storage Size parameter is implemented as 'read-only'.

#### *Devices*

Displays resource information about the devices installed in the host.

### *Hardware Info*

#### *Total Boards*

Displays the number of boards that are currently installed.

#### *Board Info*

Displays basic information on the boards that are currently installed.



### *Slot Info*

Displays information on the Power Supply Bay slots.

### *Physical Interfaces*

Displays information about the interfaces found in the device.

### *Firmware Info*

#### *Install Configurations*

Displays information about the Software release currently loaded in the device.

**Note** - The current firmware version returns a 'noSuchName' value for the Release File Exists? and Patch File Exists? parameters.

#### *Install History*

Displays information about the install history.

#### *Configuration File*

Displays the Configuration file name.

**Note** - The current firmware version accepts inputs from 5 to 32 characters for the Startup Config and Save Running Config parameters.

#### *Release Licenses*

Displays a list of software releases installed on the switch.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

### *File System*

#### *Total Files*

Displays the total number of files stored in the device.

#### *File List*

Displays a list of the files in the switch's file system.

### *Loader*

#### *Load Status*

Displays the status of the device loader.

#### *Load Parameters*

Displays information about the files to be loaded.

### *DHCP Ranges*

Displays information about the DHCP module.

### *Reset Cold*

Initiates a cold restart on the switch.

*Reset Warm*

Initiates a warm restart on the switch.

*Reset Info*

Displays information about the restart.

*Telnet*

Starts a Telnet connection to the switch.

*WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

*IP*

*ARP Table*

Displays the ARP cache on the switch.

**Note** - The Physical Address and Mapping Type parameters are implemented as 'read-only'.

*Address Table*

Displays the list of IP interfaces on the switch.

*Route Number*

Displays the IP routing number on the switch.

*Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns the value 'NULL' for the Routing Protocol MIB parameter.

**Note** - The following parameters are implemented as 'read-only':

- Destination Port Number
- Routing Type
- Next Hop AS Number

- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Destination Metric 5
- Row Status

#### *IP Statistics*

Displays statistics about IP, such as the number of IP datagrams received.

**Note** - The Default TTL parameter is implemented as 'read-only'.

#### *UDP*

##### *Listener Info*

Displays UDP listener information.

##### *UDP Statistics*

Displays UDP statistics.

#### *TCP*

##### *Connection Info*

Displays TCP connection-specific information.

**Note** - The Connection Status parameter is implemented as 'read-only'.

##### *TCP Statistics*

Displays TCP statistics.

#### *ICMP Statistics*

Displays ICMP statistics.

#### *BGP*

##### *General Info*

Displays information about the BGP module.

##### *Peer Info*

Displays BGP Peer information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Connect Retry Interval
- Configured Hold Time
- Configured Keep Alive
- Min AS Origination Interval
- Min Route Advertisement Interval

##### *Path Attributes*

Displays the BGP path attributes.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - Valid MIB Set values for the Port Path Cost parameter is in the range [1-65535] inclusive.

### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

### *Basic Bridge Info*

Displays basic bridge information.

### *Bridge Port Info*

Displays bridge port information.

**Note** - The current firmware version returns the value 'NULL' for the Circuit parameter.

## LLDP Menu

From the LLDP menu, you can view and edit LLDP information such as the LLDP Port Configuration and Local System Data.

### *LLDP Configuration*

#### *General Config*

Displays basic LLDP configuration.

#### *Port Config*

Displays LLDP configuration for each port.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the TLVs Tx Enable parameter will not be configurable and will display an 8-bit binary string instead of the actual TLV types allowed. However, the TLV types allowed can still be determined by looking at the bits that are on from left to right:

- Bit 0 - Port Description
- Bit 1 - System Name
- Bit 2 - System Description
- Bit 3 - System Capabilities

#### *LLDP Statistics*

##### *Remote Tables*

Displays statistics for the LLDP remote tables.

##### *Port Tx*

Displays statistics for LLDP frames transmitted.

##### *Port Rx*

Displays statistics for received LLDP frames.

#### *Local System Data*

##### *General Info*

Displays information about the local LLDP system.

##### *Port Info*

Displays information on the LLDP of local ports.

#### *Management Addresses*

Displays management addresses of the local LLDP system.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Port Tx Enable parameter will display a sequence of bytes in hexadecimal format instead of the actual input value.

**Note** - The current firmware version returns the value 'NULL' for the OID parameter.

## Availability Menu

From the Availability menu you can view and edit Server Load Balancing and Ping Polling information.

#### *Server Load Balancing*

##### *General Info*

Displays basic server load balancing information.

#### *Resources*

Displays server load balancing resources information.

*Resource Pools*

Displays server load balancing resource pools information.

*Virtual Balancers*

Displays virtual balancers information.

*Affinity Tables*

Displays load balancer affinities information.

*Open TCP Connections*

Displays open TCP connections information.

*Ping Polling*

*Ping Status*

Displays the status of the Ping polling.

**Note** - The current firmware version only allows the Ping Status parameter to be configured if Protocol parameter under Ping Parameters is set to OSI.

*Ping Parameters*

Displays basic information of the Ping module.

**Note** - Valid MIB Set values for the Timeout parameter should range from 1 to 60. However, the current firmware version allows the user to enter values in the range [-9223372036854775808 to -1, 1 to 9223372036854775807] inclusive. But attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - Valid MIB Set values for the Time Interval parameter should range from 0 to 604800. However, the current firmware version allows the user to enter values in the range [-9223372036854775808 to 9223372036854775807] inclusive. But attempting to enter values greater than 999999999 will cause the new value to be converted to its equivalent wrap-around value; i.e., 9999999990 will become 1410065398, 9999999991 will become 1410065399, and so on.

**Note** - Valid MIB Set values for the Number of Packets parameter should range from 1 to 4294967295. However, the current firmware version does not allow Device Manager to display the correct value greater than 2147483647. Attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e. 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

**Note** - The current firmware version only allows the Address parameter to be configured if the Protocol parameter is set to OSI.

**Note** - Valid MIB Set values for the Data Pattern parameter should range from 1 to 4294967295. However, the current firmware version does not allow Device Manager to display the correct value greater than 2147483647. Attempting to enter values greater than 2147483647 will cause the new value to be converted to the following values:

- 4286578688 - 4294934527: 8388608 - 16744447
- 4294934528 - 4294967167: 32768 - 65407
- 4294967168 - 4294967295: 128 - 255

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Address parameter will not be configurable and will display a sequence of bytes in hexadecimal format instead of the actual destination of ping packets.

#### *Ping Statistics*

Displays statistics of the Ping polling.

## Security Menu

From the Security menu, you can view and edit port access entity information such as the PAE port information and the Supplicant PAE information.

#### *Port-based Authentication*

##### *Authentication Status*

Displays the status of the port-based authentication.

#### *PAE Port Info*

##### *Standard*

Displays standard PAE port information.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 - Authenticator
- Bit 1 - Supplicant

#### *Enterprise*

Displays enterprise PAE port information.

#### *Authenticator PAE Info*

##### *Standard*

Displays standard authenticator PAE information.

**Note** - The Administrative Controlled Directions and Key Transmission Status parameters are implemented as 'read-only'.

### *Enterprise*

Displays enterprise authenticator PAE information.

### *Authenticator PAE Statistics*

#### *Standard*

Displays standard statistics for the PAE Authenticator.

### *Enterprise*

Displays enterprise statistics for the PAE Authenticator.

### *Supplicant PAE Info*

Displays supplicant PAE information.

### *Supplicant PAE Statistics*

Displays the statistics for the PAE supplicant.

### *MAC-based Authentication*

#### *PAE Port Info*

Displays PAE port information.

**Note** - The Initialize parameter is implemented as 'read-only'.

### *Authenticator PAE Info*

Displays authenticator PAE information.

### *Firewall Session Statistics*

Displays the statistics for the firewall sessions.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

### *Statistics*

Displays traffic statistics in the network segment attached to each port.

### *History Control Table*

Displays the RMON History table.

### *Alarm Table*

Displays the RMON Alarm table.

### *Event Table*

Displays the RMON Event table.

### *Event Log*

Displays the RMON Event log.



## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Alias and Counter Discontinuity Time parameters.

### *Detail Info*

#### *Duplex Mode*

Displays the duplex mode of the ports.

#### *Bandwidth Limits*

Displays bandwidth limits of the switch ports.

### *Error Statistics*

Displays error statistics.

**Note** - The following parameters are not applicable to the AT-x900-48 series and should be ignored:

- Ethernet Chip Set
- Symbol Errors
- Duplex Status

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *MAU Info*

Displays interface-related MAU information for the port.

**Note** - The MAU Type List Bits and HC False Carriers parameters are not applicable to the AT-x900-48 series and should be ignored.

**Note** - The MAU Status and Default MAU Type parameters are implemented as 'read-only'.

### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

**Note** - The following parameters are not applicable to the AT-x900-48 series and should be ignored:

- Capability Bits
- Advertised Bits
- Received Bits
- Remote Fault Advertised
- Remote Fault Received

**Note** - The Administration Status, Advertised Negotiation Capability and Restart parameters are implemented as 'read-only'.

### *Port Trunking*

#### *Aggregator Port List*

Displays Link Aggregation Control information for every Aggregation Port associated with this device.

**Note** - The following parameters are implemented as 'read-only':

- Actor Operational Key
- Partner Administrative System Priority
- Partner Administrative System ID
- Partner Administrative Key
- Partner Administrative Port
- Partner Administrative Port Priority
- Actor Administrative Status
- Partner Administrative Status

#### *LACP Statistics*

Displays Link Aggregation information for every port that is associated with this device.

#### *LACP Debug*

Displays Link Aggregation debug information for every port that is associated with this device.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

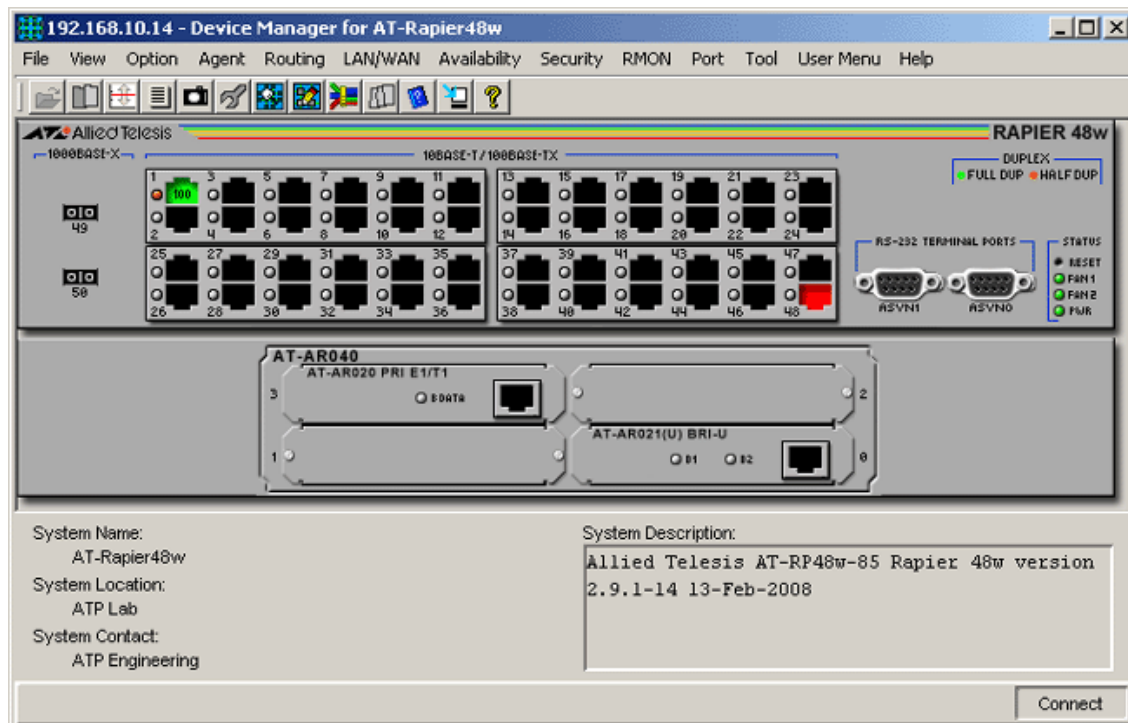
## Rapier 48w

This section describes Device Manager menus and operations specific to the AT-Rapier 48w switch.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [LAN/WAN Menu](#)
- [Availability Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



### AT-Rapier 48w

Device Manager LEDs for AT-Rapier 48w		
LED	State	Description

PWR	Green	The router is receiving power from the main power supply unit.
FAN 1 and FAN 2	Green	The FAN module is present and is turned on.
	Gray	The FAN module is not present.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

## Agent Menu

From the Agent menu, you can view and edit the system information for the router, or log into the CLI using Telnet.

### System Info

#### Standard

Displays basic system information, including system name, location, contact and description.

#### Enterprise

##### CPU Utilization

Displays information about the CPU utilization over different periods of time.

##### Power Supply Info

Displays information about the power supply, redundant power supply and power supply monitoring.

##### Fan and Power Supply

Displays information about type and status of the Fan and PSU.

**Note** - The current firmware version returns a 'noSuchName' value for the Power Supply Unit Power Status parameter.

##### Temperature

Displays information about the temperature monitored by the temperature sensors in the device.

**Note** - The current firmware version does not allow the Temperature Threshold parameter to be configured.

### Host Resources

#### General System Info

Displays general information about the host resources.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Time and Date parameter will display a sequence of bytes in hexadecimal format instead of the actual date and time of day.

**Note** - The Time and Date and Initial Load Parameter parameters are implemented as 'read-only'.

#### *Logical Storage Areas*

Displays resource information about the storage devices.

**Note** - The Storage Size parameter is implemented as 'read-only'.

#### *Devices*

Displays resource information about the devices installed in the host.

#### *Hardware Info*

##### *Total Boards*

Displays the number of boards that are currently installed.

##### *Board Info*

Displays basic information on the boards that are currently installed.

##### *Slot Info*

Displays information on the Power Supply Bay slots.

#### *Physical Interfaces*

Displays information about the interfaces found in the device.

**Note** - The Per Board submenu will appear under the Physical Interfaces menu if one or more PIC/s in the Network Service Module is/are installed.

#### *Firmware Info*

##### *Install Configurations*

Displays information about the Software release currently loaded in the device.

**Note** - The current firmware version returns a 'noSuchName' value for the Release File Exists? and Patch File Exists? parameters.

##### *Install History*

Displays information about the install history.

##### *Configuration File*

Displays the Configuration file name.

##### *Release Licenses*

Displays a list of software releases installed on the switch.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

### *File System*

#### *Total Files*

Displays the total number of files stored in the device.

#### *File List*

Displays a list of the files in the switch's file system.

### *Loader*

#### *Load Status*

Displays the status of the device loader.

#### *Load Parameters*

Displays information about the files to be loaded.

### *LLDP Configuration*

#### *General Config*

Displays basic LLDP configuration.

#### *Port Config*

Displays LLDP configuration for each port.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the TLVs Tx Enable parameter will not be configurable and will display an 8-bit binary string instead of the actual TLV types allowed. However, the TLV types allowed can still be determined by looking at the bits that are on from left to right:

- Bit 0 - Port Description
- Bit 1 - System Name
- Bit 2 - System Description
- Bit 3 - System Capabilities

### *LLDP Statistics*

#### *Remote Tables*

Displays statistics for the LLDP remote tables.

#### *Port Tx*

Displays statistics for LLDP frames transmitted.

#### *Port Rx*

Displays statistics for received LLDP frames.

### *Local System Data*

#### *General Info*

Displays information about the local LLDP system.

### *Port Info*

Displays information on the LLDP of local ports.

**Note** - The current firmware version returns the value 'NULL' for the Circuit parameter.

### *Management Addresses*

Displays management addresses of the local LLDP system.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Port Tx Enable parameter will not be configurable and will display a sequence of bytes in hexadecimal format instead of the actual input value.

**Note** - The current firmware version returns the value 'NULL' for the OID parameter.

### *Reset Cold*

Initiates a cold restart on the switch.

### *Reset Warm*

Initiates a warm restart on the switch.

### *Reset Info*

Displays information about the restart.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the router's IP routing functions.

### *IP*

#### *ARP Table*

Displays the ARP cache on the switch.

**Note** - The Physical Address and Mapping Type parameters are implemented as 'read-only'.

#### *Address Table*

Displays the list of IP interfaces on the switch.

#### *Route Number*

Displays the IP routing number on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns the value 'NULL' for the Routing Protocol MIB parameter.

**Note** - The following parameters are implemented as 'read-only':

- Destination Port Number
- Routing Type
- Nexthop AS Number
- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Destination Metric 5
- Row Status

#### *IP Statistics*

Displays statistics about IP, such as the number of IP datagrams received.

**Note** - The Default TTL parameter is implemented as 'read-only'.

### *UDP*

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP statistics.

### *TCP*

#### *Connection Info*

Displays TCP connection-specific information.

**Note** - The Connection Status parameter is implemented as 'read-only'.

#### *TCP Statistics*

Displays TCP statistics.

#### *ICMP Statistics*

Displays ICMP statistics.



### *DHCP Ranges*

Displays information about the DHCP module.

### *BGP*

#### *General Info*

Displays information about the BGP module.

#### *Peer Info*

Displays BGP Peer information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Connect Retry Interval
- Configured Hold Time
- Configured Keep Alive
- Min AS Origination Interval
- Min Route Advertisement Interval

#### *Path Attributes*

Displays the BGP path attributes.

## LAN/WAN Menu

From the LAN/WAN menu, you can view and edit information for the LAN/WAN such as the frame relay and ISDN-related information. The submenus are unavailable if the proper PICs are not installed.

### *Bridging*

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - Valid MIB Set values for the Port Path Cost parameter are in the range [1 - 65535] inclusive. Attempting to set this parameter to a value outside of

the valid range will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

#### *Basic Bridge Info*

Displays basic bridge information.

#### *Bridge Port Info*

Displays bridge port information.

### ISDN

#### *Call Details*

Displays ISDN call information such as ISDN number and call direction for active calls.

**Note** - If the In CLI (Calling Line Info) Search parameter is set to 'list', the In CLI (Calling Line Info) List Check parameter gives the index of the CLI list to search. The value of CLI list indices ranges from 1 to 100. The value 0 is returned if the In CLI (Calling Line Info) Search parameter is not set to 'list'. When the In CLI (Calling Line Info) List Check parameter is set to 0, the In CLI (Calling Line Info) Search parameter is internally set to 'off'. Subsequently setting it to a non-zero value will set the In CLI (Calling Line Info) Search parameter to 'list'. Note that when using the command line interface, CLI List indices range from 0 to 99, but when using Device Manager, they range from 1 to 100. This is because SNMP will not allow a table index to have the value 0, and the command line usage of indices from 0 to 99 is too well established to change.

**Note** - If the In CLI (Calling Line Info) Check parameter is set to 'present' or 'required', the In CLI (Calling Line Info) Check List parameter gives the index of the CLI list to check against. The value of CLI list indices ranges from 1 to 100. The value 0 means that no list to check against is defined and the check immediately fails. Note that when using the command line interface, CLI list indices range from 0 to 99, but when using Device Manager, they range from 1 to 100. This is because SNMP will not allow a table index to have the value 0, and the command line usage of indices from 0 to 99 is too well established to change.

**Note** - The PPP Template parameter specifies the PPP template to use when creating dynamic PPP interfaces for calls generated. The value 33 represents a default PPP template while the values 1 to 32 represent PPP templates that are currently defined in the router. Note that when using the command line interface, PPP template indices range from 0 to 31, but when using Device Manager, they range from 1 to 32. This is because SNMP will not allow a table index to have the value 0.

*CLI List*  
Displays the Calling Line Information list.

*Active Calls*  
Displays information about currently active ISDN calls.

*Call Log*  
Displays the call logs.

*Call Detail Attachments*  
Displays call detail attachment information.

*B Channel Attachments*  
Displays B Channel attachment information.

*BRI Interfaces*  
Displays BRI interface information.

*BRI Channels*  
Displays BRI channels information.

*PRI Interfaces*  
Displays PRI interface information.

*PRI Channels*  
Displays PRI channels information.

#### *Frame Relay*

*DLC Management Interfaces*  
Displays DLCMI (Data Link Connection Management Interface) information.

*Virtual Circuits*  
Displays Frame Relay circuit statistics.

*Errors*  
Displays information about errors related to the Frame Relay module.

#### *DSI*

*DSI Config*  
Displays DSI configuration

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Near-End*

*Current 15-Min Interval Statistics*  
Displays near-end DSI statistics every 15 minutes.

*Statistics for Past 24 Hours*

Displays near-end DSI statistics for the past 24 hours.

*Cumulative Statistics*

Displays accumulated near-end DSI statistics.

*Far-End*

*Current 15-Min Interval Statistics*

Displays far-end DSI statistics every 15 minutes.

*Statistics for Past 24 Hours*

Displays far-end DSI statistics for the past 24 hours.

*Cumulative Statistics*

Displays accumulated far-end DSI statistics.

## Availability Menu

From the Availability menu you can view and edit Server Load Balancing and Ping Polling information.

*Server Load Balancing*

*General Info*

Displays basic server load balancing information.

*Resources*

Displays server load balancing resources information.

*Resource Pools*

Displays server load balancing resource pools information.

*Virtual Balancers*

Displays virtual balancers information.

*Affinity Tables*

Displays load balancer affinities information.

*Open TCP Connections*

Displays open TCP connections information.

*Ping Polling*

*Ping Status*

Displays the status of the Ping polling.

**Note** - The current firmware version does not allow the Ping Status parameter to be configured.

*Ping Parameters*

Displays basic information of the Ping module.

**Note** - Valid MIB Set values for the Timeout parameter should range from 1 to 60. However, the current firmware version allows the user to enter values in the range [-4294967295 to -1, 1 to 4294967295] inclusive. But attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - Valid MIB Set values for the Time Interval parameter should range from 0 to 604800. However, the current firmware version allows the user to enter values in the range [-9223372036854775808 to 9223372036854775807] inclusive. But attempting to enter values greater than 999999999 will cause the new value to be converted to its equivalent wrap-around value; i.e., 9999999990 will become 1410065398, 9999999991 will become 1410065399, and so on.

**Note** - Valid MIB Set values for the Number of Packets parameter should range from 1 to 4294967295. However, the current firmware version does not allow Device Manager to display the correct value greater than 2147483647. Attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e. 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

**Note** - The current firmware version only allows the Address parameter to be configured if the Protocol parameter is set to OSI.

**Note** - Valid MIB Set values for the Data Pattern parameter should range from [0-4294967295] inclusive. However the current firmware version does not allow Device Manager to display correct values greater than 4286578687. Attempting to enter values greater than 4286578687 will cause the new value to be converted to the following values:

- 4286578688 - 4294934527: 8388608 - 16744447
- 4294934528 - 4294967167: 32768 - 65407
- 4294967168 - 4294967295: 128 - 255

### *Ping Statistics*

Displays statistics of the Ping polling.

## Security Menu

From the Security menu, you can view and edit port access entity information such as the PAE port information and the Supplicant PAE information.

## *Port-based Authentication*

### *Authentication Status*

Displays the status of the port-based authentication.

### *PAE Port Info*

#### *Standard*

Displays standard PAE port information.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 - Authenticator
- Bit 1 - Supplicant

#### *Enterprise*

Displays enterprise PAE port information.

### *Authenticator PAE Info*

#### *Standard*

Displays standard authenticator PAE information.

**Note** - The Administrative Controlled Directions and Key Transmission Status parameters are implemented as 'read-only'.

#### *Enterprise*

Displays enterprise authenticator PAE information.

### *Authenticator PAE Statistics*

#### *Standard*

Displays standard statistics for the PAE Authenticator..

#### *Enterprise*

Displays enterprise statistics for the PAE Authenticator.

### *Supplicant PAE Info*

Displays supplicant PAE information.

### *Supplicant PAE Statistics*

Displays the statistics for the PAE supplicant.

## *MAC-based Authentication*

### *PAE Port Info*

Displays the PAE port information.

**Note** - The Initialize parameter is implemented as 'read-only'.

#### *Authenticator PAE Info*

Displays authenticator PAE information.

#### *Firewall Session Statistics*

Displays the statistics for the firewall sessions.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about selected ports.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Alias and Counter Discontinuity Time parameters.

**Note** - Although the current firmware allows the Administration Status parameter to be set to 'testing', the value 'testing' is not a valid MIB Set value.

**Note** - The Promiscuous Mode parameter is implemented as 'read-only'.

### *Detail Info*

#### *Duplex Mode*

Displays the duplex mode of the ports.

#### *Bandwidth Limits*

Displays bandwidth limits of the switch ports.

### *Error Statistics*

Displays error statistics.

**Note** - The following parameters are not applicable to AT-Rapier48w and should be ignored:

- Ethernet Chip Set
- Symbol Errors
- Duplex Status

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *MAU Info*

Displays interface-related MAU information for the port.

**Note** - The MAU Type List Bits and HC False Carriers parameters are not applicable to the AT-Rapier48w and should be ignored.

**Note** - The MAU Status and Default MAU Type parameters are implemented as 'read-only'.

### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

**Note** - The following parameters are not applicable to the AT-Rapier48w and should be ignored:

- Capability Bits
- Advertised Bits
- Received Bits
- Remote Fault Advertised
- Remote Fault Received

**Note** - The Administration Status, Advertised Negotiation Capability and Restart parameters are implemented as 'read-only'.

### *Port Trunking*

#### *Aggregator Port List*

Displays Link Aggregation Control information for every Aggregation Port associated with this device.



**Note** - The following parameters are implemented as 'read-only':

- Actor Operational Key
- Partner Administrative System Priority
- Partner Administrative System ID
- Partner Administrative Key
- Partner Administrative Port
- Partner Administrative Port Priority
- Actor Administrative Status
- Partner Administrative Status

*LACP Statistics*

Displays Link Aggregation information for every port that is associated with this device.

*LACP Debug*

Displays Link Aggregation debug information for every port that is associated with this device.

*Enable*

Enables the port.

*Disable*

Disables the port.

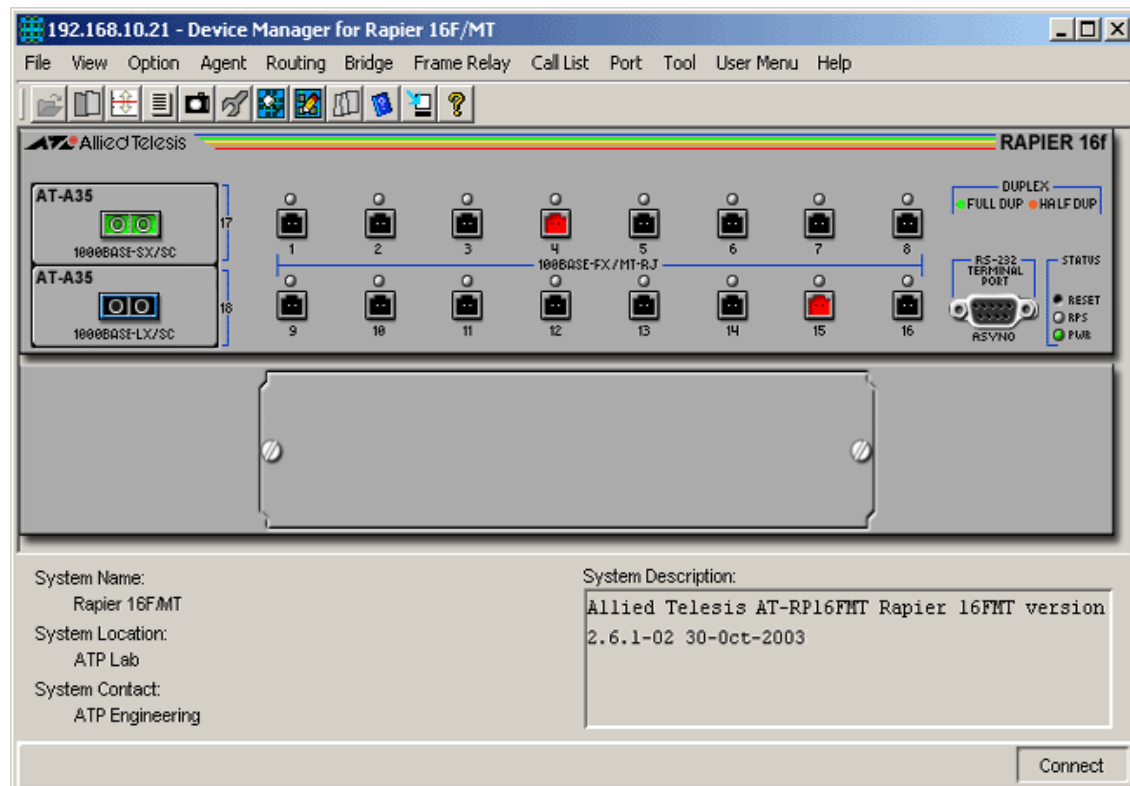
## Rapier

This section describes Device Manager menus and operations specific to Rapier Layer 3 Fast Ethernet Switches.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Frame Relay Menu](#)
- [Call List Menu](#)
- [Port Menu](#)

## Main Window



*Rapier 16F/MT*

192.168.10.21 - Device Manager for Rapier 16F/SC

File View Option Agent Routing Bridge Frame Relay Call List Port Tool User Menu Help

Allied Telesis RAPIER 16F

AT-A35 1000BASE-SX/SC  
AT-A35 1000BASE-LX/SC

AT-AR040  
AT-AR022 ETH  
1000BASE-T

System Name: Rapier 16F/SC  
System Location: ATP Lab  
System Contact: ATP Engineering

System Description:  
Allied Telesis AT-RP16FSC Rapier 16F/SC version 2.4.1-00 24-Jun-2002

Connect

Rapier 16F/SC

192.168.10.7 - Device Manager for Rapier 16Fi/MT

File View Option Agent Routing Bridge Frame Relay Call List Port Tool User Menu Help

Allied Telesis RAPIER 16F

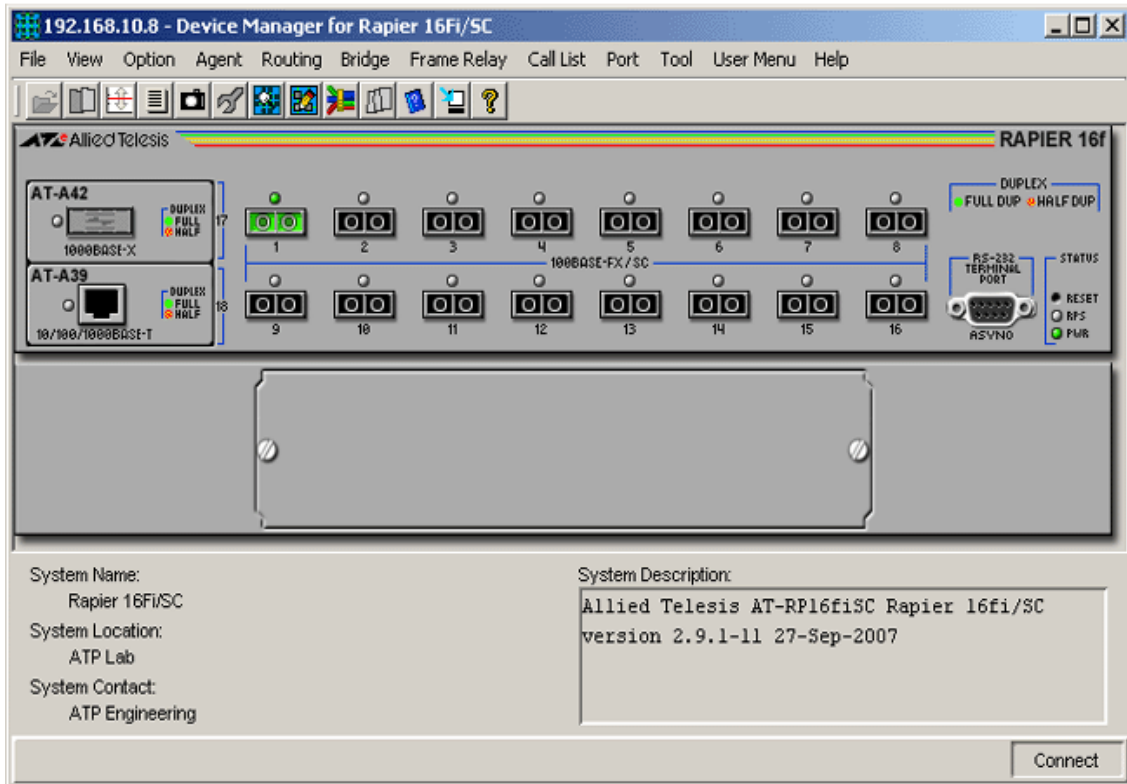
AT-AR022 ETH

System Name: Rapier 16Fi/MT  
System Location: ATP Lab  
System Contact: ATP Engineering

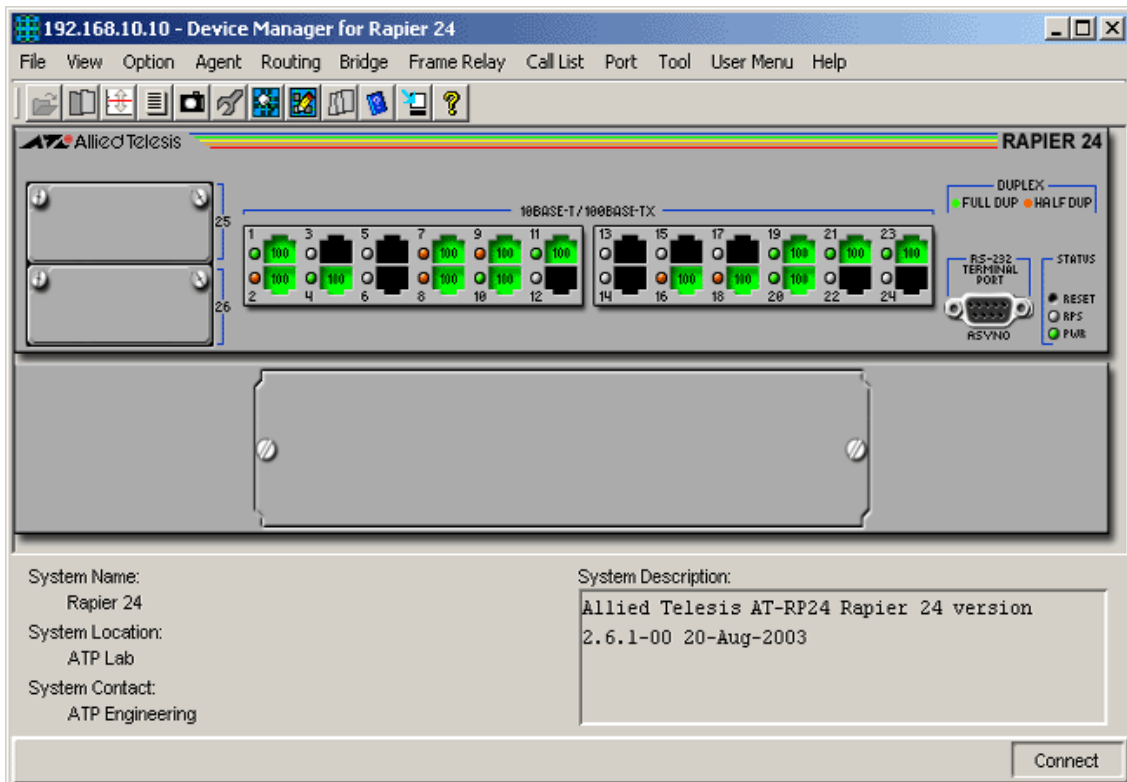
System Description:  
Allied Telesis AT-RP16fiMT Rapier 16fi/MT version 2.9.1-11 12-Oct-2007

Connect

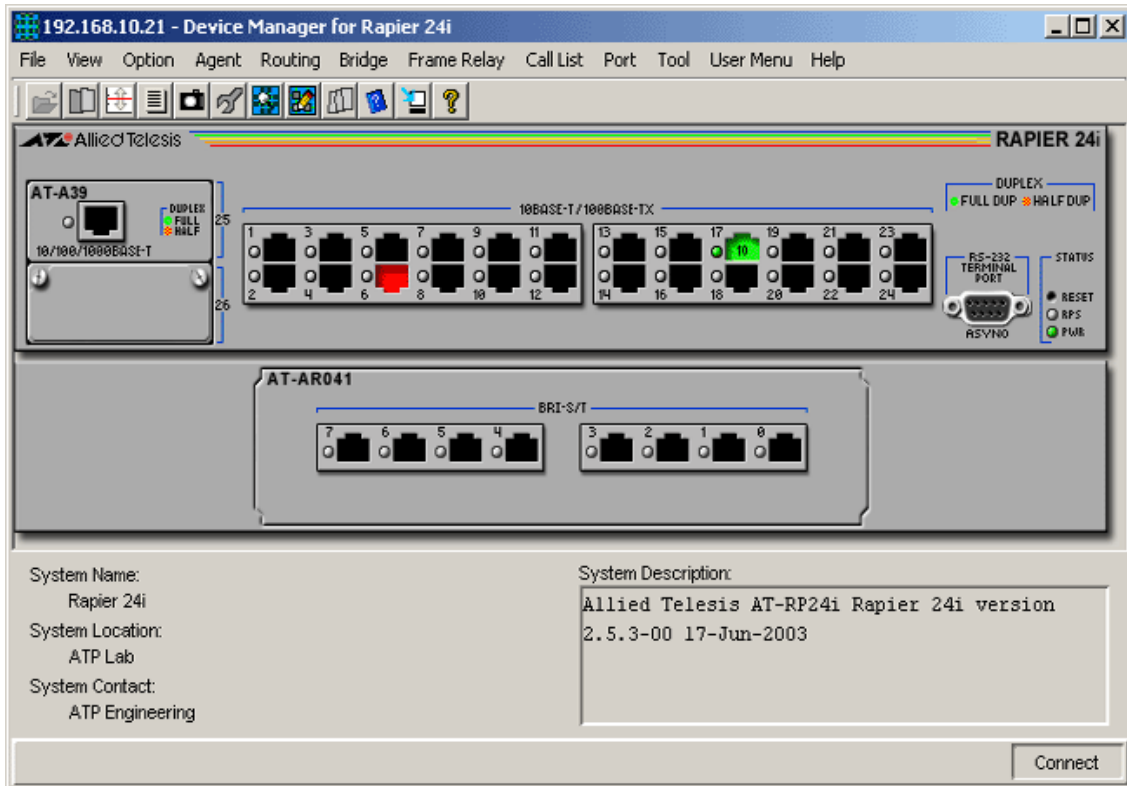
Rapier 16Fi/MT



Rapier 16Fi/SC



Rapier 24



192.168.10.21 - Device Manager for Rapier 24i

File View Option Agent Routing Bridge Frame Relay Call List Port Tool User Menu Help

Allied Telesis RAPIER 24i

AT-A39 10/100/1000BASE-T

10BASE-T/100BASE-TX

AT-AR041 BRI-S/T

System Name: Rapier 24i

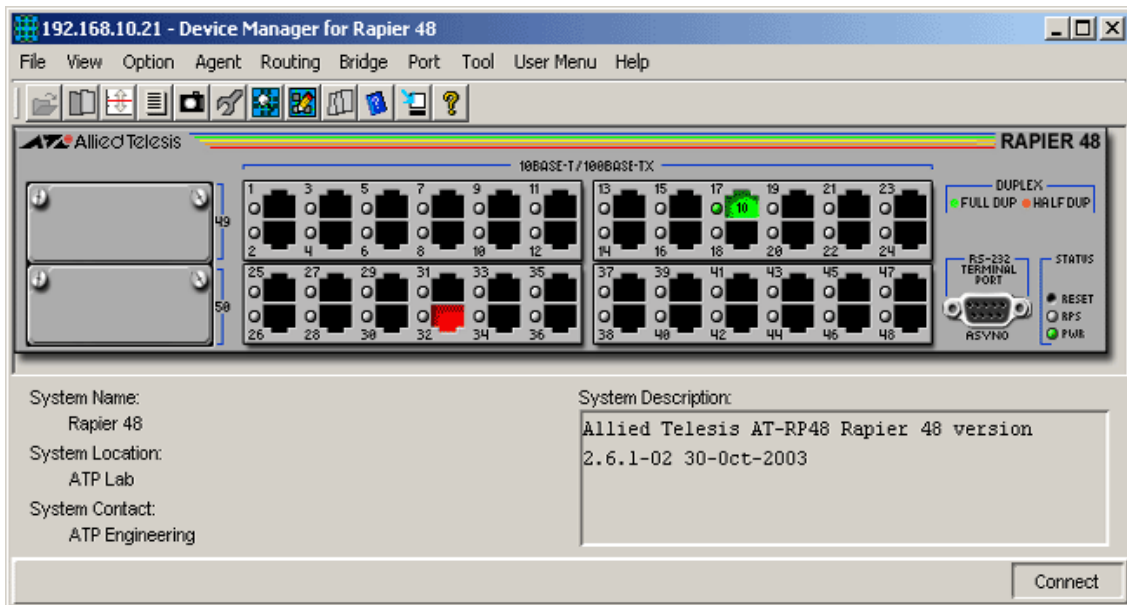
System Location: ATP Lab

System Contact: ATP Engineering

System Description: Allied Telesis AT-RP24i Rapier 24i version 2.5.3-00 17-Jun-2003

Connect

Rapier 24i



192.168.10.21 - Device Manager for Rapier 48

File View Option Agent Routing Bridge Port Tool User Menu Help

Allied Telesis RAPIER 48

AT-A39 10/100/1000BASE-T

10BASE-T/100BASE-TX

AT-AR041 BRI-S/T

System Name: Rapier 48

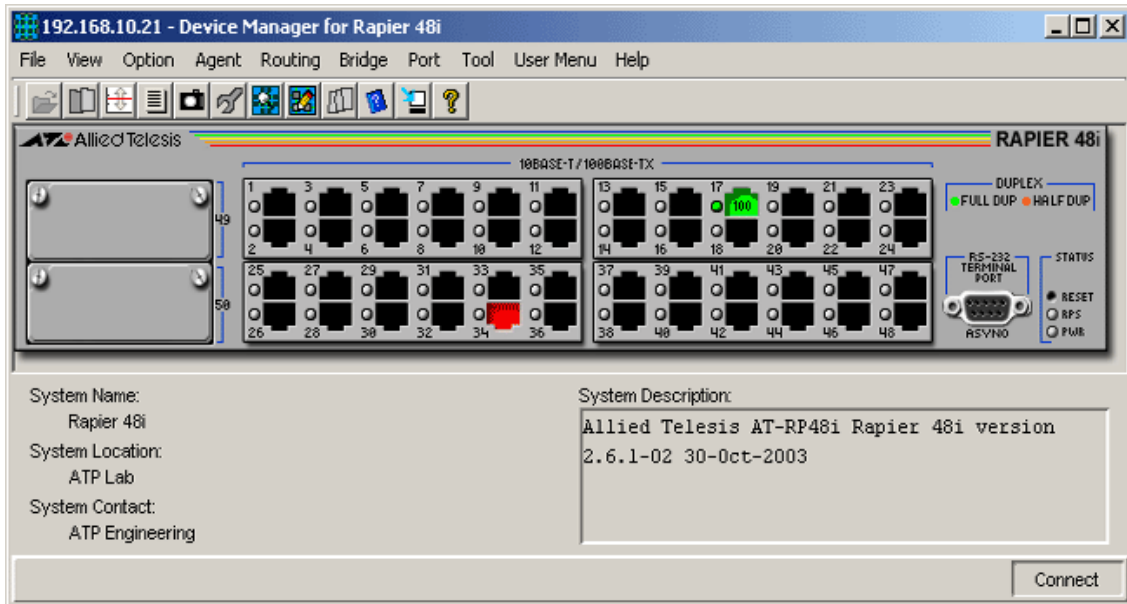
System Location: ATP Lab

System Contact: ATP Engineering

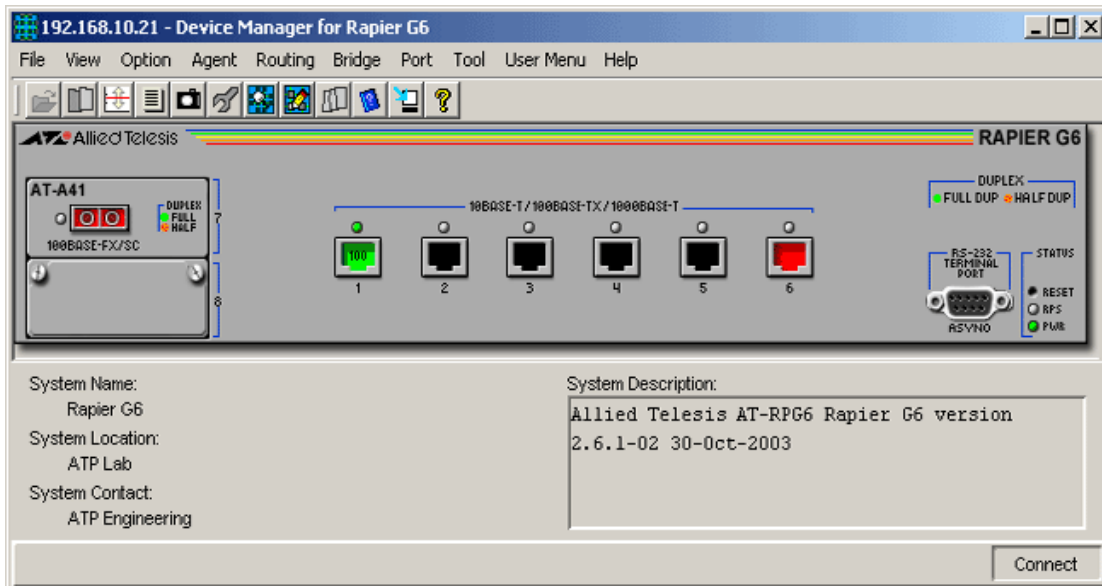
System Description: Allied Telesis AT-RP48 Rapier 48 version 2.6.1-02 30-Oct-2003

Connect

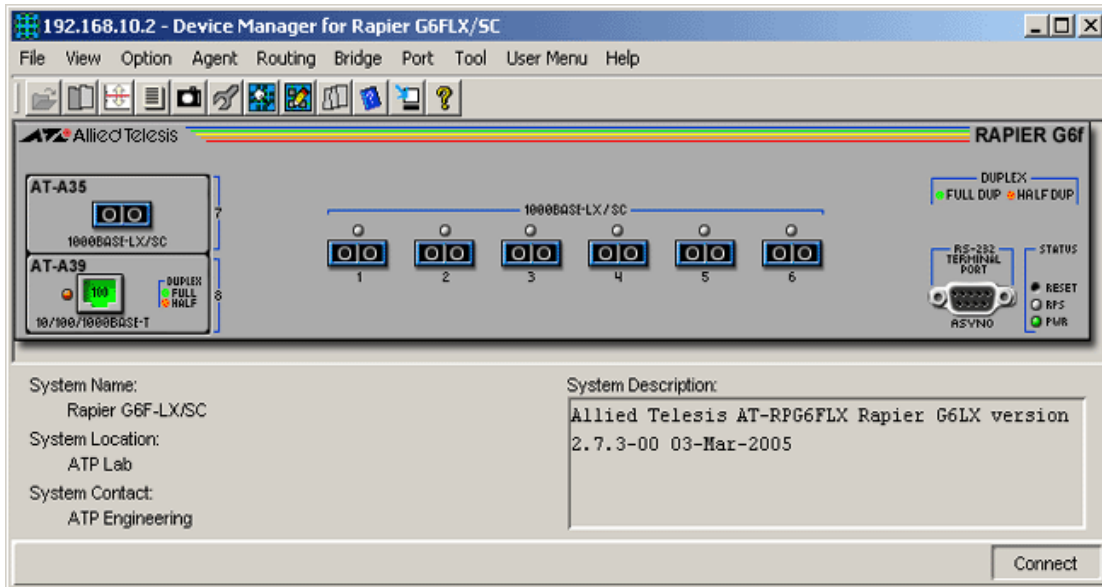
Rapier 48



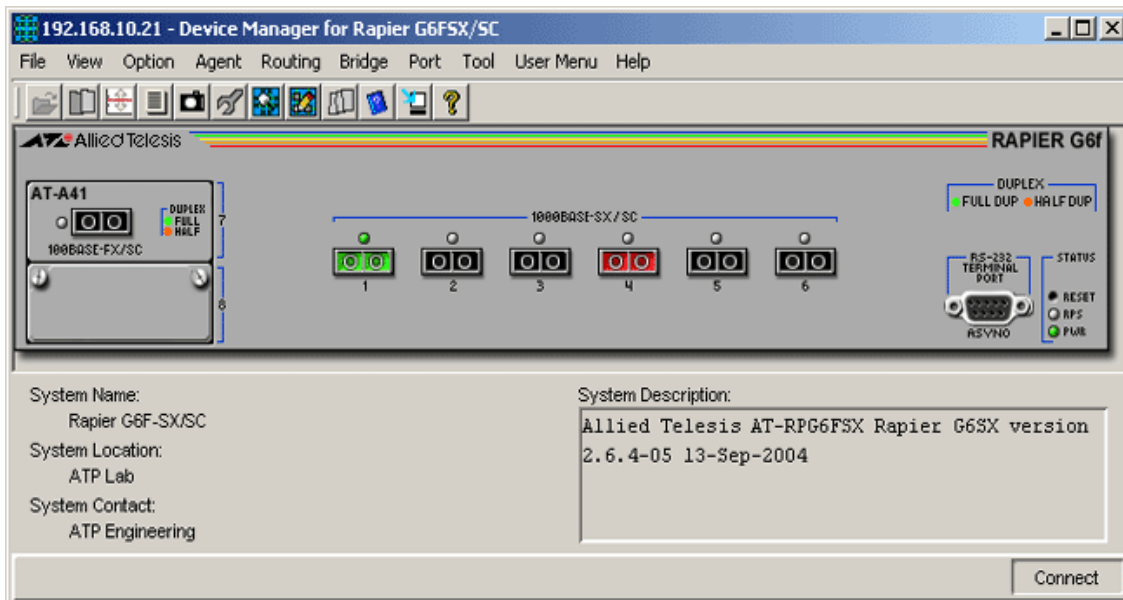
Rapier 48i



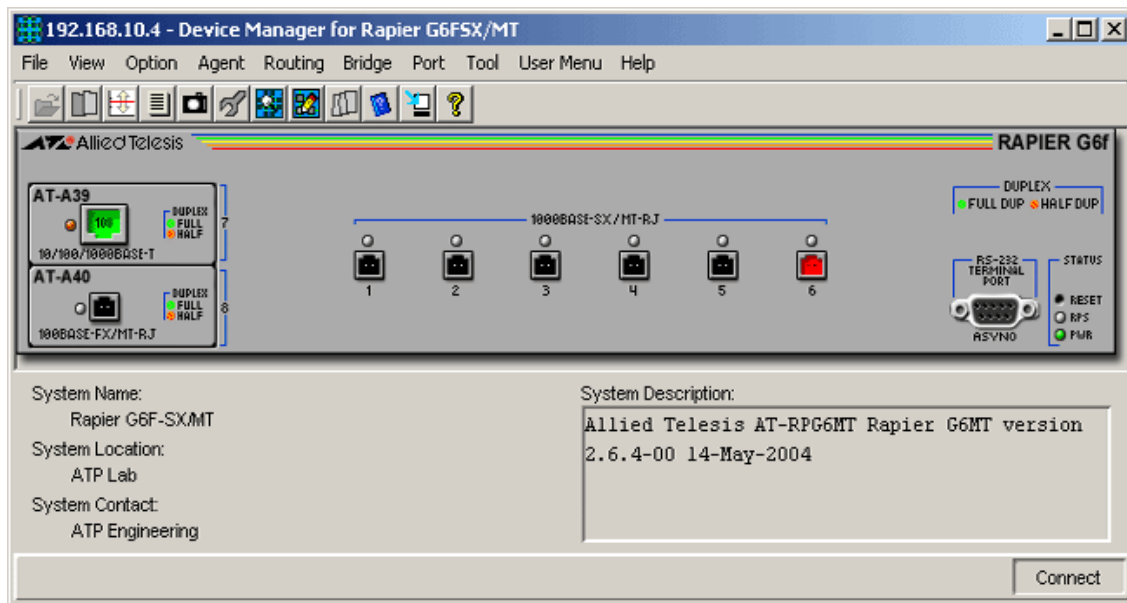
Rapier G6



Rapier G6F-LX/SC



Rapier G6F-SX/SC



Rapier G6F-SX/MT

Device Manager LEDs for Rapiers		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
	Red	The main power supply has failed.
RPS	Green	The switch is receiving power from the redundant power supply.
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

**Note** - Please refer to [Uplink Modules](#) for the operations and behavior of the uplink modules installed in these devices.

**Note** - Please refer to [Network Service Modules](#) for the operations and behavior of the Network Service Modules installed in these devices.

**Note** - To turn RPS monitoring on or off on the switch, enter the command SET SYSTEM RPSMONITOR={ON|OFF} from the command line interface. To see whether RPS monitoring is on, use the command SHOW SYSTEM. To turn on RPS monitoring using SNMP, set the fanAndPsRpsMonitoringStatus variable to on.



## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring.

### *File List*

Displays a list of the files in the switch's file system.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache), on the switch.

### *Address Table*

Displays the list of IP interfaces and their IP addresses on the switch.

### *Route Table*

Displays the IP routing table on the switch.

### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, including the number of ICMP datagrams received.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## Frame Relay Menu

From the Frame Relay menu you can view and edit Frame Relay information. The Frame Relay submenus are greyed out if the Frame Relay is not configured.

**Note** - The Frame Relay Menu does not apply to the Rapier 48, Rapier 48i, Rapier G6, Rapier G6F-LX/SC, Rapier G6F-SX/SC and Rapier G6F-SX/MT.

#### *DLCMI Info*

Displays DLCMI (Data Link Connection Management Interface) information.

#### *Circuit Info*

Displays Frame Relay circuit statistics.

#### *Error Info*

Displays information about errors related to the Frame Relay module.

## Call List Menu

From the Call List menu, you can view ISDN call information. The Call List submenus are greyed out if the device is not configured for ISDN.

**Note** - The Call List Menu does not apply to the Rapier 48, Rapier 48i, Rapier G6, Rapier G6F-LX/SC, Rapier G6F-SX/SC and Rapier G6F-SX/MT.

### *Detail Info*

Displays ISDN call information such as ISDN number and call direction for active calls.

### *Active call*

Displays information about currently active ISDN calls.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

### *Error Statistics*

Displays error statistics.

### *Spanning Tree Info*

Displays the port's spanning tree parameters.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

## SwitchBlade

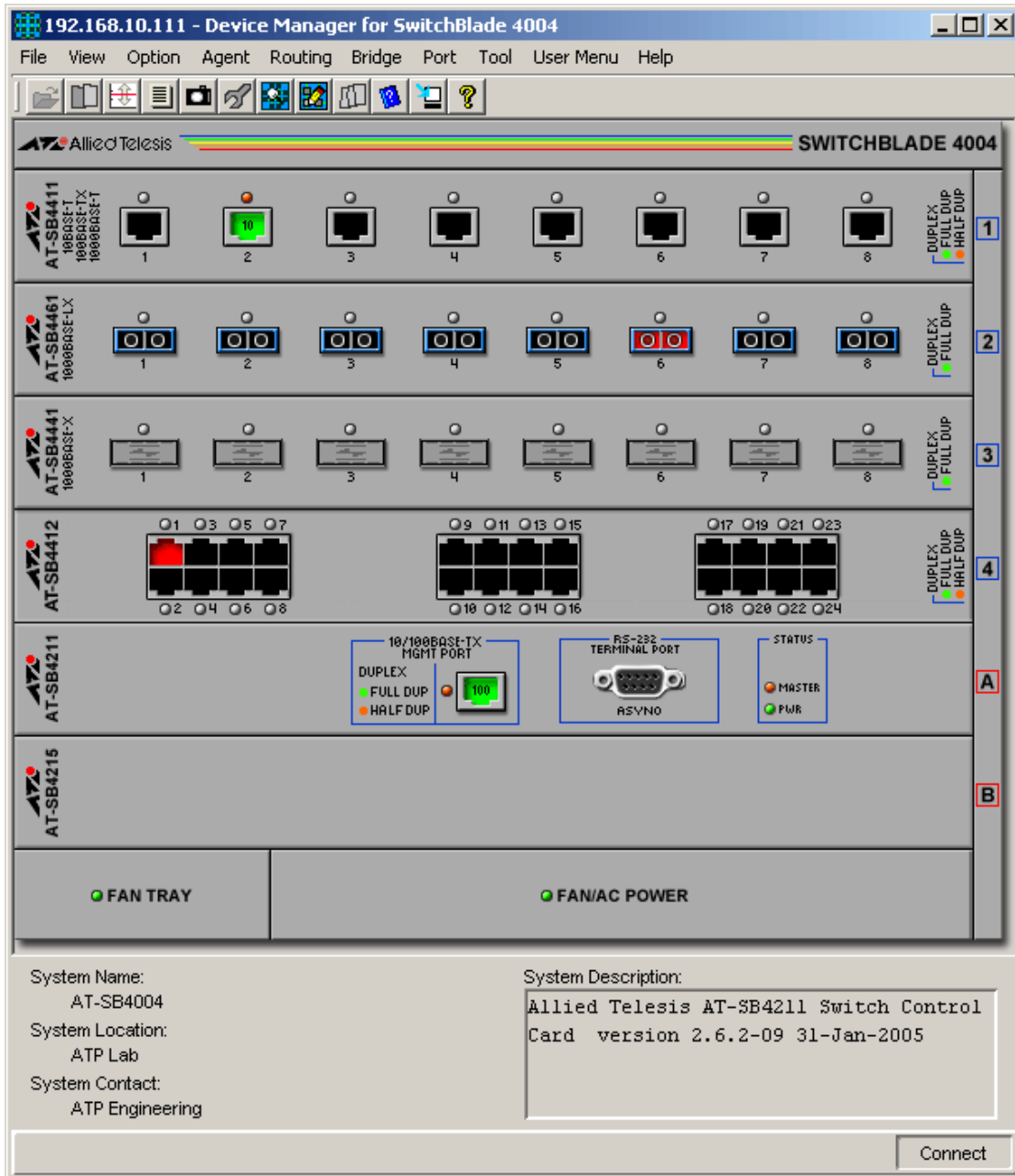
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This section describes Device Manager menus and operations specific to the SwitchBlade Series, including the AT-SB4211 Switch Controller, power supply units and fan tray installed.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Port Menu](#)

## Main Window



SwitchBlade 4004 with SB4211 Switch Controller, SB4215 Bandwidth Expander, and Line Cards installed

192.168.10.110 - Device Manager for SwitchBlade 4008

File View Option Agent Routing Bridge Port Tool User Menu Help

Allied Telesis SWITCHBLADE 4008

1	2	3	4	A	B	5	6	7	8
AT-SB4195	AT-SB4352 100BASE-FX	AT-SB4451 1000BASE-SX	AT-SB4195	AT-SB4211	AT-SB4195	AT-SB4462 1000BASE-LX	AT-SB4452 1000BASE-SX	AT-SB4311	AT-SB4195
17-28	1-8	1-8		10/100 GIG-E FX MGT PORT DUPLX FULL DUP HALF DUP		1-8	1-8	1-48	
				RS-232 TERMINAL PORT RSVNO					
				STATUS MASTER PWR					
FAN TRAY				FAN/AC POWER					
System Name: AT-SB4008				System Description: Allied Telesis AT-SB4211 Switch Control Card version 2.7.3-00 03-Mar-2005					
System Location: ATP Lab									
System Contact: ATP Engineering									
									Connect

SwitchBlade 4008 with SB4211 Switch Controller and Line Cards installed

Device Manager LEDs for AT-SB4211 Switch Controller		
LED	State	Description
PWR	Green	The PSU is receiving power from its supply circuit.
MASTER	Orange	The card is the master switch controller.
	Gray	The card is a slave switch controller.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

Device Manager LEDs for Fan Tray and Power Supply Units (PSUs)		
LED	State	Description
FAN TRAY	Green	The fan tray is installed and functioning.
	Red	The fan tray is either not installed or not functioning.
FAN/AC POWER (For AC Model)	Green	The power supply units installed including the fans are fully operational.
	Red	One of the PSU installed or its fan is faulty.
FAN/DC POWER (For DC Model)	Green	The power supply units installed including the fans are fully operational.
	Red	One of the PSU installed or its fan is faulty.

**Note** - Please refer to [SwitchBlade Line Cards](#) for the operations and behavior of the line cards installed on these devices.

**Note** - There is no distinction between one or more PSUs. The FAN/AC POWER and FAN/DC POWER LEDs show information for all PSUs installed in the device.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

### File List

Displays a list of the files in the switch's file system.

#### *Config File Name*

Displays the file name of the start-up configuration file.

#### *Boards Info*

Displays information about the chassis board, and switch controller and line card boards installed in the device.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache), on the switch.

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, including the number of ICMP datagrams received.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.



#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

**Note** - The current firmware version may, at times, return duplicate Forwarding Database table entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## Port Menu

From the Port menu, you can view and edit MIB information about the port. For each Port menu option, select first the slot in the SwitchBlade chassis, then the ports in the line card for which you require information. Note that the Port Number shown is the value of the MIB object `ifIndex`, except for the STP Info option, which shows the value of the MIB object `dot1dBasePort`.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

#### *Detail Info*

Displays detailed information about the ports, including multicast and broadcast packets received and transmitted.

#### *Error Statistics*

Displays error statistics.

#### *Spanning Tree Info*

Displays the port's spanning tree parameters. The Port Number displayed is the MIB object `dot1dBasePort`.

#### *Enable*

Enables the port.

*Disable*

Disables the port.

SwitchBlade

## SwitchBlade Line Cards

This section describes the SwitchBlade Line Cards in Device Manager. If the following Line Cards are installed in a SwitchBlade chassis, they are displayed in the main window. The operations available for the SwitchBlade include any of these line cards.

- [AT-SB4311](#)
- [AT-SB4352](#)
- [AT-SB4411](#)
- [AT-SB4412](#)
- [AT-SB4441](#)
- [AT-SB4442](#)
- [AT-SB4451](#)
- [AT-SB4452](#)
- [AT-SB4461](#)
- [AT-SB4462](#)
- [AT-SB4541](#)

### AT-SB4311 / AT-SB4352 / AT-SB4411 / AT-SB4412



48-Port (RJ-45) 10BASE-T/100BASE-TX Fast Ethernet Line Card



32-Port (MT-RJ) 100BASE-FX Fast Ethernet Line Card



8-Port (RJ-45) 10BASE-T/100BASE-TX/1000BASE-T Gigabit Ethernet Line Card



24-Port (RJ-45) 10BASE-T/100BASE-TX/1000BASE-T Gigabit Ethernet Line Card

LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.

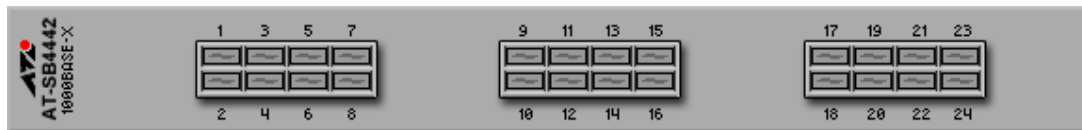
### AT-SB4441



8-Port 1000BASE-X GBIC Line Card

LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.

### AT-SB4442



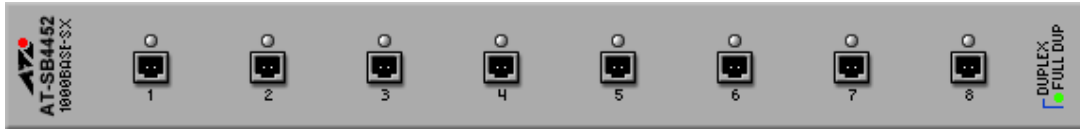
24-port 1000Base-X (SFP) Line Card

**Note** - There are no LEDs on this module.

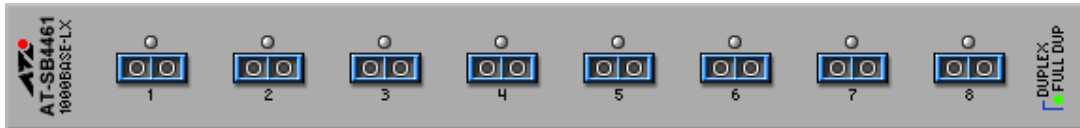
### AT-SB4451 / AT-SB4452 / AT-SB4461 / AT-SB4462



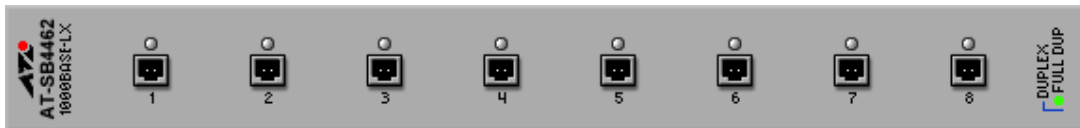
8-Port (SC) 1000BASE-SX Gigabit Ethernet Line Card



8-Port (MT-RJ) 1000BASE-SX Gigabit Ethernet Line Card



8-Port (SC) 1000BASE-LX Gigabit Ethernet Line Card



8-Port (MT-RJ) 1000BASE-LX Gigabit Ethernet Line Card

LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.

## AT-SB4541



1-port 10GBASE-R Line Card

LED	State	Description
XFP	Green	An XFP is installed and enabled.
	Orange	An XFP is installed, but disabled.
	Off	No XFP is installed.

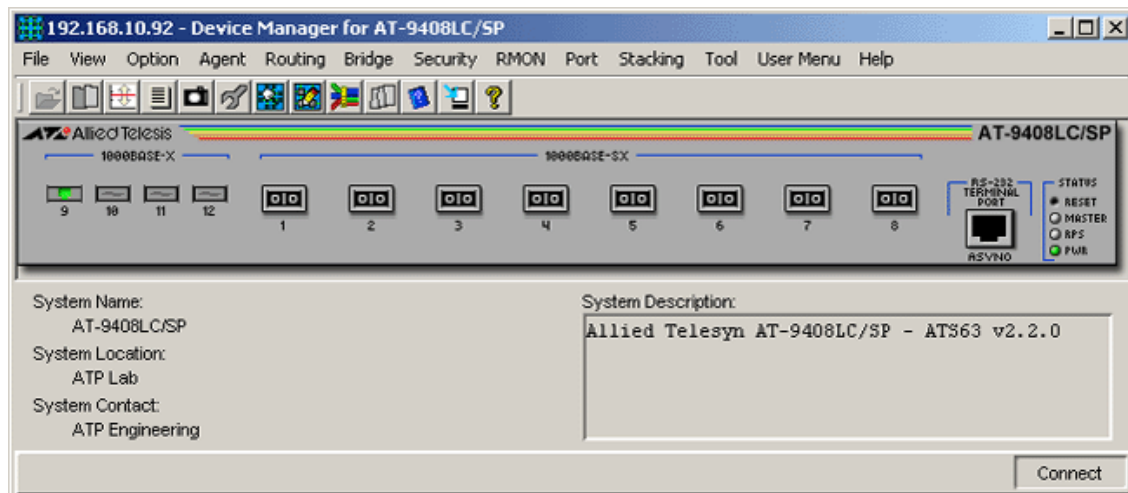
## AT-9400 Series

This section describes Device Manager menus and operations specific to the AT-9400 Series.

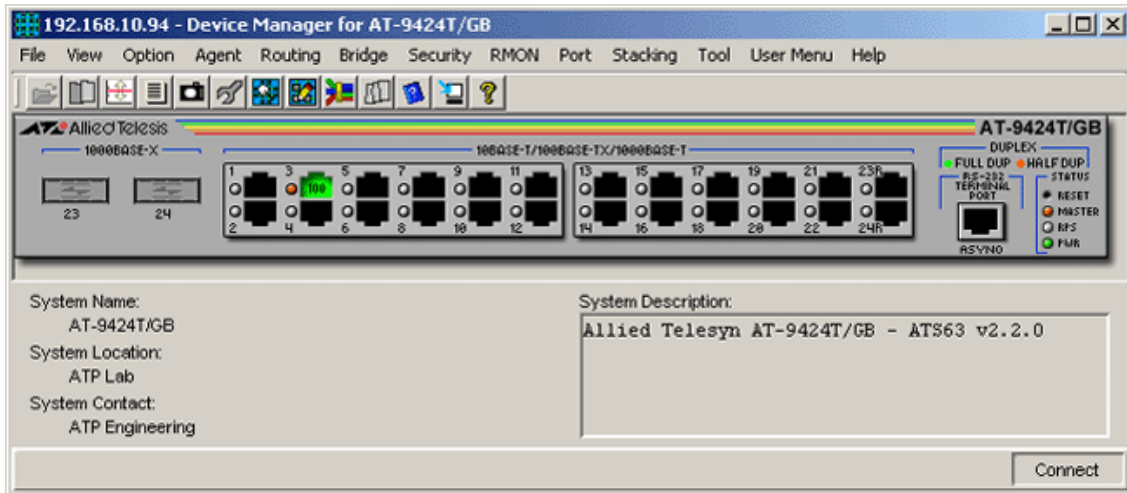
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)
- [Stacking Menu](#)

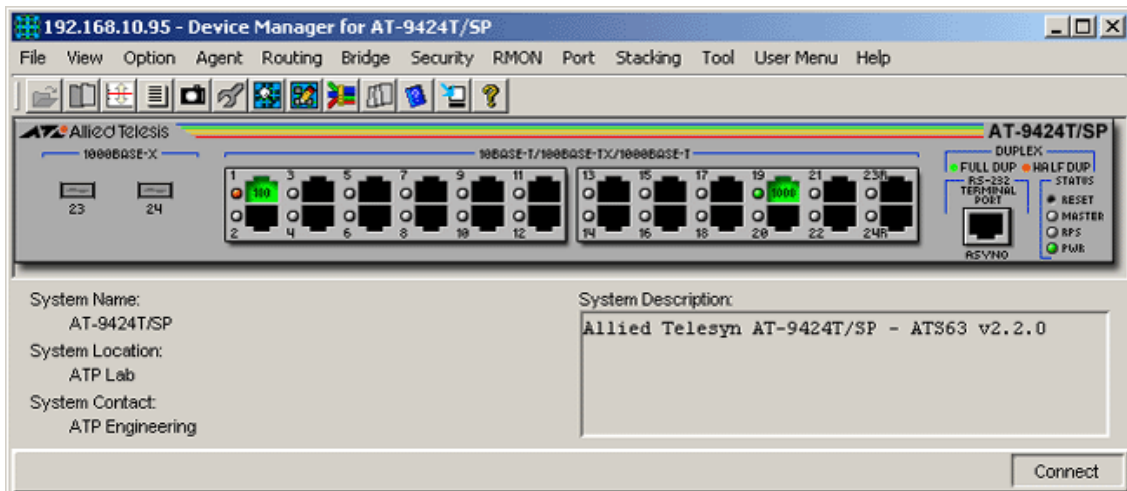
## Main Window



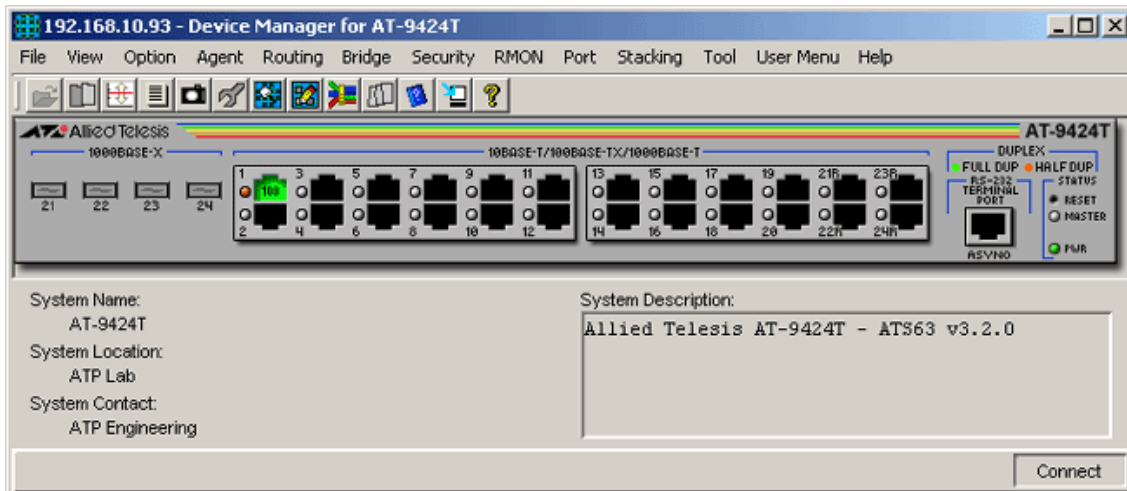
AT-9408LC/SP



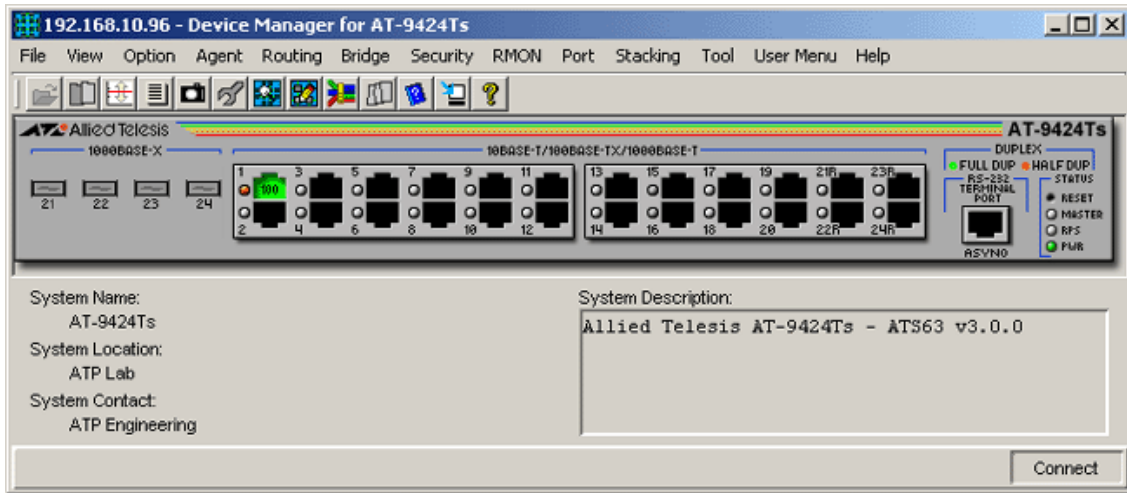
AT-9424T/GB



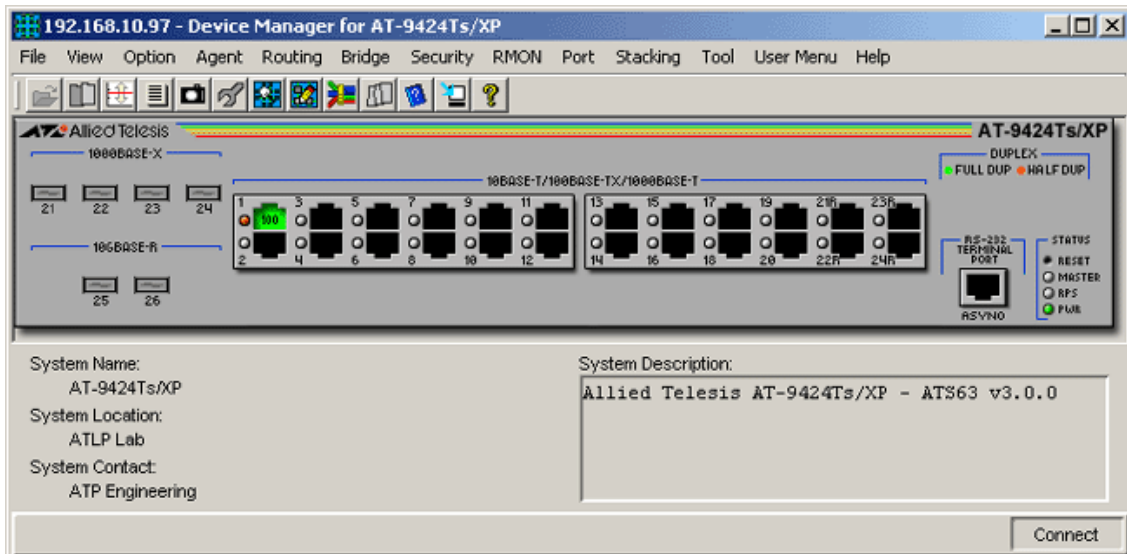
AT-9424T/SP



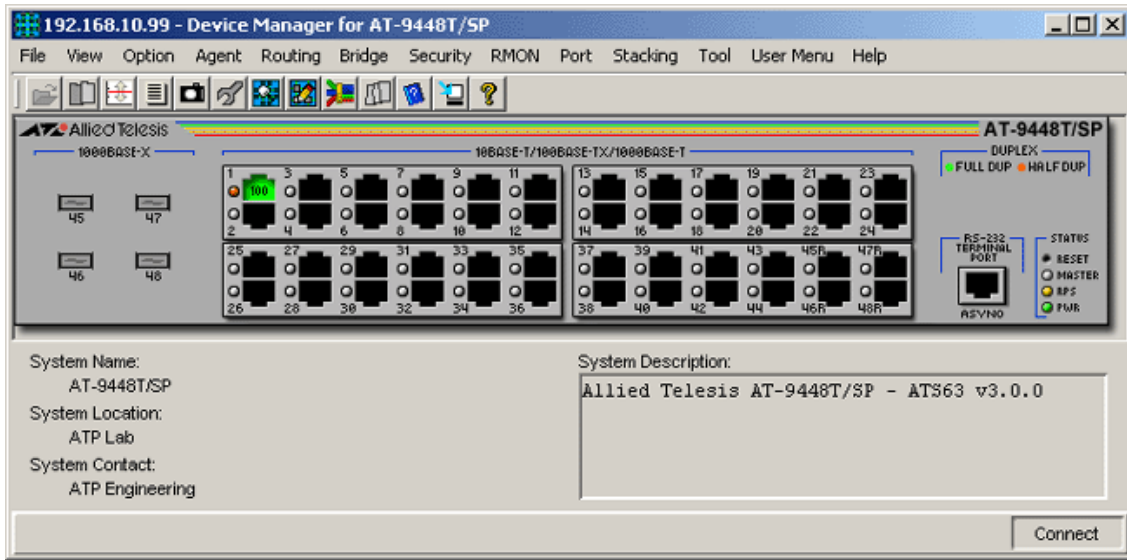
AT-9424T



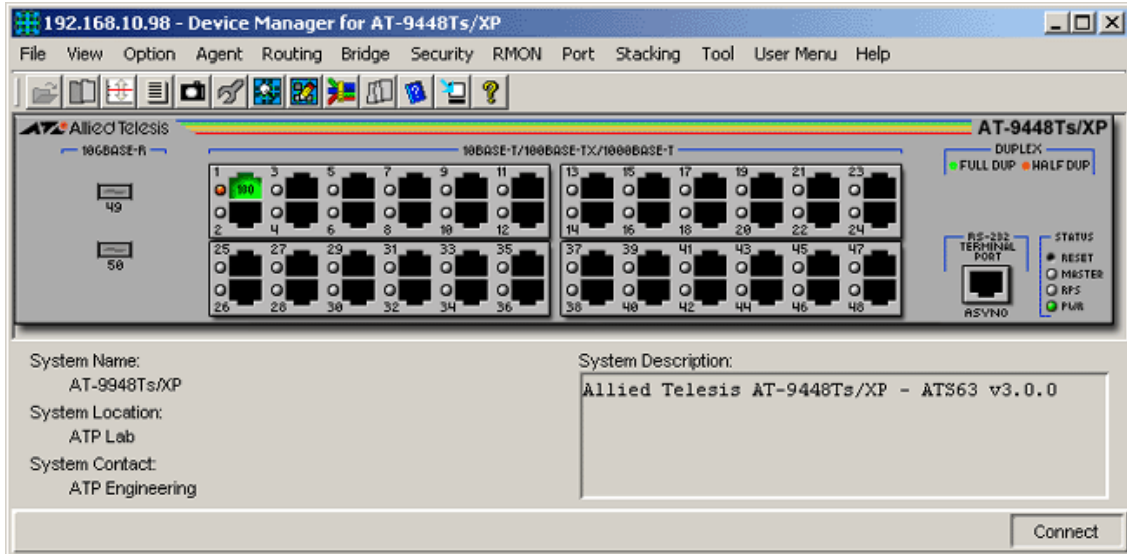
AT-9424Ts



AT-9424Ts/XP



AT-9448T/SP



AT-9448Ts/XP

### Device Manager LEDs for AT-9400 Series

LED	State	Description
PWR	Green	The switch is receiving power.
MASTER	Orange	The switch is the master switch of an enhanced stack.
	Gray	The switch is a slave switch or is not a member of an enhanced stack.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.



RPS	Green	An optional redundant power supply is connected to the switch and is turned on.
	Gray	There is no redundant power supply connected to the switch.
	Yellow	An optional redundant power supply is connected to the switch but is turned off.

**Note** - The current firmware version is unable to detect the presence or absence of an XFP module in any of the XFP slots. As a result, the XFP slots on the device image will always show XFP images regardless of whether or not XFP modules are physically present in the slots.

**Note** - When connecting to a slave switch, Device Manager does not automatically replace the master switch image in the main window with the slave switch image. The same is true when returning to the master switch from the slave switch. To view the updated image, click on the Refresh option under the Agent menu.

**Note** - L2+ Models: Blocking ports will appear green instead of yellow when the Spanning Tree Status parameter is set to "enabled" and the Spanning Tree Version parameter is set to "rstp".

**Note** - L3 Models: Blocking ports will appear green instead of yellow when the Spanning Tree Status parameter is set to "enabled".

**Note** - Status information for combo ports will always be reflected on both the RJ-45 port images and the GBIC/SFP port images regardless of whether it is the RJ-45 or the GBIC/SFP ports that are actually in operation. However, if Device Manager detects that the established link speed is less than 1 Gbps, only the RJ-45 port images will turn green.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - L3 Models: The current firmware version allows up to 38 characters for the System Location parameter.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *Device Info*

### *General Info*

Displays general information about the switch.

**Note** - The current firmware version does not return the correct value for the Hardware Version parameter of the following models:

- AT-9408LC/SP
- AT-9424T/GB
- AT-9424T/SP
- AT-9424Ts

**Note** - L2+ Models: The current firmware version returns an incorrect value for the RPS Present parameter. If the device is connected to an RPS, the RPS Present parameter returns 'disconnected'. If it is not, it returns 'connected'.

### *Uplink Info*

Displays uplink information.

### *Temperature Info*

Displays temperature information.

**Note** - This table applies to L2+ models only.

### *Fan Info*

Displays fan information.

**Note** - This table applies to L2+ models only.

### *Voltage Info*

Displays voltage information.

**Note** - This table applies to L2+ models only.

### *Management Info*

#### *General Config*

Displays management configuration information about the switch.

**Note** - AT-9408LC/SP: The current firmware version does not allow the Configuration Action parameter to be configured.

**Note** - The current firmware version returns "???(0)" for the Action parameter.

### *Access Lists*

Displays management access lists for the switch.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Application parameter may display any of the following values:

- 00100000 - ping
- 01000000 - web
- 10000000 - telnet
- 11100000 - all

but may not be configured.

#### *Date and Time*

Displays and configures the current date and time of the device.

#### *MAC Address Table*

Displays a list of static MAC addresses configured on the switch.

**Note** - The MIB (atiStackSwitch.mib ? L2+ Models: v2.36 / L3 Models: v2.38) supported by the current firmware version defines the Module ID, Port ID and Port List parameters as "read-write". As a result, Device Manager displays these parameters as configurable objects. However, attempting to configure these parameters will show that the firmware does not accept any value.

**Note** - The only valid MIB Set value for the Status parameter is "destroy". Attempting to set this parameter to any other value may result in the value being ignored or the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - L3 Models: This table cannot be viewed using SNMPv3.

#### *Reset*

Resets the switch.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's routing functions.

#### *IP*

##### *ARP Table*

Displays the ARP cache on the switch.

##### *Address Table*

Displays the list of IP interfaces on the switch.

##### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

**Note** - The current firmware version does not allow the Default TTL parameter to be configured.

### UDP

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP statistics.

### TCP

#### *Connection Info*

Displays TCP connection-specific information.

#### *TCP Statistics*

Displays TCP statistics.

#### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

**Note** - L2+ Models: Changes to the Forwarding Database table caused by dynamic network topology/configuration changes will not be reflected unless the device is restarted.

**Note** - Forwarding Database table entries for aggregated ports do not reflect the correct port number in the Port Number column.

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

*Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

*Statistics*

Displays statistics about frames received/transmitted on the switch port.

*Basic Bridge Info*

Displays basic bridge information.

*Bridge Port Info*

Displays statistics about frames received/transmitted on the switch port.

## Security Menu

From the Security menu, you can view and edit security protocols such as the ACL.

*Access Control List*

Displays the Access Control List table as returned by the device.

**Note** - The current firmware version allows up to 31 characters for the Description parameter.

## RMON Menu

From the RMON menu you can view and edit the RMON MIB.

*Statistics*

Displays traffic statistics in the network segment attached to each port.

*Standard*

Displays standard port statistics.

*Additinal Info*

Displays additional port statistics.

*Error*

Displays error statistics.

*History Control Table*

Displays the RMON History table.

**Note** - The current firmware version is unable to provide History Control Table information. As a result, the following error message appears: "Failed to get MIB data."

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

## Port Menu

From the Port menu, you can view and edit MIB information about the port.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

##### *Standard*

Displays port statistics such as the number of packets received and transmitted on the port, bytes received and transmitted on the port and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

**Note** - The current firmware version does not allow the Port Alias parameter to be configured.

**Note** - Use SNMP v2c or v3 to view high capacity (HC) port parameter values.

##### *Additional Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port and port status.

**Note** - Use SNMP v2c or v3 to view this table.

#### *Error Statistics*

Displays error statistics.

### *Standard*

Displays port error statistics such as error frames and collision frames. It also displays deferred transmissions and ethernet chipset information.

### *Additional Info*

Displays Bad Frames Received and Collision parameters.

**Note** - Use SNMP v2c or v3 to view this table.

### *Detail Info*

Displays detailed port information such as duplex mode.

**Note** - Valid MIB Set values for the Port Flow Control and Port Back Pressure parameters are 'disable' and 'enable'. Attempting to set these parameters to 'unknown' will cause them to be set to 'enable'.

**Note** - The Port CoS/QoS Priority and Port STP State parameters are not applicable to the AT-9400 series and should be ignored.

**Note** - AT-94xxTs/XP: The current firmware version returns the value 'unknown' for the Port Speed parameter of the XFP ports.

**Note** - AT-94xxTs/XP: The Port Speed and Mode parameter of the XFP ports has a fixed value of 'auto sense' and cannot be configured.

**Note** - L3 Models: Setting the Port Speed and Mode parameter of 10Base-T/100Base-TX/1000Base-T ports to '10Mbps half-duplex', '10Mbps full-duplex', '100Mbps half-duplex' or '100Mbps full-duplex' causes the firmware to return a value of '1000' for the Port Speed parameter and 'full-duplex' for the Port Duplex Status parameter. As a result, the speed label on the port image will always show '1000' and its corresponding DUP LED will always be green.

**Note** - The Port MDIO parameter is not applicable to the AT-9408LC/SP.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

### *Port Trunking*

Displays Port Trunking information as returned by the device and allows the configuration of trunk name, method and port list.

**Note** - The current firmware version allows the Trunk Name parameter to be configured.

### *Port Mirroring*

Displays Port Mirroring parameters and allows you to create/delete a port mirror.

**Note** - The current firmware version does not allow the Port Mirroring Status parameter to be set to 'enabled' if, upon device startup, the Port Mirroring feature is disabled.

**Note** - L2+ Models: The current firmware version does not allow the Mirroring Source Port (Ingress) and Mirroring Source Port (Egress) parameters to be set to NULL.

**Note** - L3 Models: The current firmware version does not allow the Mirroring Source Port (Ingress) and Mirroring Source Port (Egress) parameters to be configured.

**Note** - The current firmware version does not allow the Mirroring Destination Port parameter to be set to 0.

**Note** - The Mirroring Source Module, Mirroring Source Port and Mirroring Destination Module parameters are not applicable to the AT-9400 series and should be ignored.

#### *MAC Address Security*

Displays MAC Address Security parameters and allows you to set the security level for dynamic and static MAC addresses learned and assigned to a port.

#### *DoS Defense*

Displays DoS Defense parameters and allows you to enable/disable a defense mechanism on a port.

**Note** - The current firmware version returns 'noSuchName' for the Module ID and Port Number parameters under each Attack Type option.

**Note** - The Attack Mirror Port parameter under each Attack Type option is already obsolete and should be ignored.

**Note** - The Attack Mirror Port Status parameter is not applicable to the SYN Flood and Smurf defenses and should be ignored.

#### *LAN IP Subnet*

Displays LAN IP address and subnet mask

#### *SYN Flood Config*

Displays syn flood attack type configuration

#### *Smurf Config*

Displays smurf attack type configuration.



#### *Land Config*

Displays land attack type configuration

#### *IP Option Config*

Displays IP option attack type configuration

#### *Teardrop Config*

Displays teardrop attack type configuration

#### *Ping Death Config*

Displays ping of death attack type configuration

## Stacking Menu

From the Stacking menu, you can access slave switches and other Master switches in the enhanced stack.

#### *Stacking Info*

Displays Enhanced Stacking parameters, allows you to set the switch's enhanced stacking status and select a switch to manage in the enhanced stack.

**Note** - Attempting to connect to an AT-9424T, AT-9424Ts or an AT-9424Ts/XP slave from any master device that supports Enhanced Stacking will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

**Note** - Attempting to connect to an AT-8400 slave from an AT-9400 master will result in the error message: "The error occurred with 'Set' operation. Error: gen Error".

**Note** - Connecting to an AT-9408LC/SP or to an AT-9424T/SP slave from any master device that supports Enhanced Stacking can only be done once. Once the management session is returned to the master device, any attempt to reconnect to these slave devices will fail.

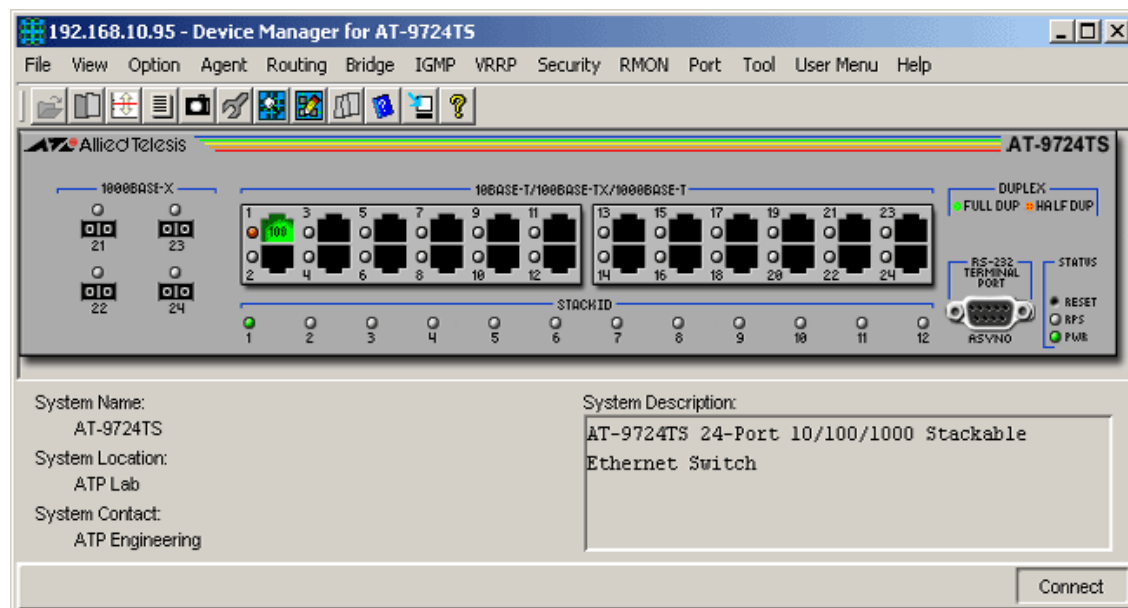
## AT-9700 Series

This section describes Device Manager menus and operations specific to the AT-9700 Series of Advanced Layer 3 Gigabit Switches.

Topics:

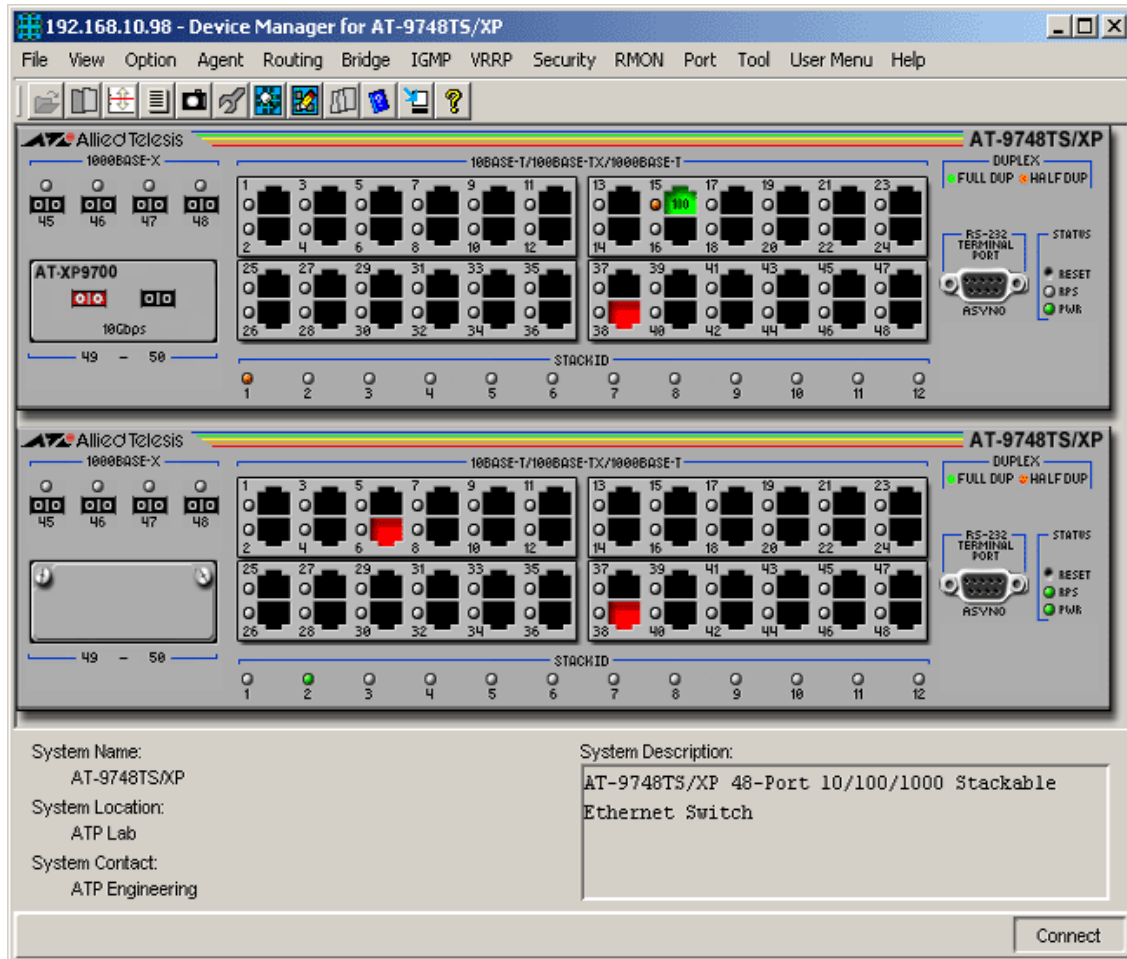
- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [IGMP Menu](#)
- [VRRP Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

## Main Window



AT-9724TS

The AT-9724TS supports up to 12 stacked AT-9724TS switches.



### AT-9748TS/XP

The AT-9748TS/XP supports up to 8 AT-9748TS/XP stacked switches with no uplinks or 5 AT-9748TS/XP stacked switches with 10G uplinks or any of the following mixed stack combinations of AT-9748TS/XP and AT-9724TS switches.

AT-9748TS/XP (With 10G Uplink)	AT-9748TS/XP (No Uplink)	AT-9724TS
5	0	<= 1
4	2	0
4	1	<= 2
3	2	<= 3
3	1	<= 5
3	0	<= 7
2	5	0

AT-9748TS/XP (With 10G Uplink)	AT-9748TS/XP (No Uplink)	AT-9724TS
2	4	<=2
2	3	<=4
2	2	<=6
2	1	<=8
2	0	<=10
1	6	<=1
1	5	<=3
1	4	<=5
1	3	<=7
1	2	<=9
1	1	<=10
1	0	<=11
0	7	<=2
0	6	<=4
0	5	<=6
0	4	<=8
0	3	<=9
0	2	<=10
0	1	<=11

#### Device Manager LEDs for AT-9700 Series

LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
RPS	Green	The switch is receiving power from the redundant power supply.
	Gray	RPS is not installed or not functioning.
STACK ID	Green	The stacked unit is either a slave switch or the switch is not in a stacked mode.
	Orange	The stacked unit is the master switch.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - The Stack ID LED indicates the Box ID of the stacked switch or standalone switch.

**Note** - When multiple units of the AT-9700 series are stacked together, port numbering is continuous based on the Box ID.

- Box ID 1 - 1 to 64
- Box ID 2 - 65 to 128
- Box ID 3 - 129 to 192
- Box ID 4 - 193 to 256
- Box ID 5 - 257 to 320
- Box ID 6 - 321 to 384
- Box ID 7 - 385 to 448
- Box ID 8 - 449 to 512
- Box ID 9 - 513 to 576
- Box ID 10 - 577 to 640
- Box ID 11 - 641 to 704
- Box ID 12 - 705 to 768

This numbering scheme assumes that a unit can have a maximum of 64 ports.

**Note** - The current firmware version does not allow Device Manager to detect the presence or absence of an SFP module in any of the SFP slots. As a result, the SFP slots on the device image will always show SFP images regardless of whether or not SFP modules are physically present in the slots.

**Note** - Status information for ports 21 to 24 on the AT-9724TS and ports 45 to 48 on the AT-9748TS/XP will always be reflected on both the RJ-45 port images and the SFP port images regardless of whether it is the RJ-45 or the SFP ports that are actually in operation. However, if Device Manager detects that the established link speed is less than 1 Gbps, only the RJ-45 port images will turn green.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Device Info*

#### *Equipment Capacity*

Displays the equipment capacity supported in the system.

#### *Power Supply Info*

Displays information about the power supply and redundant power supply .

#### *Fan Info*

Displays fan status.

#### *Unit Info*

Displays information about the system's stacking mode, units supported in the system, total number of ports and number of ports in use.

#### *Unit Management Info*

Displays management information for each unit in the system.

#### *Module Info*

Displays module information for each unit in the system.

### *Management Info*

#### *General Info*

Displays common management information.

#### *General Config*

Displays basic control of the system.

**Note** - The current firmware version does not allow the RS-232C Mode parameter to be configured.

**Note** - It may take a while for the device to set the STP Status parameter to 'enable'. As a result, a timeout error may occur. However, the value is still set successfully.

#### *MIB List*

Displays the list of MIB capability entries supported by the system.

#### *TFTP Services*

Displays information about the files that have been downloaded from and uploaded to the device.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Description
- Transfer Type
- File Type
- File Control
- Download CFG File
- Multi Image Control ID

**Note** - Valid MIB Set values for the Load Type parameter will depend on the Description parameter:

- boot file - download
- log file - upload
- config file - upload/download

#### *IP Protocol Info*

Displays information about the IP interfaces supported by the system.

#### *Multiple Image List*

Displays information about multiple image management.

#### *Alarm Config*

Displays the status of trap configurations.

### *Group Management*

#### *Group Management Info*

Displays the basic information of the device.

#### *Group Management Config*

Displays status and role state of the switch in the system.

**Note** - The current firmware version does not allow the Switch Role parameter to be set to 'member'.

#### *Member Switches*

Displays information about member switches that belong to the group management group.

**Note** - The current firmware version does not allow the Candidate ID and Candidate Password parameters to be configured.

#### *Candidate Switches*

Displays information about candidate switches that belong to the group management group.

#### *Groups*

Displays information about group management groups learned by the command switch.

#### *Neighbors*

Displays information about group management Neighbors.

### *Date and Time*

#### *System Date and Time*

Displays the current date and time configuration of the system.

**Note** - The current firmware version does not allow the Current Clock parameter to be configured.

#### *Summer Date and Time*

Displays the summer date and time configuration of the system.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Repeating Start
- Repeating End
- Annual Start
- Annual End

#### *SNTP*

Displays the SNTP configuration of the system.

#### *System Log Server Config*

Displays basic information and configuration of the System Log Server.

#### *Reset Cold*

Performs a hardware reset.

#### *Reset Warm*

Performs a software reset.

**Note** - This function is currently not supported.

#### *Telnet*

Starts a Telnet connection to the switch.

#### *WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit various routing protocols such as RIP, DVMRP, OSPF, PIM and IPM.

### *IP*

#### *Interface Info*

Displays information about IP interfaces.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Interface Name
- IP Subnet Mask
- VLAN Name
- Operation Mode
- Secondary IP



#### *Forwarding Database*

Displays the Forwarding Database table.

#### *ARP Aging Time*

Displays the timeout period in minutes for aging out dynamically learned arp information.

#### *Static Route Table*

Displays the IP static routing table.

**Note** - The current firmware version does not allow the Next Hop Address and Destination Metric parameters to be configured.

**Note** - The only valid MIB Set value for the Entry Status parameter is 'invalid'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: noSuchName."

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

### **UDP**

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP Statistics.

### **TCP**

#### *Connection Info*

Displays TCP connection-specific information.

**Note** - The current firmware version does not allow the Connection Status parameter to be configured.

#### *TCP Statistics*

Displays TCP Statistics.

### **CIDR**

#### *Route Number*

Displays the number of valid CIDR entries.

#### *Route Table*

Displays the CIDR routing tables.

**Note** - Only the Row Status parameter can be configured.

### **ICMP Statistics**

Displays ICMP Statistics.

### *Route Preferences*

Displays configurations of routing preferences.

### *Route Redistribution*

Displays the route redistribution table of various protocols.

## *RIP*

### *Basic Info*

Displays basic information about Routing Information Protocol.

### *Interface Info*

Displays the list of subnets which require separate status monitoring in Routing Information Protocol.

**Note** - The Row Status parameter has a fixed value of 'active' and cannot be modified.

### *Interface Config*

Displays the list of subnets which require separate configuration in Routing Information Protocol.

**Note** - The current firmware version does not allow the Domain and Default Metric parameters to be configured.

**Note** - Valid MIB Set values for the Row Status parameter are 'active' and 'not in service'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value".

**Note** - The current firmware version does not allow the following parameters to be configured:

- Domain
- Authentication Key
- Default Metric
- Source IP Address

### *Active Peer Info*

Displays information about active peer relationships.

## *OSPF*

### *Basic Info*

Displays basic information about Open Shortest Path First routing protocol.

**Note** - The current firmware version does not allow the following parameters to be configured:

- AS Border Router Status
- Type of Service Support Status
- Ext Link State DB Limit
- Multicast Extensions
- Exit Overflow Interval
- Demand Extensions

#### *Area Info*

Displays the configured parameters and cumulative statistics of the device's attached areas.

**Note** - The Authentication Type parameter is not applicable to the AT-9700 Series and should be ignored.

#### *Stub Area Config*

Displays the set of metrics that will be advertised by a default Area Border Router into a stub area.

**Note** - The current firmware version does not allow the Row Status and Metric Type parameters to be configured.

#### *Link State Ads*

Displays the OSPF Process' Link State Database.

**Note** - The Link State Ads sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Host Info*

Displays the list of hosts, and their metrics, that the device will advertise as host routes.

**Note** - The current firmware version does not allow the Metric parameter to be set to 0.

#### *Interface Info*

Displays the interfaces from the viewpoint of OSPF.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Type
- Transit Delay
- Retransmission Interval
- Multicast Forwarding
- Demand
- Authentication Type

- Authentication Key
- Authentication Key ID
- Row Status

#### *Interface Metric*

Displays the Type of Service metrics for a non-virtual interface.

**Note** - The current firmware version does not allow the Value parameter to be set to 0.

#### *Virtual Interface Info*

Displays information about this device's virtual interfaces.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Authentication Type
- Authentication Key
- Authentication Key ID

#### *Neighbor Info*

Displays the non-virtual neighbor information.

**Note** - The Neighbor Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Virtual Neighbor Info*

Displays the virtual neighbor information.

**Note** - The Virtual Neighbor Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *External Link State Ads*

Displays the OSPF Process' Link State Database containing only the External Link State Advertisements.

#### *Area Aggregate Info*

Displays the range of IP addresses specified by an IP address/IP network mask pair .

### **DVMRP**

#### *Basic Info*

Displays basic information about Distance Vector Multicast Routing Protocol.

#### *Interface Info*

Displays a list of the device's multicast capable interfaces.

**Note** - The current firmware version does not return any value for the Interface Index parameter.

**Note** - The following parameters are not applicable to the AT-9700 Series and should be ignored:

- Remote Address
- Remote Subnet Mask
- Generation ID
- Received Packets
- Transmitted Packets
- Received Octets
- Transmitted Octets

**Note** - The current firmware version returns 'noSuchName' for the Transmitted Routes, Master Key and Master Key Version parameters.

**Note** - The current firmware version does not allow the Local Address parameter to be configured.

#### *Neighbor Info*

Displays a list of the device's DVMRP neighbors, as discovered by receiving DVMRP messages.

**Note** - The Neighbor Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Route Table*

Displays the table of routes learned through DVMRP route exchange.

#### *Next Hop Table*

Displays the table containing information on the next hops on outgoing interfaces for routing IP multicast datagrams.

**Note** - The Next Hop Table sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

## **PIM**

#### *Basic Info*

Displays the default interval at which periodic PIM-SM Join/Prune messages are to be sent, PIM Parameter Settings, Candidate - Rendezvous Point Global Settings, and Candidate - BSR Settings.

**Note** - The current firmware version returns 'noSuchName' for the Join/Prune Interval parameter and does not allow it to be configured.

**Note** - Valid MIB set values for the Register Probe Time parameter are in the range [0-127] inclusive.

**Note** - Valid MIB set values for the Register Suppression Time parameter are in the range [1-255] inclusive.

#### *Interface Info*

Displays the list of device's Protocol Independent Multicast interfaces.

#### *DR Priority*

Displays the DR Priority of the router's interface.

#### *Neighbor Info*

Displays a list of the device's PIM neighbors.

**Note** - The current firmware version returns 'noSuchName' for the Mode parameter.

#### *Route Table*

Displays the table of routes learned through PIM route exchange.

**Note** - The Route Table sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Next Hop Table*

Displays the table containing information on the next hops on outgoing interfaces for routing IP multicast datagrams.

**Note** - The Next Hop Table sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Rendezvous Points*

Displays the list of PIM information for candidate Rendezvous Points for IP multicast groups.

**Note** - The Rendezvous Points sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Candidate - RP*

Displays the list of IP multicast groups for which the local router is to advertise itself as a Candidate-RP

#### *Component*

Displays the list of objects specific to a PIM.

**Note** - The Component sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

*Candidate - BSR*

Displays the Candidate - Boot Strap Router configuration.

*Register Checksum*

Displays the Register Checksum including Data RP List settings.

*Static RP*

Displays the Static RP settings configured in the router.

**Note** - The current firmware version does not allow the RP Address parameter to be configured.

**Note** - The current firmware version returns an incorrect value for the RP Address and Row Status parameters whenever the Get MIB Value button is used.

*IPM*

*Basic Info*

Displays basic information about IP Multicast Routing Protocol.

*Interface Info*

Displays the list of multicast routing information specific to interfaces.

**Note** - The current firmware version returns 'noSuchName' for the following parameters:

- Rate Limit
- Received Multicast Octets
- Transmitted Multicast Octets
- Received Multicast Octets (HC)
- Transmitted Multicast Octets (HC).

**Note** - The current firmware version does not allow the Datagram TTL Threshold parameter to be configured.

*Scope Name Info*

Displays the list of multicast scope names.

**Note** - The Scope Name Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

*Scope Boundary Info*

Displays a list of the device's scoped multicast address boundaries.

**Note** - The Scope Boundary Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Route Table*

Displays the table containing multicast routing information for IP datagrams sent by particular sources to the IP multicast groups known to this device.

**Note** - The Route Table sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Next Hop Table*

Displays the table containing information on the next hops on outgoing interfaces for routing IP multicast datagrams.

**Note** - The Next Hop Table sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### *BOOTP Relay*

#### *Basic Info*

Displays basic information about the BOOTP relay function.

**Note** - Valid MIB set values for the Hop Count parameter are in the range [0-16] inclusive.

#### *Interface Info*

Displays information about a specific IP address as a destination to forward BOOTP packets to.

### *DNS Relay*

#### *Basic Info*

Displays basic information about the DNS relay function.

#### *Interface Info*

Displays the current DNS relay static.

### *MD5 Key Config*

Displays the current MD5 key table.

**Note** - To configure the MD5 Key parameter, the Row Status parameter must first be set to 'create and go'. Once the MD5 Key parameter has been configured, the Row Status parameter is automatically set to 'active'.



**Note** - If the MD5 Key parameter is set to a new value whose length is shorter than the length of the previously active MD5 Key, an extra character, as well as the remaining characters of the previous key, is appended to the new value.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database, discard/aging time information, spanning tree status and 802.1p.

### *Forwarding Database*

**Note** - A user account assigned a MIB view that excludes a row or multiple rows from the Forwarding Database table will not be allowed to view the table at all.

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

### *Spanning Tree Info*

#### *STP Global Settings*

Displays spanning tree parameters such as status and version.

#### *MSTP Instance Info*

Displays information about the Multiple Spanning Tree Protocol instance.

**Note** - The current firmware version does not allow the following parameters to be configured:

- VLAN Range List 1 - 64
- VLAN Range List 65 - 128
- VLAN Range List 129 - 192
- VLAN Range List 193 - 256
- VLAN Range List 257 - 320
- VLAN Range List 321 - 384
- VLAN Range List 385 - 448
- VLAN Range List 449 - 512
- Row Status

### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

### *High Capacity Ports*

Displays statistics about frames received/transmitted on high capacity ports.

**Note** - The current firmware version returns 'noSuchName' for the Received Frames, Transmitted Frames and Discarded Frames parameters.

### *Overflow Counters*

Displays statistics for the high capacity interfaces of a transparent bridge.

### *802.1p*

#### *Config*

Displays information on 802.1p such as Device Capabilities, GMRP Status and if Traffic classes are enabled.

**Note** - The current firmware version returns 'noSuchName' for the GMRP Status parameter.

#### *Port Capabilities*

Displays port capabilities associated with this bridge.

#### *GMRP*

Displays the list of GARP Multicast Registration Protocol control and status information for every bridge port.

**Note** - The current firmware version returns 'noSuchName' for the GMRP Status, Failed Registrations and Last PDU Origin parameters.

#### *GARP*

Displays Generic Attribute Registration Protocol control for a bridge port.

**Note** - The current firmware version does not allow the Join Time, Leave Time and Leave All Time to be configured.

## **IGMP Menu**

From the IGMP menu, you can view and edit IGMP information such as IGMP queries and reports sent between devices, VLAN's IGMP functions and interfaces on which IGMP is enabled.

### *IGMP Config*

Displays configurations of the Internet Group Management Protocol function.

**Note** - IGMP Config parameters cannot be configured when the Row Status parameter under IGMP -> MGMD Management -> Router Interface Info is set to “active”.

#### *VLAN Info*

Displays VLAN parameters such as the maximum supported VLANs and maximum group number per VLAN.

#### *Query Info*

Displays IGMP parameters such as the current IGMP query packets which is captured by this device, as well as the IGMP query packets sent by the device.

#### *Group Info*

Displays current information which is captured by the device provided that IGMP Snooping and IGMP Status of associated VLAN entry are all enabled.

#### *MGMD Management*

##### *Router Interface Info*

Displays the list of interfaces on which IGMP is enabled.

**Note** - The current firmware version accepts values in the range [0-255] inclusive for the Query Maximum Response Time and Last Member Query Interval parameters. However, if the value entered is not a multiple of 10, the firmware will convert it to the largest multiple of 10 less than the entered value. Values less than 10 but greater than 0 will be converted to 10.

##### *Router Cache Info*

Displays the list of IP multicast groups for which there are members on a particular interface.

**Note** - The Router Cache Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of ‘noSuchName’.

## VRRP Menu

From the VRRP menu, you can view and edit VRRP-related information such as the current VRRP version, VRRP status, VRRP statistics and IP addresses associated with VRRP.

#### *Basic Info*

Displays basic information such as the particular version of the Virtual Routing Redundancy Protocol supported by the device and the whether the VRRP-enabled router will generate SNMP traps.

**Note** - The current firmware version returns 'noSuchName' for the Trap Packet IP Address and Trap Authentication Error Type parameters.

#### *Operations*

Displays the table containing statistics information about a given virtual router.

**Note** - The current firmware version does not allow the Primary IP Address and Authentication Key parameters to be configured.

**Note** - The current firmware version does not allow the Priority parameter to be configured when the Virtual IP Address (VRRP -> Associated IP Addresses) and the Master IP Address (VRRP -> Operations) values are the same.

#### *Associated IP Addresses*

Displays the table of addresses associated with this virtual router.

#### *Statistics*

Displays the total number of VRRP packets received with an invalid VRRP checksum value, with an unknown or unsupported version number and with an invalid VRID for this virtual router.

## Security Menu

From the Security menu, you can view and edit different security and authentication protocols SSL, SSH, AAC, ACL, port-based and MAC-based authentication.

#### *Authentication Info*

Displays authentication information such as the Port Access Control status, authentication protocol used to authenticate user and authentication mode of the device.

#### *Port-based Authentication*

##### *PAE Port Info*

Displays the system level information for each port supported by the Port Access Entity.

**Note** - The current firmware version returns 'noSuchName' for the Port Number parameter.

**Note** - The current firmware version does not allow the Initialize and Re-authenticate parameters to be configured.

##### *Authenticator PAE Info*

Displays configuration objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for the Port Number parameter.

**Note** - The current firmware version does not allow the Key Transmission Status parameter to be configured.

#### *Authenticator PAE Statistics*

Displays statistics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for the Port Number parameter.

#### *Authenticator PAE Diagnostics*

Displays diagnostics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for the Port Number parameter.

#### *Authenticator PAE Session Statistics*

Displays session statistics objects for the Authenticator PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for the Port Number, Received Octets and Transmitted Octets parameters.

#### *Supplicant PAE Info*

Displays configuration objects for the Supplicant PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for all parameters under this sub-menu option.

#### *Supplicant PAE Statistics*

Displays statistics objects for the Supplicant PAE associated with each port.

**Note** - The current firmware version returns 'noSuchName' for all parameters under this sub-menu option.

### *MAC-based Authentication*

#### *Authenticator PAE Info*

Displays status objects for the Authenticator PAE associated with each virtual port (MAC).

**Note** - The Authenticator PAE Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Authenticator PAE Statistics*

Displays statistics objects for the Authenticator PAE associated with each MAC address.

**Note** - The Authenticator PAE Statistics sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Authenticator PAE Diagnostics*

Displays diagnostics objects for the Authenticator PAE associated with each MAC address.

**Note** - The Authenticator PAE Diagnostics sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Authenticator PAE Session Statistics*

Displays session statistics objects for the Authenticator PAE associated with each MAC address.

**Note** - The Authenticator PAE Session Statistics sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

### **RADIUS**

#### *RADIUS Server Info*

Displays the IP address, UDP port number for authentication and accounting request, and current status of the RADIUS server.

#### *Authentication Client Info*

Displays the number of RADIUS Access-Response packets received from unknown addresses and the identifier of the RADIUS authentication client.

#### *Authentication Server Info*

Displays the list of RADIUS authentication servers with which the client shares a secret.

#### *Accounting Client Info*

Displays the number of RADIUS Access-Response packets received from unknown addresses and the identifier of the RADIUS accounting client.

#### *Accounting Server Info*

Displays the list of RADIUS accounting servers with which the client shares a secret.

### **Secure Shell**

#### *SSH Config*

Displays basic information and control for Secure Shell management.

#### *Encryption Algorithm*

Displays the status of various encryption algorithm such as TDES, Blowfish, AES128, AES192, AES256, Arcfour, CAST128, Twofish128, Twofish192, and Twofish256.

#### *Authentication Mode*

Displays the status of various authentication method such as password authentication, Public Key authentication, and Host Key authentication.

#### *Data Integrity Algorithm*

Displays the status of the HMAC-SHA1 and HMAC-MD5 data integrity algorithms.

#### *Public Key Algorithm*

Displays the status of the RSA and DSA public key algorithms.

### *Secure Socket Layer*

#### *SSL Config*

Displays the status of SSL support and cipher suites, and the cache timeout value for the SSL module to refresh the session resume data kept in the database.

**Note** - The current firmware version does not allow the Cipher Suites parameter to be configured.

#### *Certificate File*

Displays the parameters used in downloading certificate or key files.

### *Access Authentication Control*

#### *Basic Info*

Displays the maximum number of Login method lists, Enable method lists, Server Groups and AAC servers supported by the system.

#### *Login Method Lists*

Displays information about Login authentication method lists.

**Note** - For user-defined lists, the only valid MIB Set value for the Row Status parameter is 'destroy'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Enable Method Lists*

Displays information about Enable authentication method lists.

**Note** - For user-defined lists, the only valid MIB Set value for the Row Status parameter is 'destroy'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Application Authentication Settings*

Displays various applications that can be used to execute authentication such as console, telnet, HTTP and SSH.

#### *Server Group Info*

Displays information about server groups.

**Note** - For user-defined server groups, the only valid MIB Set value for the Row Status parameter is 'destroy'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Server Info*

Displays information about servers.

**Note** - The current firmware version does not allow the Authentication Key parameter to be configured.

**Note** - The only valid MIB Set value for the Row Status parameter is 'destroy'. Attempting to set this parameter to any other value will result in the error message: "The error occurred with 'Set' operation. Error: bad value."

#### *Access Control List*

##### *Ethernet Info*

Displays ACL mask of Ethernet information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Filtered Ports
- Source MAC Address Mask
- Destination MAC Address Mask

##### *Ethernet Rule*

Displays ACL rule of Ethernet information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- VLAN
- Source MAC Address
- Destination MAC Address
- Ethernet Type

##### *IP Info*

Displays ACL mask of IP information.

**Note** - The current firmware version does not allow the following parameters to be configured:



- Filtered Ports
- TCP/UDP Source Port Mask
- TCP/UDP Destination Port Mask
- Protocol ID Mask

#### *IP Rule*

Displays ACL rule of IP information.

**Note** - The current firmware version does not allow the VLAN and User Mask parameters to be configured.

#### *Packet Content Info*

Displays ACL mask of user-defined information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Filtered Ports
- Offset 0 to 15
- Offset 16 to 31
- Offset 32 to 47
- Offset 48 to 63
- Offset 64 to 79

#### *Packet Content Rule*

Displays ACL rule of user-defined information.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Offset 0 to 15
- Offset 16 to 31
- Offset 32 to 47
- Offset 48 to 63
- Offset 64 to 79

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

#### *Statistics*

Displays traffic statistics in the network segment attached to each port.

#### *History Control Table*

Displays the RMON History table.

#### *Alarm Table*

Displays the RMON Alarm table.

#### *Event Table*

Displays the RMON Event table.

#### *Event Log*

Displays the RMON Event log.

#### *Probe*

##### *Probe Config*

Displays RMON probe information.

**Note** - The current firmware version returns 'noSuchName' for the Date and Time parameter.

##### *Network Interface Config*

Displays configuration parameters for a particular network interface on this device.

**Note** - Valid MIB Set values for the Row Status parameter are 'active' and 'not in service'. Attempting to set this parameter to any other value will result in error message: "The error occurred with 'Set' operation. Error: bad value".

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The current firmware version returns '??? (117)' for the Port Type parameter.

**Note** - The current firmware version returns the value 0.0 for the Specific Media MIB parameter which Device Manager interprets as a null value.

#### *Error Statistics*

Displays error statistics for the port.

**Note** - The current firmware version returns the value 0.0 for the Ethernet Chip Set parameter which Device Manager interprets as a null value.

#### *Detail Info*

##### *Port Info*

Displays detailed port information such as port type, port link state and port speed and duplex status.

##### *Port Config*

Displays configuration parameters for a particular port such as administration status and port speed and mode.

**Note** - The current firmware version does not allow the Port Speed and Mode parameter to be set to 'other'.

**Note** - The Port Flow Control parameter is not applicable to the 10Gbps ports on the AT-XP9700 expansion module.

#### *Spanning Tree Info*

##### *STP*

Displays information maintained by every port about the Spanning Tree Protocol.

**Note** - The current firmware version does not allow the Administrative Hello Time and Migration parameters to be configured.

##### *MSTP*

Displays information maintained by every port about the Multiple Spanning Tree Protocol.

#### *Enable*

Enables the port.

#### *Disable*

Disables the port.

#### *Port Security*

##### *Config*

Displays port security configuration parameters for every port present in the switch.

##### *Deletion*

Displays configuration parameters to allow port security deletion.

**Note** - The current firmware version does not allow the MAC Address and Port Security Deletion Activity parameters to be configured.

#### *Traffic Management*

### *Config*

Displays traffic control configuration parameters for every port present in the switch.

### *Segmentation*

Displays the information that specifies the port with its traffic forward list.

**Note** - The current firmware version does not allow the Forward Ports parameter to be configured.

### *Port Mirroring*

Displays port mirroring parameters and allows configuration of port mirroring status, destination port, Ingress source port and Egress source port.

**Note** - The current firmware version does not allow the Mirroring Source Port (Ingress) and Mirroring Source Port (Egress) parameters to be configured.

### *QoS*

#### *Basic Config*

Displays QoS parameters and allows enabling of Hol prevention status and setting of scheduling mechanism.

#### *Scheduling Mechanism*

Displays scheduling mechanism parameters.

#### *802.1p Default Priority*

Displays the 802.1p default priority table..

#### *802.1p User Priority*

Displays the 802.1p user priority class table.

#### *User Priority Regeneration*

Displays the regenerated user priorities table.

#### *Traffic Class*

Displays the traffic class table.

#### *Outbound Access Priority*

Displays the outbound access priority table.

#### *Bandwidth Control*

Displays the bandwidth control table.

**Note** - Valid MIB Set values for the Receive Rate and Transmit Rate parameters are in the range [1-10000] inclusive. However, specifying a value greater than 999 will automatically set these parameters to 999.

## Port Trunking

### Basic Info

Displays basic information about port trunking.

### Trunk Config

Displays port trunking parameters and allows configuration of the master port, member ports, trunk type and trunk status.

**Note** - The current firmware version does not allow the Member Ports and Trunk Type parameters to be configured.

### Aggregator Info

Displays information about every Aggregator that is associated with this system.

**Note** - The current firmware version returns 'noSuchName' for the Aggregate Index parameter.

**Note** - The current firmware version does not allow the Actor System Priority and Collector Maximum Delay parameters to be configured.

### Aggregator Port List

Displays Link Aggregation Control information for every Aggregation Port associated with this device.

**Note** - The current firmware version returns 'noSuchName' for the Port Number parameter.

**Note** - The current firmware version does not allow the following parameters to be configured:

- Actor System Priority
- Actor Operational Key
- Partner Administrative System Priority
- Partner Administrative System ID
- Actor Port Priority
- Partner Administrative Port
- Partner Administrative Port Priority

**Note** - Setting the Actor Administrative Status parameter and the Partner Administrative Status parameter to 'lACPActivity' or 'lACPTimeout' will result in the same hex value of '6C'. On the other hand, setting them to 'distributing' or 'defaulted' will result in the same hex value of '64'.

### LACP Statistics

Displays Link Aggregation information for every port that is associated with this device.

**Note** - The current firmware version returns 'noSuchName' for all parameters under this sub-menu option.

#### *LACP Debug*

Displays Link Aggregation debug information for every port that is associated with this device.

**Note** - The current firmware version returns 'noSuchName' for all parameters under this sub-menu option.

## Expansion Module Notes

- The current firmware version does not allow Device Manager to detect the presence or absence of an XFP transceiver in any of the expansion module's XFP slots. As a result, the XFP slots on the device image will always show XFP images regardless of whether or not XFP transceivers are physically present in the slots.

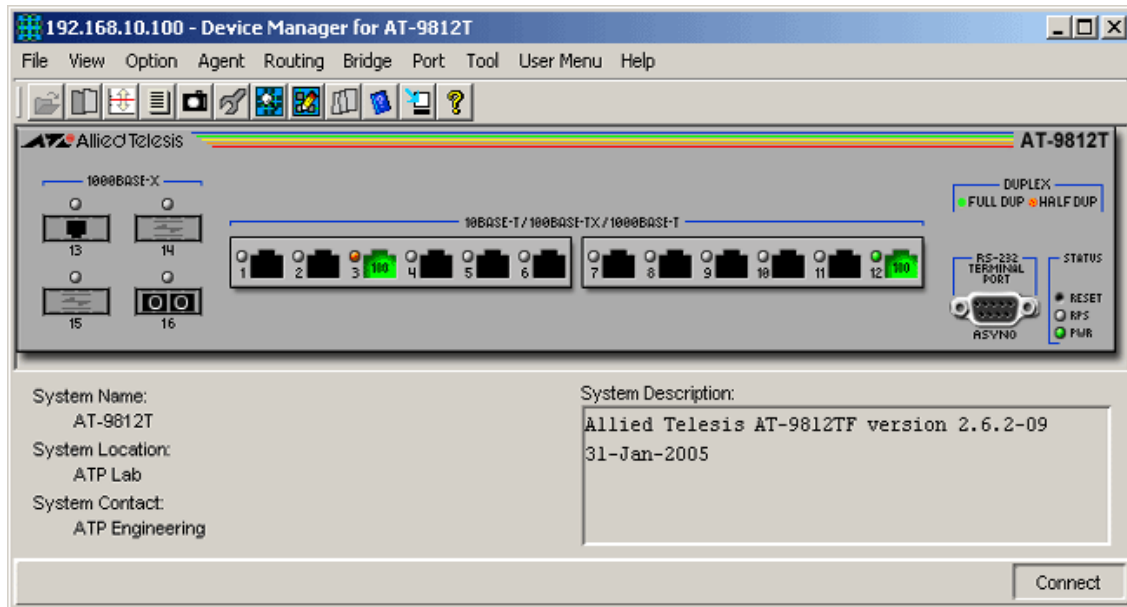
## AT-9800 Series

This section describes Device Manager menus and operations specific to the AT-9800 Series of Multi-Layer Gigabit Switches.

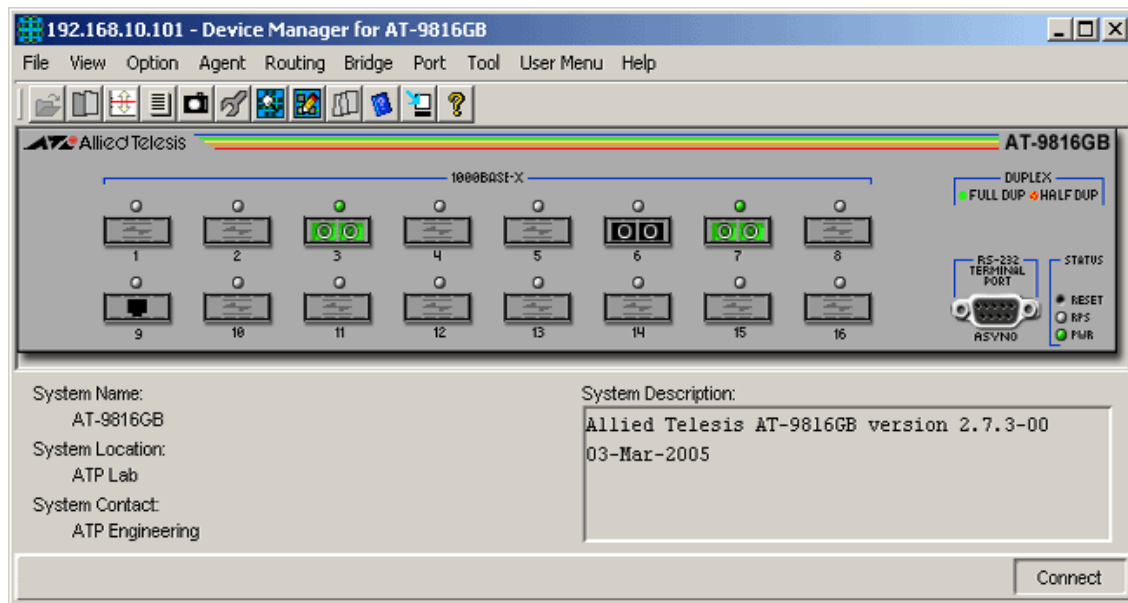
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Port Menu](#)

## Main Window



AT-9812T



AT-9816GB

Device Manager LEDs for AT-9800 Series		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.
	Red	Main power supply is either off or has failed.
RPS	Green	The switch is receiving power from the redundant power supply.
	Red	RPS has failed.
	Gray	RPS is not installed or RPS monitoring is disabled.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - AT-9812T, AT-9812TF and AT-9812T-DC share the same device image.

**Note** - AT-9816GB, AT-9816GF and AT-9816GB-DC share the same device image.

**Note** - To turn RPS monitoring on or off on the switch, enter the command SET SYSTEM RPSMONITOR={ON|OFF} from the command line interface. To see whether RPS monitoring is on, use the command SHOW SYSTEM. To turn on RPS monitoring using SNMP, set the fanAndPsRpsMonitoringStatus variable to on.

**Note** - The current firmware version does not allow Device Manager to support the RPS LED on the DC models.



## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Power Supply Info*

Displays information about the power supply, redundant power supply and power supply monitoring.

### *Firmware Info*

Displays a list of software releases installed on the switch.

### *File List*

Displays a list of the files in the switch's file system.

### *Config File Name*

Displays the file name of the start-up configuration file.

### *Chassis Temperature Info*

Displays the actual temperature of the switch and the temperature status.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

### *Reset Cold*

Resets the hardware and executes the default configuration file.

### *Reset Warm*

Performs a warm start of the software modules and executes the default configuration file.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

#### *ARP Table*

Displays the mapping of IP addresses to MAC addresses (the ARP cache), on the switch.

#### *Address Table*

Displays the list of IP interfaces and their IP addresses on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

#### *ICMP Statistics*

Displays statistics about ICMP, including the number of ICMP datagrams received.

## **Bridge Menu**

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

#### *Forwarding Database*

##### *Standard View*

Displays the Forwarding Database table as returned by the device.

##### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

*Utilization*

Displays the port's utilization information.

*Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status.

*Error Statistics*

Displays error statistics.

*Spanning Tree Info*

Displays the port's spanning tree parameters.

*MAU Info*

Displays interface-related MAU information for the port.

*MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

*Enable*

Enables the port.

*Disable*

Disables the port.

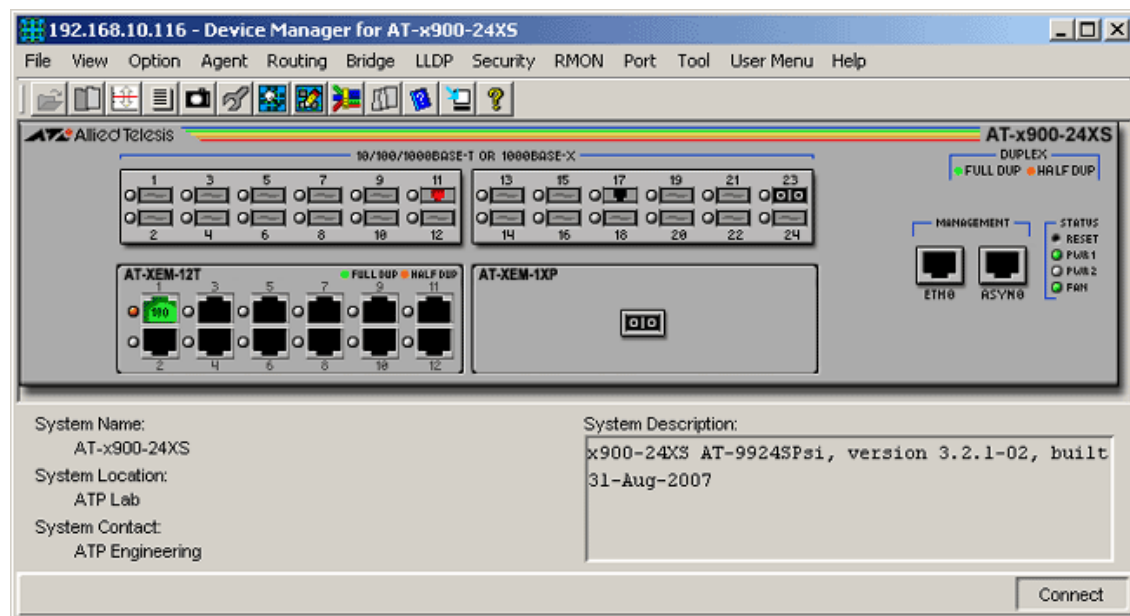
## AT-x900-24X Series

This section describes Device Manager menus and operations specific to the AT-x900-24X Series Advanced Layer 3 Gigabit Switches.

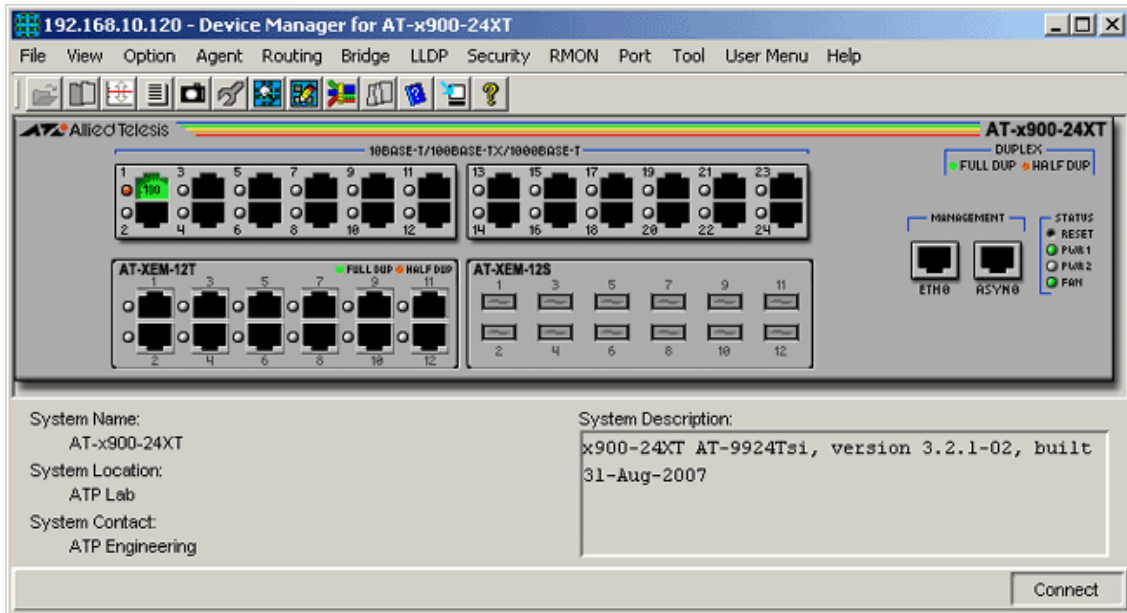
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [LLDP Menu](#)
- [Security Menu](#)
- [RMON Menu](#)
- [Port Menu](#)

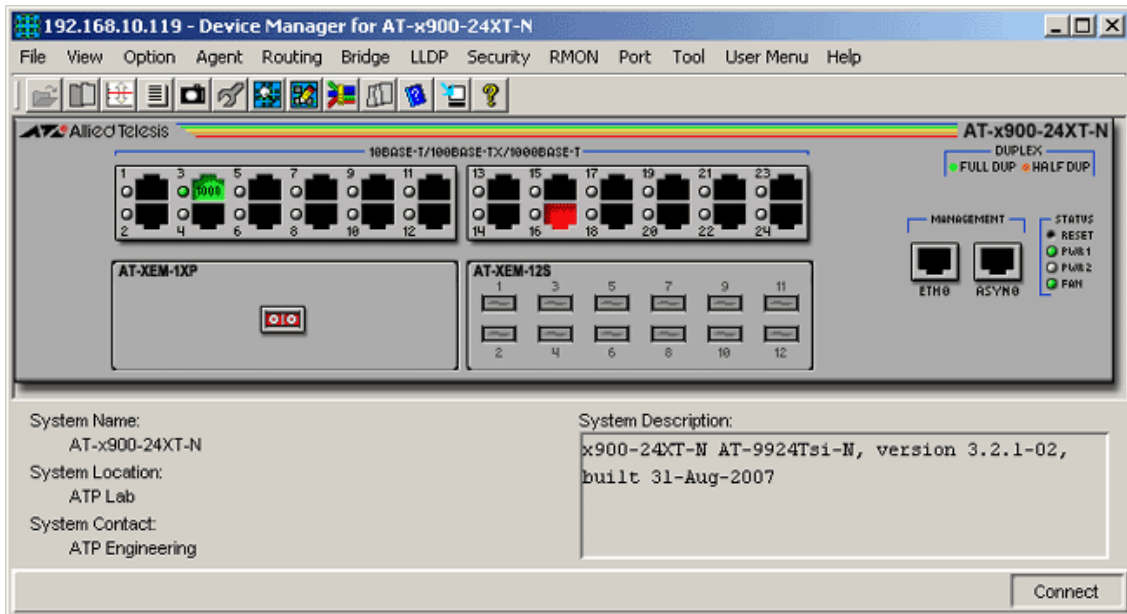
## Main Window



AT-x900-24XS



AT-x900-24XT



AT-x900-24XT-N

Device Manager LEDs for the AT-x900-24X Series		
LED	State	Description
PWR 1 and PWR 2	Green	There is a power supply unit (PSU) in the PSU bay.
	Gray	There is no power supply unit (PSU) in the PSU bay.
FAN	Green	There is a functioning Fan Only Module (FOM) in the PSU bay.
	Gray	There is no functioning Fan Only Module (FOM) in the PSU bay.
DUPLEX	Green	The port is operating at full duplex.
	Orange	The port is operating at half duplex.

**Note** - Please refer to [Uplink Modules](#) for the operations and behavior of the Expansion Modules installed on these devices.

**Note** - The PWR LEDs do not reflect the operating state of the power supplies installed. The PWR LEDs simply indicate the presence or absence of power supplies in the rear of the chassis.

**Note** - The FAN LED does not reflect the operating state of the FAN module installed. The FAN LED simply indicates the presence or absence of a FAN module in the rear of the chassis.

**Note** - If only one expansion module is installed and it is installed on the right bay of the device, the expansion module image will appear on the left bay of the device image.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### System Info

#### Standard

Displays basic system information, including system name, location, contact and description.

### Enterprise

#### CPU Utilization

Displays information about the CPU utilization over different periods of time.

#### Fan Speeds

Displays information about fans installed in the device that have their fan speeds monitored by environment monitoring hardware.

#### *Voltage Rails*

Displays information about voltage rails in the device that are monitored by environment monitoring hardware.

#### *Temperature Sensors*

Displays information about the temperature monitored by the temperature sensors in the device.

#### *Power Supply Bays*

Displays information about the Power Supply Bays in the system and info on any devices that are present.

#### *Power Supply Sensors*

Displays information about device installed in the Power Supply Bay.

### *Host Resources*

#### *General System Info*

Displays general information about the host resources.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Time and Date parameter will display a sequence of bytes in hexadecimal format instead of the actual date and time of day.

**Note** - The Time and Date and Initial Load Parameter parameters are implemented as 'read-only'.

#### *Logical Storage Areas*

Displays resource information about the storage devices.

**Note** - The Storage Size parameter is implemented as 'read-only'.

#### *Devices*

Displays resource information about the devices installed in the host.

**Note** - The current firmware version returns an incorrect value for the Device ID parameter.

#### *Processors*

Displays basic information about the processor installed in the host.

**Note** - The current firmware version returns the value 'NULL' for the Firmware Product ID parameter.

### *Hardware Info*

#### *Total Boards*

Displays the number of boards that are currently installed.

#### *Board Info*

Displays basic information on the boards that are currently installed.

**Note** - The current firmware version returns the value "boards(272)" for the Board ID parameter of the AT-x900-24XS.

#### *Slot Info*

Displays information on the Power Supply Bay slots.

#### *Physical Interfaces*

Displays information about the interfaces found in the device.

#### *Firmware Info*

##### *Install Configurations*

Displays information about the Software release currently loaded in the device.

**Note** - The current firmware version returns a 'noSuchName' value for the Release File Exists? and Patch File Exists? parameters.

##### *Configuration File*

Displays the Configuration file name.

**Note** - The current firmware version accepts inputs from 4 to 38 characters for the Startup Config and Save Running Config parameters.

##### *Release Licenses*

Displays a list of software releases installed on the switch.

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

#### *File System*

##### *Total Files*

Displays the total number of files stored in the device.

##### *File List*

Displays a list of the files in the switch's file system.

**Note** - The current firmware version does not allow the File Status parameter to be configured.

#### *Loader*

##### *Load Status*

Displays the status of the device loader.

**Note** - The current firmware version does not allow the Load Status parameter to be set to 'actionupload'.



### *Load Parameters*

Displays information about the files to be loaded.

### *DHCP Ranges*

Displays information about the DHCP module.

### *Ping Polling*

#### *Ping Status*

Displays the status of the Ping polling.

**Note** - Since the Address parameter cannot be configured, the Ping Status parameter cannot also be configured.

#### *Ping Parameters*

Displays basic information of the Ping module.

**Note** - The current firmware version accepts values in the range [1-4294967595] inclusive for the Number of Packets and Time Interval parameters.

**Note** - Valid MIB Set values for the Timeout parameter should range from 1 to 65535. However, the current firmware version allows the user to enter values in the range [-65535 to -1, 1 to 65535] inclusive. Attempting to enter values greater than 65535 will cause the new value to be converted to its equivalent wrap-around value; i.e., 65536 will become 0, 65537 will become 1, and so on.

**Note** - Valid MIB Set values for the Number of Packets parameter are in the range [1-4294967295] inclusive. However, attempting to enter values greater than 2147483647 will cause the new value to be converted to its equivalent wrap-around value; i.e., 2147483648 will become -2147483648, 2147483649 will become -2147483647, and so on.

**Note** - Device Manager does not handle objects of type OCTET STRING correctly. As a result, the Address parameter will not be configurable and will display a sequence of bytes in hexadecimal format instead of the actual destination of ping packets.

#### *Ping Statistics*

Displays statistics of the Ping polling.

### *Reset Cold*

Initiates a cold restart on the switch.

### *Reset Warm*

Initiates a warm restart on the switch.

### *Reset Info*

Displays information about the restart.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB browser*

Opens your web browser and connects to the switch's HTTP server.

**Note** - The web browser can only contact the device if the device has a valid resource file loaded and set, and the HTTP server and GUI on the device are enabled.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

### *IP*

#### *ARP Table*

Displays the ARP cache on the switch.

**Note** - The Physical Address and Mapping Type parameters are implemented as 'read-only'.

#### *Address Table*

Displays the list of IP interfaces on the switch.

#### *Route Number*

Displays the IP routing number on the switch.

#### *Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns the value 'NULL' for the Routing Protocol MIB parameter.

**Note** - The following parameters are implemented as 'read-only':

- Destination Port Number
- Routing Type
- Next Hop AS Number
- Destination Metric 1
- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Destination Metric 5
- Row Status

### *IP Statistics*

Displays statistics about IP, such as the number of IP datagrams received.

## UDP

### *Listener Info*

Displays UDP listener information.

### *UDP Statistics*

Displays UDP statistics.

## TCP

### *Connection Info*

Displays TCP connection-specific information.

**Note** - The Connection Status parameter is implemented as 'read-only'.

### *TCP Statistics*

Displays TCP statistics.

## ICMP Statistics

Displays ICMP statistics.

## BGP

### *General Info*

Displays information about the BGP module.

### *Peer Info*

Displays BGP Peer information.

**Note** - Only the Administration Status parameter can be configured.

### *Path Attributes*

Displays the BGP path attributes.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as the forwarding database and the spanning tree status.

### *Forwarding Database*

#### *Standard View*

Displays the Forwarding Database table as returned by the device.

#### *Enhanced View*

Displays the Forwarding Database table on a per port basis. User can select a port or group of ports to view its corresponding Forwarding Database entries.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded for reasons such as lack of memory or the entry's aging timer.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

#### *Basic Bridge Info*

Displays basic bridge information.

#### *Bridge Port Info*

Displays bridge port information.

**Note** - The current firmware version returns the value 'NULL' for the Circuit parameter.

## LLDP Menu

From the LLDP menu, you can view and edit LLDP information such as the LLDP Port Configuration and Local System Data.

#### *LLDP Configuration*

##### *General Config*

Displays basic LLDP configuration.

##### *Port Config*

Displays LLDP configuration for each port.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the TLVs Tx Enable parameter will not be configurable and will display an 8-bit binary string instead of the actual TLV types allowed. However, the TLV types allowed can still be determined by looking at the bits that are on from left to right:

- Bit 0 : Port Description
- Bit 1 : System Name
- Bit 2 : System Description
- Bit 3 : System Capabilities

### *LLDP Statistics*

#### *Remote Tables*

Displays statistics for the LLDP remote tables.

#### *Port Tx*

Displays statistics for LLDP frames transmitted.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Port Rx*

Displays statistics for received LLDP frames.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

### *Local System Data*

#### *General Info*

Displays information about the local LLDP system.

#### *Port Info*

Displays information on the LLDP of local ports.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

#### *Management Addresses*

Displays management addresses of the local LLDP system.

**Note** - The current firmware version returns the value 'NULL' for the OID parameter.

## **Security Menu**

From the Security menu, you can view and edit port access entity information such as the PAE port information and the Supplicant PAE information.

### *Port-based Authentication*

#### *Authentication Status*

Displays the status of the port-based authentication.

#### *PAE Port Info*

##### *Standard*

Displays standard PAE port information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Capabilities parameter will display an 8-bit binary string instead of the actual PAE functionality supported. However, the PAE functionality supported can still be determined by looking at the bits that are on from right to left:

- Bit 0 : Authenticator
- Bit 1 : Supplicant

*Enterprise*

Displays enterprise PAE port information.

*Authenticator PAE Info*

*Standard*

Displays standard authenticator PAE information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

**Note** - The Administrative Controlled Directions and Key Transmission Status parameters are implemented as 'read-only'.

*Enterprise*

Displays enterprise authenticator PAE information.

*Authenticator PAE Statistics*

*Standard*

Displays standard statistics for the PAE Authenticator.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

*Enterprise*

Displays enterprise statistics for the PAE Authenticator.

*Supplicant PAE Info*

Displays supplicant PAE information.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

*Supplicant PAE Statistics*

Displays the statistics for the PAE supplicant.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Number parameter.

### *MAC-based Authentication*

#### *PAE Port Info*

Displays PAE port information.

**Note** - The Initialize parameter is implemented as 'read-only'.

#### *Authenticator PAE Info*

Displays authenticator PAE information.

## **RMON Menu**

From the RMON menu you can view and edit the RMON MIB.

### *Statistics*

Displays traffic statistics in the network segment attached to each port.

### *History Control Table*

Displays the RMON History table.

### *Alarm Table*

Displays the RMON Alarm table.

### *Event Table*

Displays the RMON Event table.

### *Event Log*

Displays the RMON Event log.

## **Port Menu**

From the Port menu, you can view and edit MIB information about the port.

### *Utilization*

Displays the port's utilization information.

### *Interface Info*

Displays port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port, and port status. This table also displays high-capacity port statistics including received and transmitted unicast/multicast/broadcast packets on the port, link up/down trap and port speed.

**Note** - The current firmware version returns a 'noSuchName' value for the Port Alias and Counter Discontinuity Time parameters.

**Note** - Valid MIB Set values for the Administration Status parameter are 'up' and 'down' only.

**Note** - The Promiscuous Mode parameter is implemented as 'read-only'.

*Detail Info*

*Duplex Mode*

Displays the duplex mode of the ports.

**Note** - Port numbering will vary depending on the number of expansion modules installed and the bay in which they are installed.

Left Bay	Right Bay	Numbering
None	None	1 to 25 (Port 25 is invalid and should be ignored.)
None	AT-XEM-IXP	1 to 26 (Port 25 will not show any valid data. Port 26 is invalid and should be ignored.)
None	AT-XEM-I2S AT-XEM-I2T	1 to 37 (Ports 25 to 36 are invalid and should be ignored. Port 37 will show data for port 1 of the module on the right bay.)
AT-XEM-IXP	None	1 to 26 (Port 25 will show data for the port on the left bay. Port 26 is invalid and should be ignored.)
AT-XEM-I2S AT-XEM-I2T	None	1 to 37 (Ports 25 to 36 will show data for ports on the left bay. Port 37 is invalid and should be ignored.)
AT-XEM-IXP	AT-XEM-IXP	1 to 27 (Port 25 will show data for the port on the left bay. Port 26 will not show any valid data. Port 27 is invalid and should be ignored.)
AT-XEM-IXP	AT-XEM-I2S AT-XEM-I2T	1 to 38 (Port 25 will show data for the port on the left bay. Ports 26 to 36 will not show any valid data. Ports 37 and 38 will show data for ports 1 and 2 of the module on the right bay.)
AT-XEM-I2S AT-XEM-I2T	AT-XEM-IXP	1 to 38 (Ports 25 to 36 will show data for ports on the left bay. Port 37 will show data for the port on the right bay. Port 38 is invalid and should be ignored.)



Left Bay	Right Bay	Numbering
AT-XEM-12S	AT-XEM-12S	1 to 49 (Ports 25 to 36 will show data for ports on the left bay. Ports 37 to 48 will show data for ports on the right bay. Port 49 is invalid and should be ignored.)
AT-XEM-12T	AT-XEM-12T	

#### *Bandwidth Limits*

Displays bandwidth limits of the switch ports.

**Note** - The current firmware version does not allow the Ingress Limit parameter to be configured.

#### *Error Statistics*

Displays error statistics.

**Note** - The following parameters are not applicable to the AT-x900-24X series and should be ignored:

- Ethernet Chip Set
- Symbol Errors
- Duplex Status
- Rate Control Ability
- Rate Control Status

#### *Spanning Tree Info*

Displays the port's spanning tree parameters.

**Note** - The Path Cost Contribution parameter is not applicable to the AT-x900-24X series and should be ignored.

**Note** - Valid MIB Set values for the Port Path Cost parameter is in the range [1-65535] inclusive.

#### *MAU Info*

Displays interface-related MAU information for the port.

**Note** - The MAU Type List Bits and HC False Carriers parameters are not applicable to the AT-x900-24X series and should be ignored.

**Note** - The MAU Status and Default MAU Type parameters are implemented as 'read-only'.

#### *MAU Negotiation Info*

Displays the MAU's auto-negotiation settings and its status.

**Note** - The following parameters are not applicable to the AT-x900-24X series and should be ignored:

- Capability Bits
- Advertised Bits
- Received Bits
- Remote Fault Advertised
- Remote Fault Received

**Note** - The Administration Status, Advertised Negotiation Capability and Restart parameters are implemented as 'read-only'.

### *Port Trunking*

#### *Aggregator Port L1st*

Displays Link Aggregation Control information for every Aggregation Port associated with this device.

**Note** - Valid MIB Set values for the Actor System Priority and Actor Port Priority parameters are in the range [0..65535] inclusive.

**Note** - The following parameters are implemented as 'read-only':

- Actor Operational Key
- Partner Administrative System Priority
- Partner Administrative System ID
- Partner Administrative Key
- Partner Administrative Port
- Partner Administrative Port Priority
- Actor Administrative Status
- Partner Administrative Status

### *LACP Statistics*

Displays Link Aggregation information for every port that is associated with this device.

### *LACP Debug*

Displays Link Aggregation debug information for every port that is associated with this device.

### *Enable*

Enables the port.

### *Disable*

Disables the port.

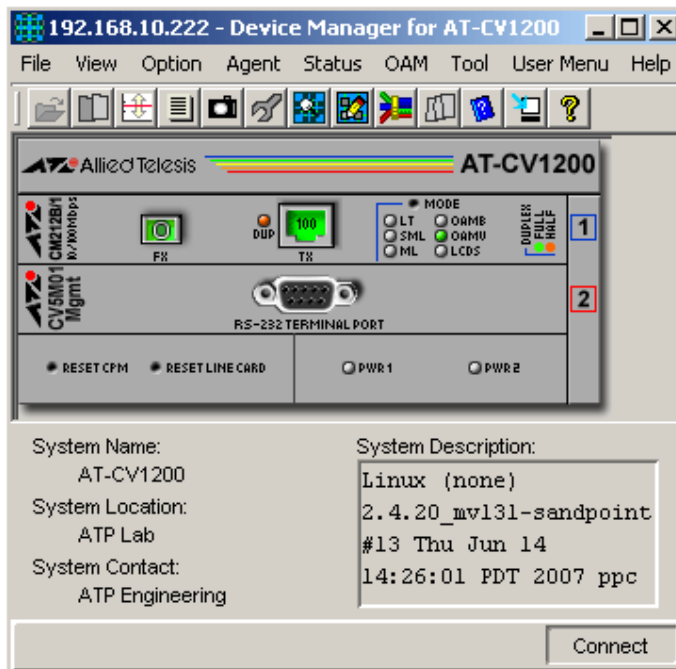
## Converteon Series

This section describes Device Manager menus and operations specific to the Converteon Series.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)
- [OAM Menu](#)

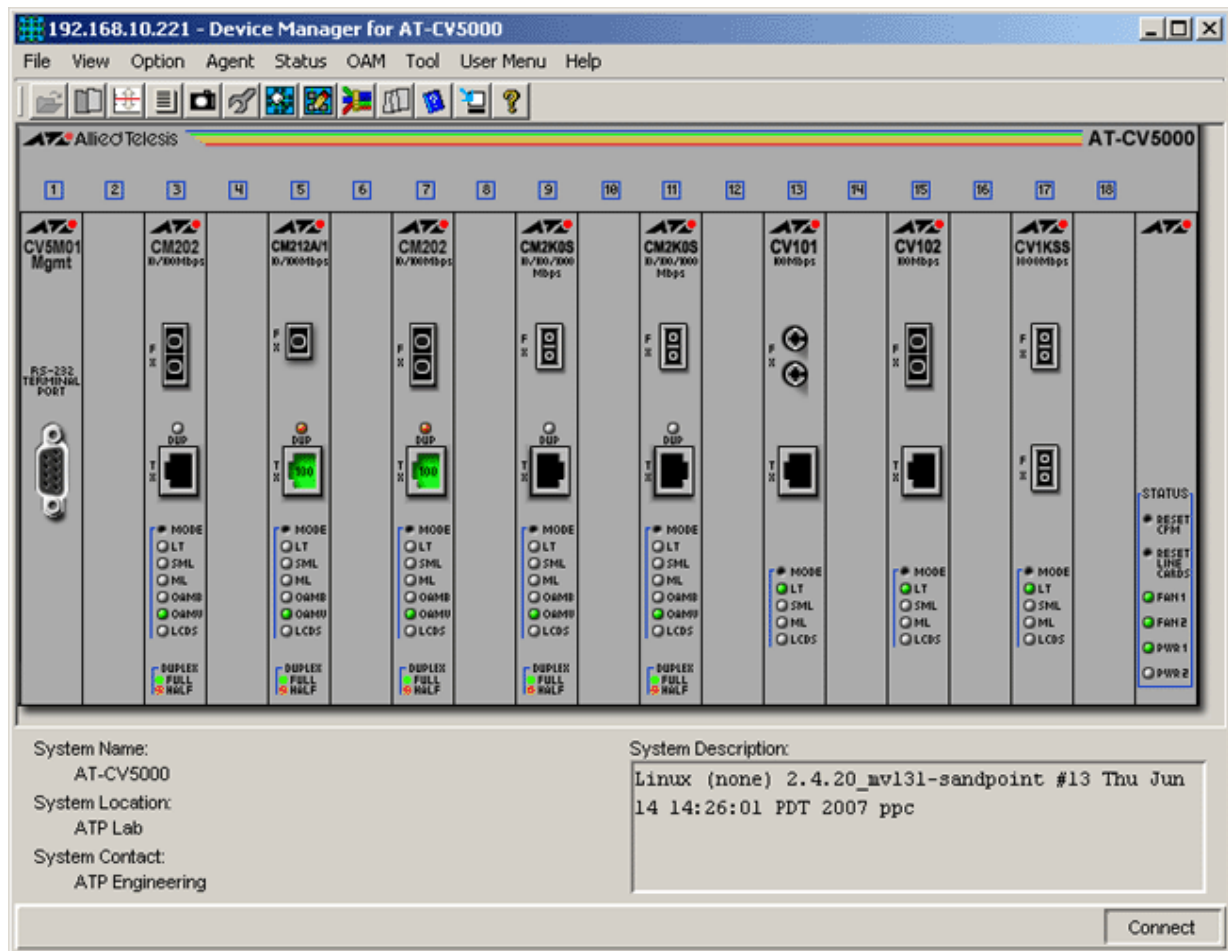
## Main Window



AT-CV1200

**Note** - Resetting the line card also resets the CPM.

**Note** - The current firmware version does not allow Device Manager to support the PWR LEDs.



## AT-CV5000

### Device Manager LEDs for Convertion Chassis

LED	State	Description
PWR1	Green	Power supply 1 is installed and power is on.
	Gray	Power supply 1 is not installed or it is installed but not powered on.
PWR2	Green	Power supply 2 is installed and power is on.
	Gray	Power supply 2 is not installed or it is installed but not powered on.
FAN1 (AT-CV5000)	Green	FAN 1 is installed and power is on.
	Gray	FAN 1 is not installed or it is installed but not powered on.
FAN2 (AT-CV5000)	Green	FAN 2 is installed and power is on.
	Gray	FAN 2 is not installed or it is installed but not powered on.

**Note** - Please refer to [Converteon Series Modules](#) for the operations and behavior of the modules installed on the chassis.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the chassis, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The System Contact and System Name parameters accept inputs of up to 39 characters only while the System Location parameter accepts up to 38. Input values that exceed these limits will be automatically truncated.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the TRAP Destination.

### *System Config*

Displays the device's systems variables.

**Note** - The Temperature Threshold parameter is not applicable to the AT-CVI200 and should be ignored.

### *Diagnostics*

Displays the device's software version, fan speed and fan temperature.

### *Reset*

Resets the device.

### *Telnet*

Starts a Telnet connection to the chassis.

## Status Menu

From the Status Menu, you can view information about [Converteon Series Modules](#) installed on the chassis.

### *Module Info*

Displays the basic module configuration information of the device. Options to view all/per module information are displayed.

**Note** - The Module Name parameter serves as the slot name. As such, any value specified for this parameter will be retained even if the line card occupying the slot is removed or replaced.

**Note** - Setting the Module Reset parameter of media converter line cards to 'yes' will not reset the line cards.

**Note** - The Module Reset parameter always displays the value '??? (0)'.

**Note** - The Module Operation Mode parameter of CPMs always displays '??? (0)'.

#### *Port Info*

Displays the port configurable parameters. Options to view all/per module information are displayed.

#### *Port Statistics*

Displays the basic port statistics configuration information. Options to view all/per module information are displayed.

#### *Remote Line Card Info*

Displays the Remote Line Card information of the AT-CMxx series line cards.

#### *Remote Module Info*

Displays the module info of the line cards.

**Note** - The current firmware version does not allow the Remote Local Module Name parameter to be configured.

#### *Remote Port Info*

Displays the remote port information of the line cards.

**Note** - The current firmware version does not allow the Remote Port Speed parameter to be configured.

**Note** - The current firmware version does not allow the Remote Ingress Rate Limit and Remote Egress Rate Limit parameters to be configured.

#### *Remote SFP Info*

Displays the remote SFP of the AT-CM2K0s and AT-CM70S line cards.

#### *Remote Port Statistics Info*

Displays the remote port statistics information of the line cards.

## OAM Menu

From the OAM Menu, you can view information about OAM capabilities of the device.

#### *OAM Config*

Displays information about the device's administration status, max OAM PDU size and configuration revision.

**Note** - Device Manager does not handle objects of type BITS correctly. As a result, the Functions Supported parameter will display binary data instead of human-readable data.

#### *OAM Statistics*

Displays information about the device's transmitted and received frames, received and transmitted loopback OAMPDU's and received and transmitted variable responses.

#### *OAM Peer Info*

Displays information about the device's peer mac address, peer mode and peer vendor info.

**Note** - The current firmware version does not return any value for the Peer Functions Supported and Peer Vendor OUI parameters.

#### *Loopback*

Displays information on how to control loopback state and the status of the loopback function.

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Converteon Series

## Converteon Series Modules

This section describes the modules supported by Device Manager. If modules are installed on the AT-CV5000 or AT-CV1200 chassis at the time Device Manager is called, they will be displayed in their corresponding slots on the chassis image.

- [AT-CM201](#)
- [AT-CM202](#)
- [AT-CM212x/1](#)
- [AT-CM2K0S](#)
- [AT-CM70S](#)
- [AT-CV10x](#)
- [AT-CV1KSS](#)

### AT-CM201



10/100TX to 100FX (ST, 2km, MM)

LED	State	Description
DUP	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
OAMB	Green	OAM Bypass is enabled
OAMV	Green	OAM Visible is enabled
LCDS	Green	Line Card Dip Switch is enabled

### AT-CM202



10/100TX to 100FX (SC, 2km, MM)



LED	State	Description
DUP	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
OAMB	Green	OAM Bypass is enabled
OAMV	Green	OAM Visible is enabled
LCDS	Green	Line Card Dip Switch is enabled

#### Port Info

**Note** - The value of the Port Mode parameter of a port with an established link automatically changes to 'auto' when the settings of the port to which it is connected are modified.

**Note** - The value of the Port Speed parameter of a port with an established link automatically changes to '10Mbps' when the value of its Port Mode parameter is changed from 'auto' to 'manual'.

### AT-CM212x/I



AT-CM212A/I: 10/100TX to 100FX (SC, 15km, SM)



AT-CM212B/I: 10/100TX to 100FX (SC, 15km, SM)

LED	State	Description
DUP	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
OAMB	Green	OAM Bypass is enabled

OAMV	Green	OAM Visible is enabled
LCDS	Green	Line Card Dip Switch is enabled

*Port Info*

**Note** - The value of the Port Mode parameter of a port with an established link automatically changes to 'auto' when the settings of the port to which it is connected are modified.

**Note** - The value of the Port Speed parameter of a port with an established link automatically changes to '10Mbps' when the value of its Port Mode parameter is changed from 'auto' to 'manual'.

### AT-CM2K0S



10/100/1000T to SFP

LED	State	Description
DUP	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
OAMB	Green	OAM Bypass is enabled
OAMV	Green	OAM Visible is enabled
LCDS	Green	Line Card Dip Switch is enabled

*Port Info*

**Note** - The value of the Port Mode parameter of a port with an established link automatically changes to 'auto' when the settings of the port to which it is connected are modified.

**Note** - The value of the Port Speed parameter of a port with an established link automatically changes to '10Mbps' when the value of its Port Mode parameter is changed from 'auto' to 'manual'.

**Note** - The Port Ingress Rate Limit and Port Egress Rate Limit parameters are not applicable to this line card and should be ignored.

## AT-CM70S



4 x T1/E1 + 10/100TX over SFP-based fiber.

LED	State	Description
DUP	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.
LT	Green	Link Test is enabled
OAMB	Green	OAM Bypass is enabled
OAMV	Green	OAM Visible is enabled
LCDS	Green	Line Card Dip Switch is enabled

**Note** - The current firmware version will not allow remote port connection on the RJ-45 port if the SFP port is set to disabled.

### Remote Line Card Info

**Note** - Even if the current firmware version allows the Remote Port Mode parameter to be configured to certain values, this parameter should not be configured for the 100Base-FX port.

### Port Info

**Note** - The value of the Port Speed and Port Duplex parameters of a port with an established link automatically changes to '10Mbps' and 'half duplex' when the value of its Port Mode parameter is changed from 'auto' to 'manual'.

**Note** - The current firmware version does not allow Device Manager to configure or display information on the TI/EI port of the AT-CM70S.

### Context Menu

**Note** - Selecting the Telnet option in the RS-232 Terminal Port Context Menu of the AT-CM70S will establish a Telnet session to the AT-CV5M01 management module.

### AT-CV10x



AT-CV101: 100TX to 100FX (ST)



AT-CV102: 100TX to 100FX (SC)

LED	State	Description
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
LCDS	Green	Line Card Dip Switch is enabled

### Module Info

**Note** -The current firmware version does not return the correct value for the Module MAC Address parameter.

**Note** - Configuring the Module Operation Mode parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred".

### Port Info

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

### AT-CVIKSS



1000X to 1000X SFP

LED	State	Description
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled
LCDS	Green	Line Card Dip Switch is enabled

**Note** - The current firmware version does not allow Device Manager to detect the presence or absence of an SFP module in any of the SFP slots. As a result, the SFP slots on the device image will always show SFP images regardless of whether or not SFP modules are physically present in the slots.

**Note** - The SFP port images will always be fiber optic ports even if the actual SFP modules inserted in the SFP slots have copper ports. This is because the current firmware version does not allow Device Manager to identify the port type of SFP modules inserted in the SFP slots.

#### Module Info

**Note** - The current firmware version does not return any value for the Module Revision parameter.

**Note** - The current firmware version does not return the correct value for the Module MAC Address parameter.

**Note** - Configuring the Module Operation Mode parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred".

#### Port Info

**Note** - The current firmware version does not allow any of the parameters under this table to be configured.

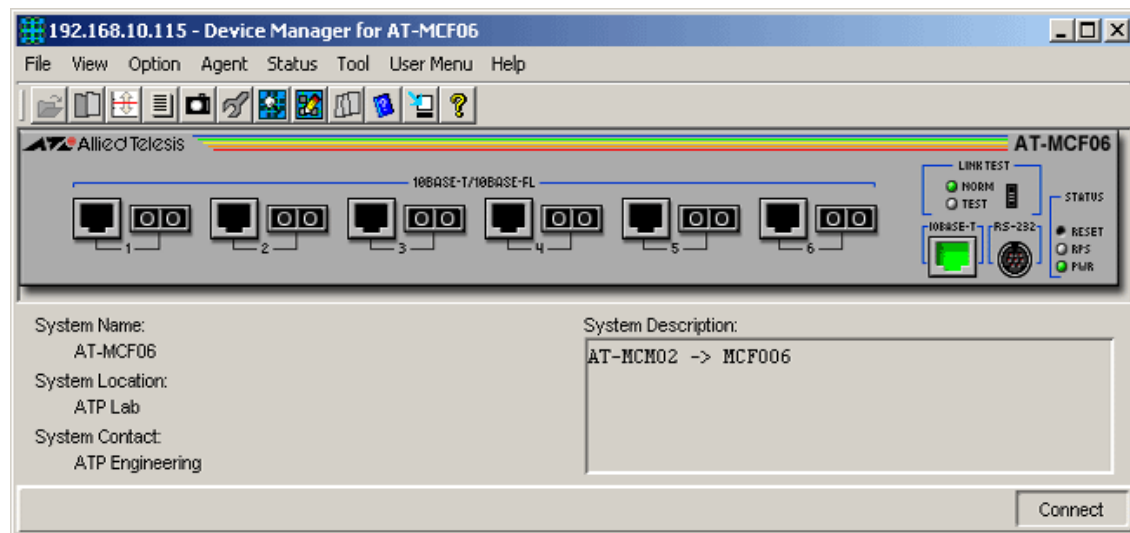
## AT-MCF06 Family

This section describes Device Manager menus and operations specific to the AT-MCF06 family of media converters.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

### Main Window



AT-MCF06 Family

Device Manager LEDs for AT-MCF06 Family

LED	State	Description
PWR	Green	The main power supply is installed and power is on.
	Gray	The main power supply is not installed or it is installed but not powered on.
RPS	Green	The backup power supply is installed and power is on.
	Gray	The backup power supply is not installed or it is installed but not powered on.

Device Manager LEDs for AT-MCF06 Family		
LED	State	Description
NORM	Green	The unit is not performing a link test.
	Gray	The unit is performing a link test.
TEST	Green	The unit is performing a link test.
	Gray	The unit is not performing a link test.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter more than the 50-character limit for the System Contact, System Name, and System Location parameters. However, doing so may result in any of the following :

- Anywhere from 1 to 12 characters may be truncated from the entered value.
- The firmware password may be overwritten if 255 characters are entered for the System Location parameter. Once this happens, a firmware reload will be required.
- The last 50 characters of the entered value may go into the System Contact parameter if 255 characters are entered for the System Name parameter.

**Note** - Device Manager allows the user to enter multiple-word values for the System Contact, System Name, and System Location parameters. NULL values are not allowed.

### *Management Interface Info*

Displays basic interface information for the management port including description, type, physical address, speed and operation status.

### *Temperature Info*

Displays the temperature of the device in celsius.

### *Power Info*

Displays the status of the main and backup power supplies.

*Link Test Channel 1 to 6*

Displays link test mode on channels 1 to 6.

*Telnet*

Starts a Telnet connection to the media converter.

## Status Menu

From the Status Menu, you can view all channels or per channel information.

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AT-MCF06 Family



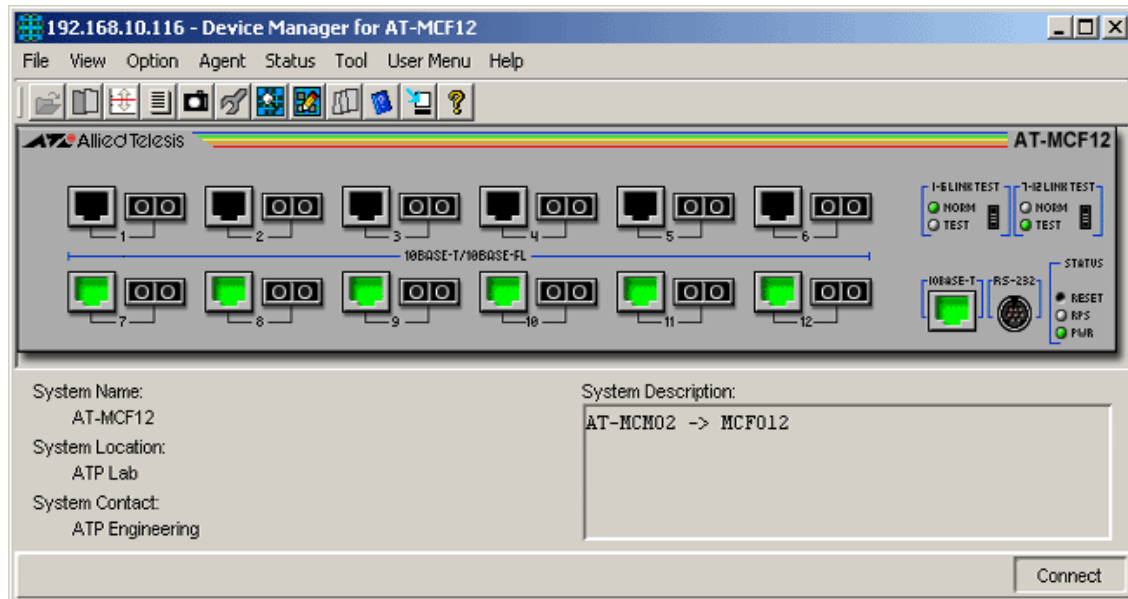
## AT-MCF12 Family

This section describes Device Manager menus and operations specific to the AT-MCF12 family of media converters.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

### Main Window



AT-MCF12 Family

Device Manager LEDs for AT-MCF12 Family

LED	State	Description
PWR	Green	The main power supply is installed and power is on.
	Gray	The main power supply is not installed or it is installed but not powered on.
RPS	Green	The backup power supply is installed and power is on.

Device Manager LEDs for AT-MCF12 Family		
LED	State	Description
	Gray	The backup power supply is not installed or it is installed but not powered on.
NORM	Green	The unit is not performing a link test.
	Gray	The unit is performing a link test.
TEST	Green	The unit is performing a link test.
	Gray	The unit is not performing a link test.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter more than the 50-character limit for the System Contact, System Name, and System Location parameters. However, doing so may result in any of the following :

- Anywhere from 1 to 12 characters may be truncated from the entered value.
- The firmware password may be overwritten if 255 characters are entered for the System Location parameter. Once this happens, a firmware reload will be required.
- The last 50 characters of the entered value may go into the System Contact parameter if 255 characters are entered for the System Name parameter.

**Note** - Device Manager allows the user to enter multiple-word values for the System Contact, System Name, and System Location parameters. NULL values are not allowed.

### Management Interface Info

Displays basic interface information for the management port including description, type, physical address, speed and operation status.

### Temperature Info

Displays the temperature of the device in celsius.

*Power Info*

Displays the status of the main and backup power supplies.

*Link Test Channel 1 to 6*

Displays link test mode on channels 1 to 6.

*Link Test Channel 7 to 12*

Displays link test mode on channels 7 to 12.

*Telnet*

Starts a Telnet connection to the media converter.

## Status Menu

From the Status Menu, you can view all channels or per channel information.

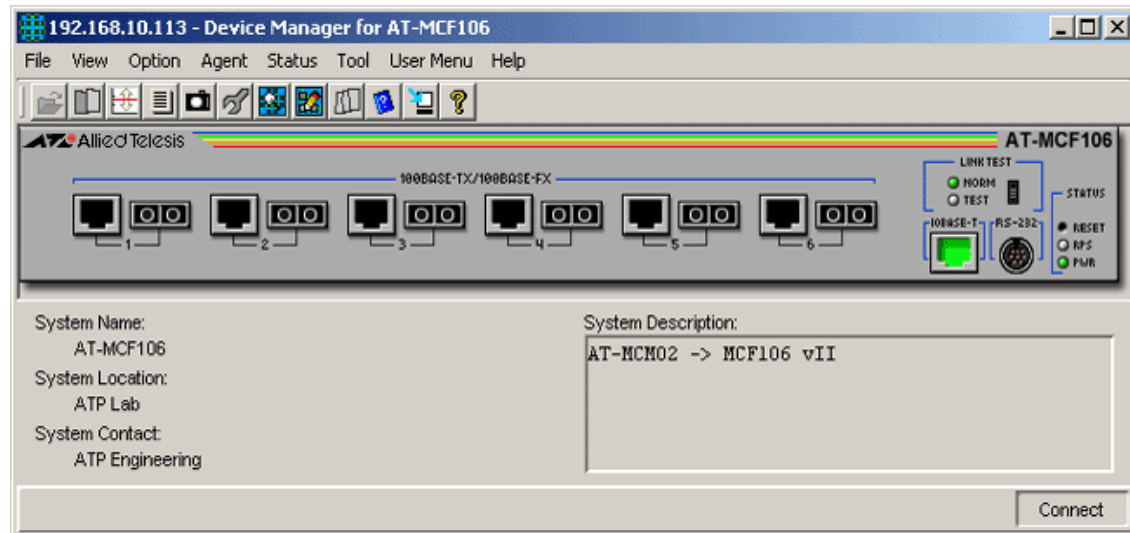
## AT-MCF106 Family

This section describes Device Manager menus and operations specific to the AT-MCF106 family of media converters.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

### Main Window



AT-MCF106 Family

Device Manager LEDs for AT-MCF106 Family

LED	State	Description
PWR	Green	The main power supply is installed and power is on.
	Gray	The main power supply is not installed or it is installed but not powered on.
RPS	Green	The backup power supply is installed and power is on.
	Gray	The backup power supply is not installed or it is installed but not powered on.

Device Manager LEDs for AT-MCF106 Family		
LED	State	Description
NORM	Green	The unit is not performing a link test.
	Gray	The unit is performing a link test.
TEST	Green	The unit is performing a link test.
	Gray	The unit is not performing a link test.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter more than the 50-character limit for the System Contact, System Name, and System Location parameters. However, doing so may result in any of the following :

- Anywhere from 1 to 12 characters may be truncated from the entered value.
- The firmware password may be overwritten if 255 characters are entered for the System Location parameter. Once this happens, a firmware reload will be required.
- The last 50 characters of the entered value may go into the System Contact parameter if 255 characters are entered for the System Name parameter.

**Note** - Device Manager allows the user to enter multiple-word values for the System Contact, System Name, and System Location parameters. NULL values are not allowed.

### Management Interface Info

Displays basic interface information for the management port including description, type, physical address, speed and operation status.

### Temperature Info

Displays the temperature of the device in celsius.

### Power Info

Displays the status of the main and backup power supplies.

*Link Test Channel 1 to 6*

Displays link test mode on channels 1 to 6.

*Telnet*

Starts a Telnet connection to the media converter.

## Status Menu

From the Status Menu, you can view all channels or per channel information.

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AT-MCF106 Family

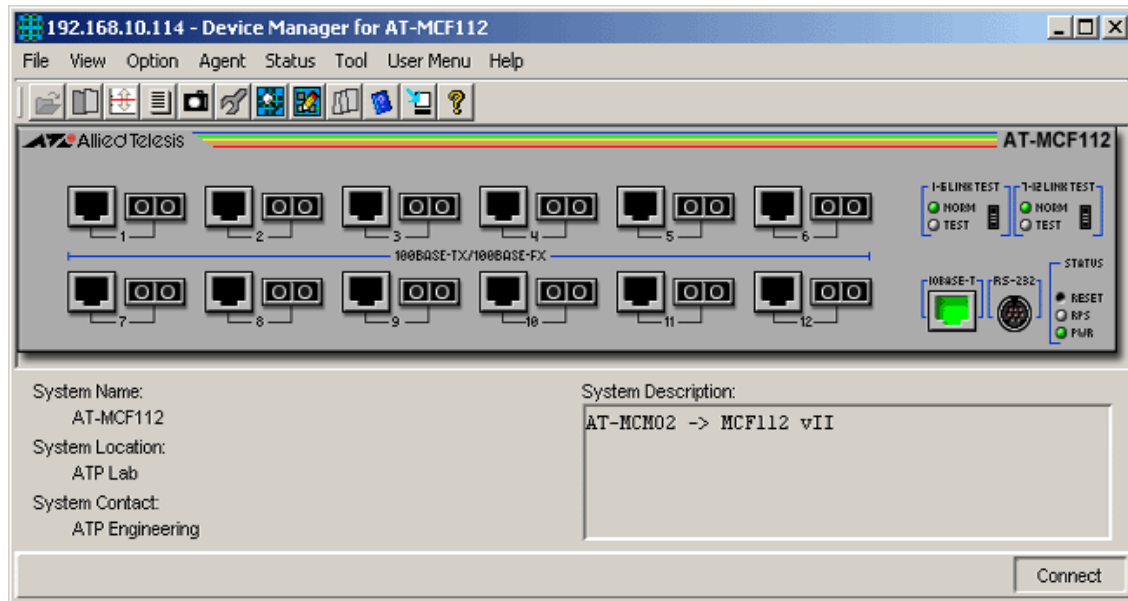
## AT-MCFI 12 Family

This section describes Device Manager menus and operations specific to the AT-MCFI 12 family of media converters.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

### Main Window



AT-MCFI 12 Family

Device Manager LEDs for AT-MCFI 12 Family

LED	State	Description
PWR	Green	The main power supply is installed and power is on.
	Gray	The main power supply is not installed or it is installed but not powered on.
RPS	Green	The backup power supply is installed and power is on.

Device Manager LEDs for AT-MCFI 12 Family		
LED	State	Description
	Gray	The backup power supply is not installed or it is installed but not powered on.
NORM	Green	The unit is not performing a link test.
	Gray	The unit is performing a link test.
TEST	Green	The unit is performing a link test.
	Gray	The unit is not performing a link test.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### System Info

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter more than the 50-character limit for the System Contact, System Name, and System Location parameters. However, doing so may result in any of the following :

- Anywhere from 1 to 12 characters may be truncated from the entered value.
- The password in the firmware may be overwritten if 255 characters are entered for the System Location parameter. Once this happens, a firmware reload will be required.
- The last 50 characters of the entered value may go into the System Contact parameter if 255 characters are entered for the System Name parameter.

**Note** - Device Manager allows the user to enter multiple-word values for the System Contact, System Name, and System Location parameters. NULL values are not allowed.

### Management Interface Info

Displays basic interface information for the management port including description, type, physical address, speed and operation status.

### Temperature Info

Displays the temperature of the device in celsius.



*Power Info*

Displays the status of the main and backup power supplies.

*Link Test Channel 1 to 6*

Displays link test mode on channels 1 to 6.

*Link Test Channel 7 to 12*

Displays link test mode on channels 7 to 12.

*Telnet*

Starts a Telnet connection to the media converter.

## Status Menu

From the Status Menu, you can view all channels or per channel information.

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AT-MCF112 Family

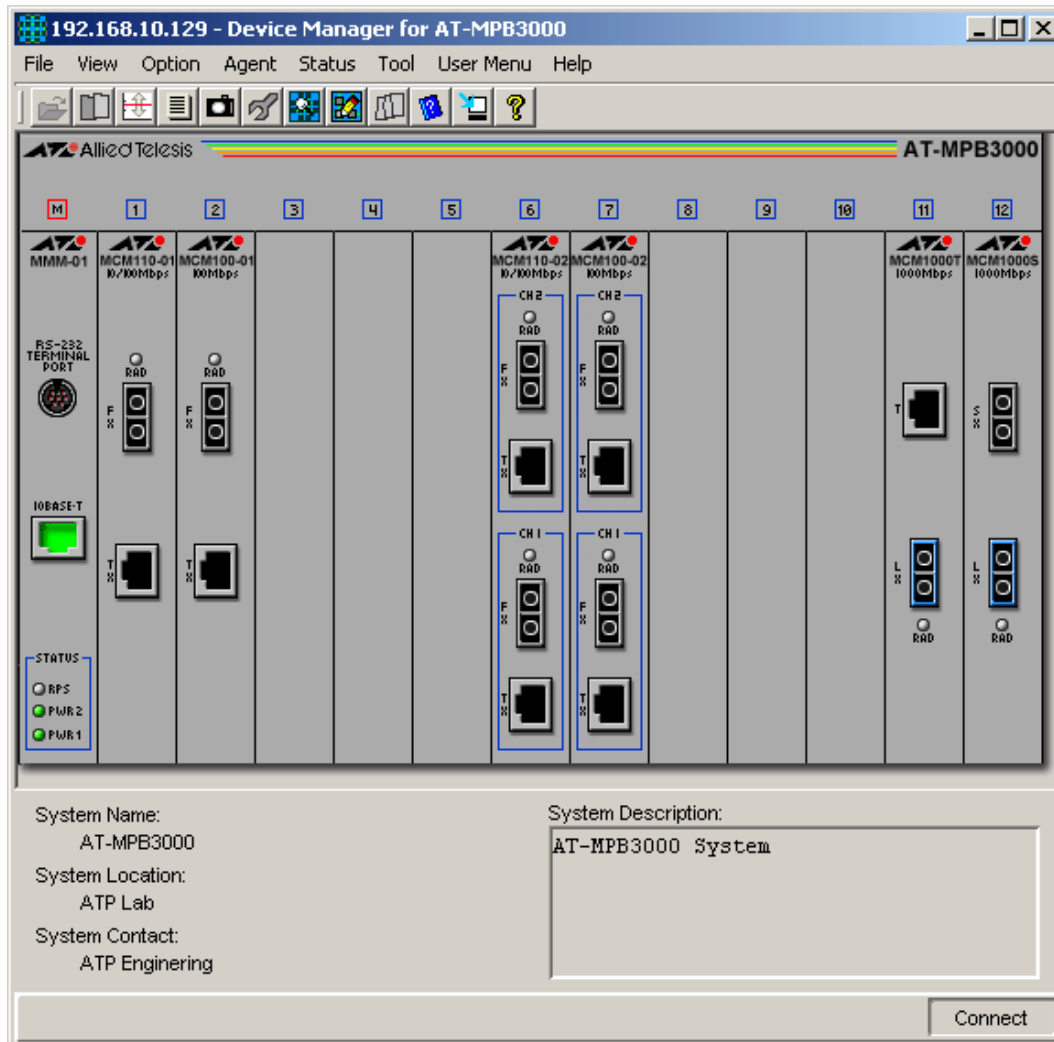
## AT-MPB3000

This section describes Device Manager menus and operations specific to the AT-MPB3000 chassis.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

## Main Window



## AT-MPB3000

**Note** - The current firmware version does not allow Device Manager to support stacked AT-MPB3000 devices.

Device Manager LEDs for AT-MMM-01 Management Module		
LED	State	Description
PWR1	Green	Power supply 1 is installed and power is on.
	Gray	Power supply 1 is not installed or it is installed but not powered on.
PWR2	Green	Power supply 2 is installed and power is on.
	Gray	Power supply 2 is not installed or it is installed but not powered on.
RPS	Green	The optional redundant power supply is installed and power is on.
	Gray	The optional redundant power supply is not installed or it is installed but not powered on.

**Note** - Please refer to [AT-MPB3000 Modules](#) for the operations and behavior of the modules installed on the chassis.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the chassis, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter up to 112 characters for the System Contact parameter, 132 characters for the System Name parameter, and 92 characters for the System Location parameter. However, entering more than 19 characters for any one of these parameters may affect the values of the other two parameters.

### *Temperature Info*

Displays the actual temperature of the chassis.

### *Power Info*

Displays power supply status.

### *Telnet*

Starts a Telnet connection to the chassis.

## Status Menu

From the Status Menu, you can view information about [AT-MPB3000 Modules](#) installed on the chassis. Options to view all/per module information are displayed.

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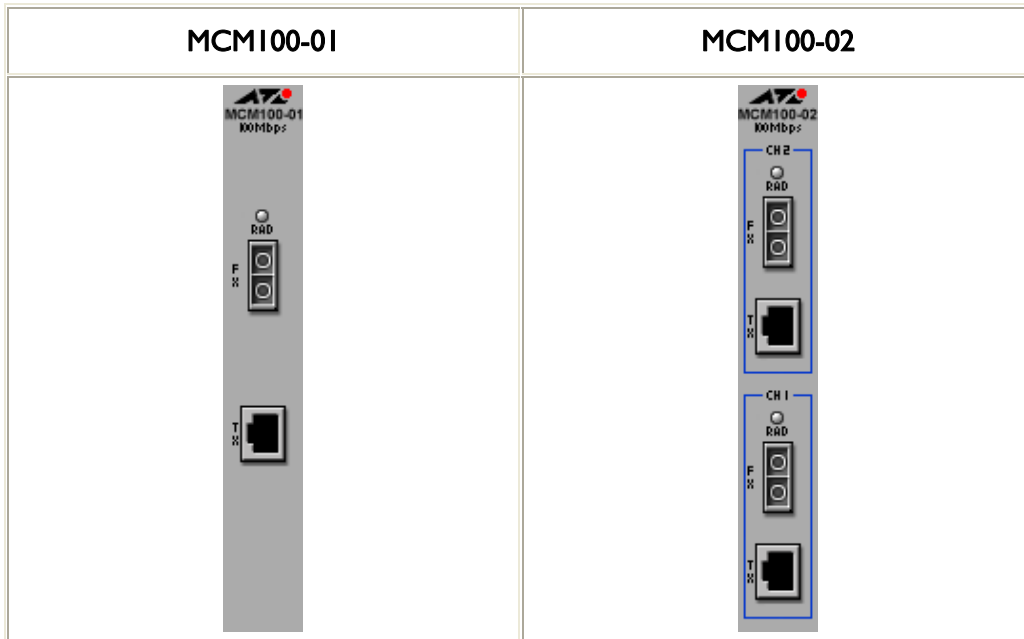
AT-MPB3000

## AT-MPB3000 Modules

This section describes the modules supported by Device Manager. If modules are installed on the AT-MPB3000 chassis at the time Device Manager is called, they will be displayed in their corresponding slots on the chassis image.

- [AT-MCM100 Modules](#)
- [AT-MCM110 Modules](#)
- [AT-MCM1000S Modules](#)
- [AT-MCM1000T Modules](#)

## AT-MCM100 Modules



LED	State	Description
RAD	Green	The FX port is connected to a remote access device.

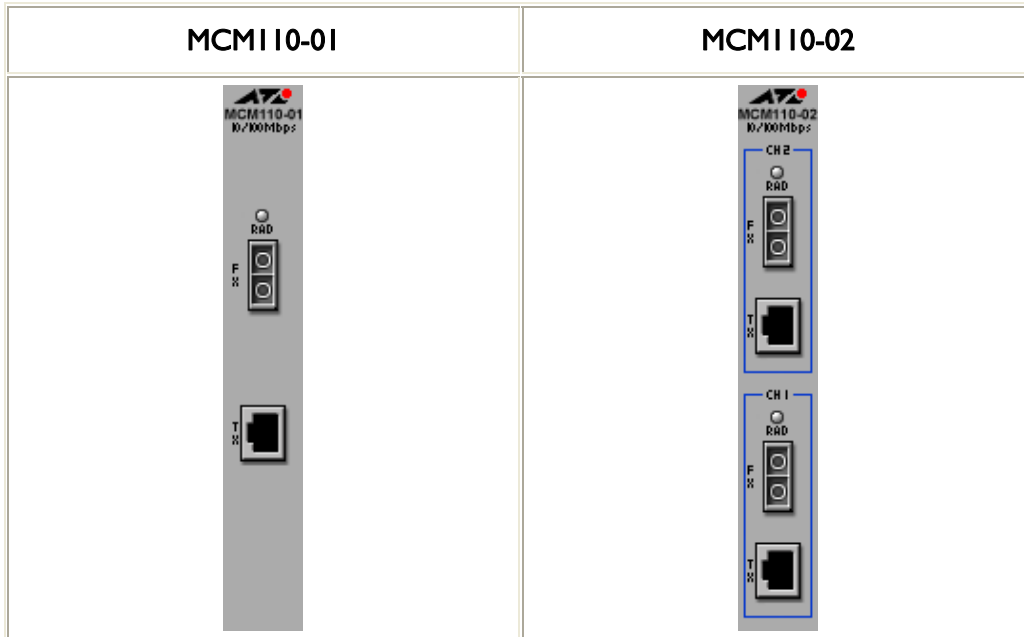
**Note** - The MCM100-01 module image applies to the following variants:

- AT-MCM100-01SC
- AT-MCM100-01SMR
- AT-MCM100-01SMRF15
- AT-MCM100-01ST

**Note** - The MCM100-02 module image applies to the following variants:

- AT-MCM100-02SC
- AT-MCM100-02SMR
- AT-MCM100-02SMRF15
- AT-MCM100-02ST

## AT-MCM110 Modules



LED	State	Description
RAD	Green	The FX port is connected to a remote access device.

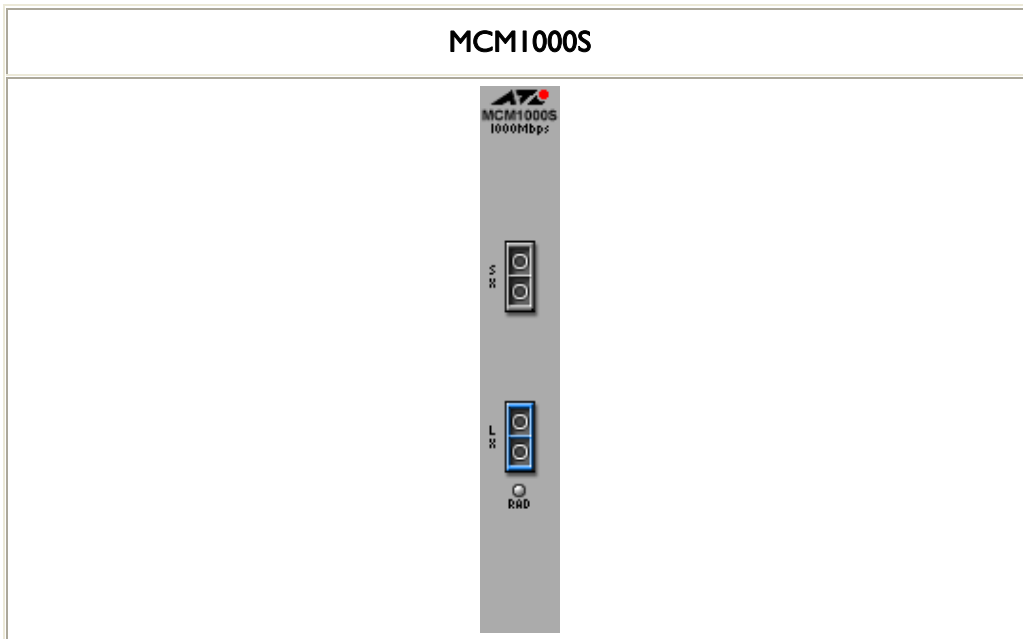
**Note** - The MCM110-01 module image applies to the following variants:

- AT-MCM110-01SC
- AT-MCM110-01SMR
- AT-MCM110-01SMRF15
- AT-MCM110-01ST

**Note** - The MCM110-02 module image applies to the following variants:

- AT-MCM110-02SC
- AT-MCM110-02SMR
- AT-MCM110-02SMRF15
- AT-MCM110-02ST

## AT-MCMI000S Modules



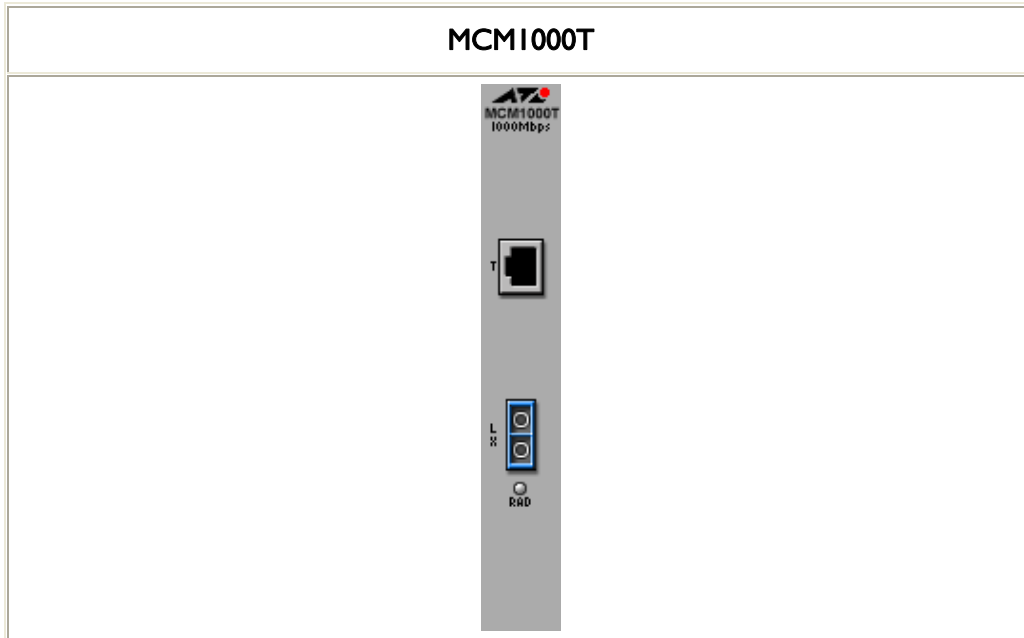
LED	State	Description
RAD	Green	The LX port is connected to a remote access device.

**Note** - The TP Link Status parameter reflects the status of the SX port while the F/O Link Status parameter reflects the status of the LX port.

**Note** - The remote access device connected to the LX port may at times be inaccessible when link is established on the SX port. As a result, the RAD LED may turn gray and the following parameters may not return any value:

- Remote Device
- Remote Device Status
- Remote Device TP Link Status

## AT-MCM1000T Modules



LED	State	Description
RAD	Green	The LX port is connected to a remote access device.

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AT-MPB3000 Modules



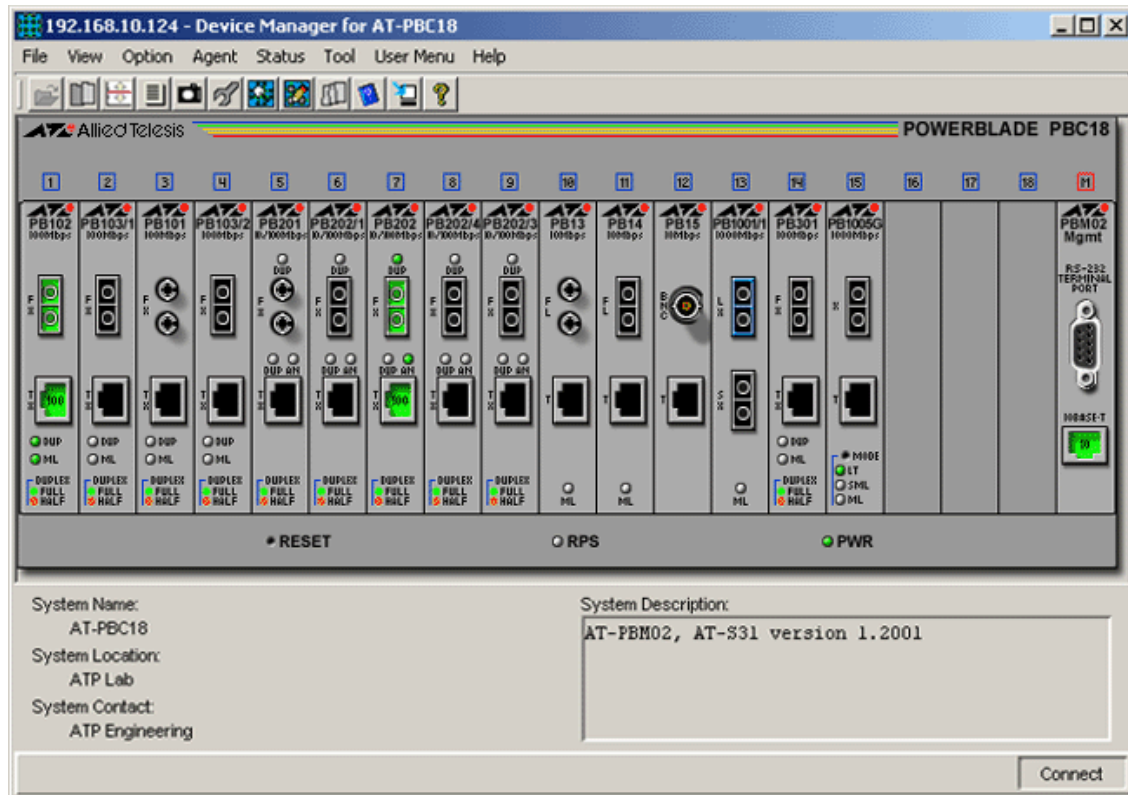
## PowerBlade

This section describes Device Manager menus and operations specific to the AT-PBC18 chassis.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Status Menu](#)

## Main Window



AT-PBC18

Device Manager LEDs for AT-PBM02 Management Module		
LED	State	Description
PWR	Green	The main power supply is installed and power is on.
	Gray	The main power supply is not installed or it is installed but not powered on.
RPS	Green	The optional redundant power supply is installed and power is on.
	Gray	The optional redundant power supply is not installed or it is installed but not powered on.

**Note** - The current firmware version does not allow Device Manager to support the Reset button.

**Note** - Please refer to [PowerBlade Modules](#) for the operations and behavior of the modules installed on the chassis.

## Agent Menu

From the Agent Menu, you can view and edit the system information for the chassis, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - Device Manager allows the user to enter more than 20 characters for the System Name parameter. However, doing so will result in the following error message: "The error occurred with 'Set' operation. Error: bad value."

### *System Date and Time*

Displays system configuration for system date and time.

### *Network Info*

Displays network-related information such as the addresses of the default gateway and the agents.

**Note** -The Default Domain Name parameter returns unrecognizable characters.

### *FAN Info*

Displays fan speed.

*Management Module Temperature*

Displays the actual temperature of the management module.

*Chassis Temperature*

Displays the actual temperature of the chassis.

*Power Info*

Displays power supply voltage information.

*Battery Voltage*

Displays the battery voltage information.

*Omega*

Displays Omega management interface information, including time-out and port status (RS-232 and 10Base-T).

*Telnet*

Starts a Telnet connection to the chassis.

## Status Menu

From the Status Menu, you can view and edit information about [PowerBlade Modules](#) installed on the chassis. Options to view all/per module information are displayed.

**Note** - The current firmware version does not allow the Module Name parameter to be set to NULL. Attempting to set this parameter to NULL will only set it to its default value.

**Note** - The Module Type parameter returns 0 for the management module (19), main power supply (20), and optional redundant power supply (21).

**Note** - The same set of parameters is displayed for each module regardless of whether or not each parameter is applicable to the module.

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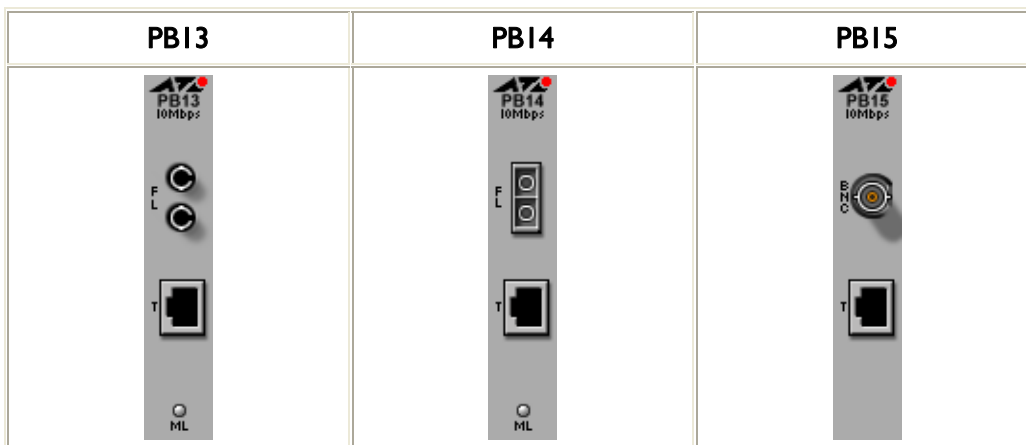
PowerBlade

## PowerBlade Modules

This section describes the modules supported by Device Manager. If modules are installed on the PowerBlade chassis at the time Device Manager is called, they will be displayed in their corresponding slots on the chassis image.

- [AT-PBI0 Series Media Converter Modules](#)
- [AT-PBI00 Series Media Converter Modules](#)
- [AT-PB200 Series Switch Modules](#)
- [AT-PB300 Series Media Converter Modules](#)
- [AT-PBI000 Series Media Converter Modules](#)

### AT-PBI0 Series Media Converter Modules



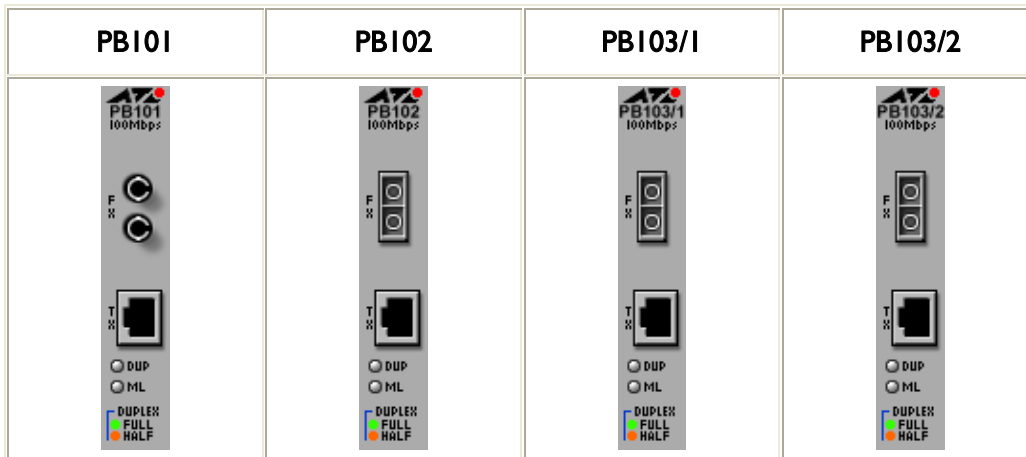
LED	State	Description
ML	Green	The Missing Link feature is enabled

**Note** - The Port A Mode and the Port B Mode parameters return 'not supported' for these modules.

**Note** - Active ports on PB13 and PB14 do not turn red when disabled using the Omega interface.

**Note** - The Link Test parameter of PB15 has a fixed value of 'hardware-link-test' and cannot be modified.

## AT-PBI00 Series Media Converter Modules



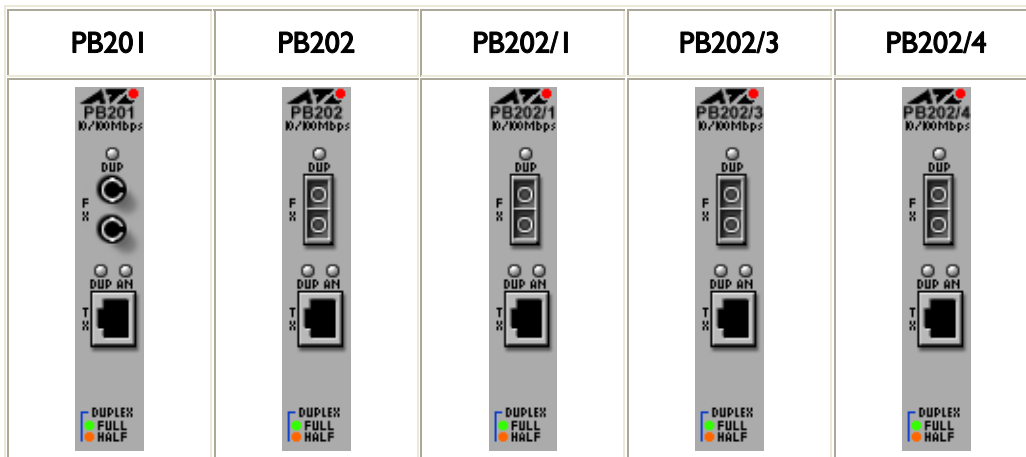
LED	State	Description
DUP	Green	The media converter is operating in full-duplex mode.
	Gray	The media converter is operating in half-duplex mode.
ML	Green	The Missing Link feature is enabled.

**Note** - The Port A Mode parameter for these modules has a fixed value of 'full' and cannot be modified.

**Note** - The current firmware version does not allow the Port B Mode parameter to be set to 'full' from the default value of 'half'. Likewise, it cannot be set to 'half' if it was set to 'full' using the Omega interface.

**Note** - Expect the DUP LED to be green when it should be gray and vice-versa when the Port B Mode parameter is set to 'auto'. This is because the current firmware version is unable to provide information on the negotiated mode for Port B.

## AT-PB200 Series Switch Modules



LED	State	Description
DUP	Green	The media converter is operating in full-duplex mode.
	Gray	The media converter is operating in half-duplex mode.
AN	Green	The 10/100Base-TX port is auto-negotiating.

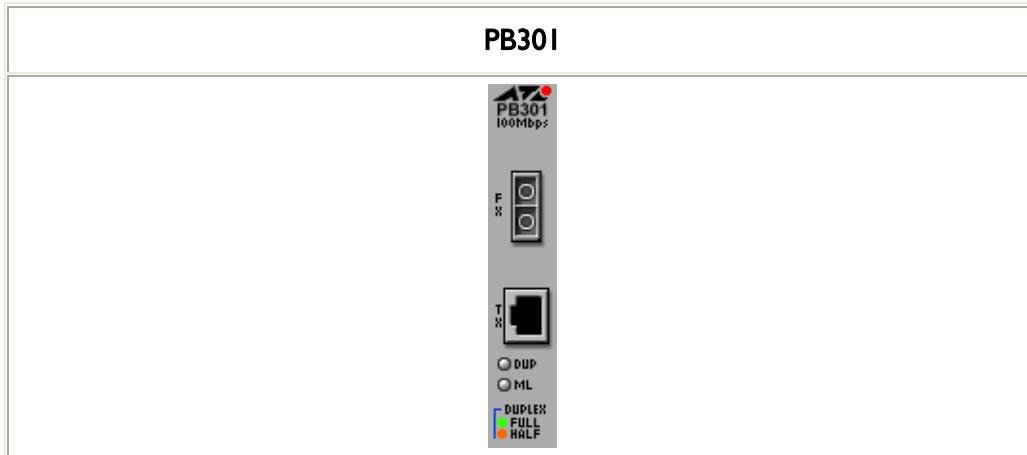
**Note** - Connection cannot be established between a 10/100Base-TX port on an AT-PB200 series module that is configured to auto-negotiate and a 10/100Base-TX port on another AT-PB200 series module that is configured to operate at 100 full/half duplex.

**Note** -The current firmware version allows the Port A Speed parameter to be set to '10M' even if Port A is only capable of operating at a speed of 100Mbps.

**Note** -The current firmware version allows the Port A Mode parameter to be set to 'auto' even if Port A is not capable of auto-negotiation.

**Note** -When the Port B Mode parameter is set to 'auto', the current firmware version is unable to provide information on the negotiated speed and mode for Port B. As a result, the speed reflected on the port image may be a '10' when it should really be '100' and vice-versa. Also, expect the DUP LED to be gray when it should really be green or orange.

## AT-PB300 Series Media Converter Modules



LED	State	Description
DUP	Green	The media converter is operating in full-duplex mode.
	Gray	The media converter is operating in half-duplex mode.
ML	Green	The Missing Link feature is enabled.

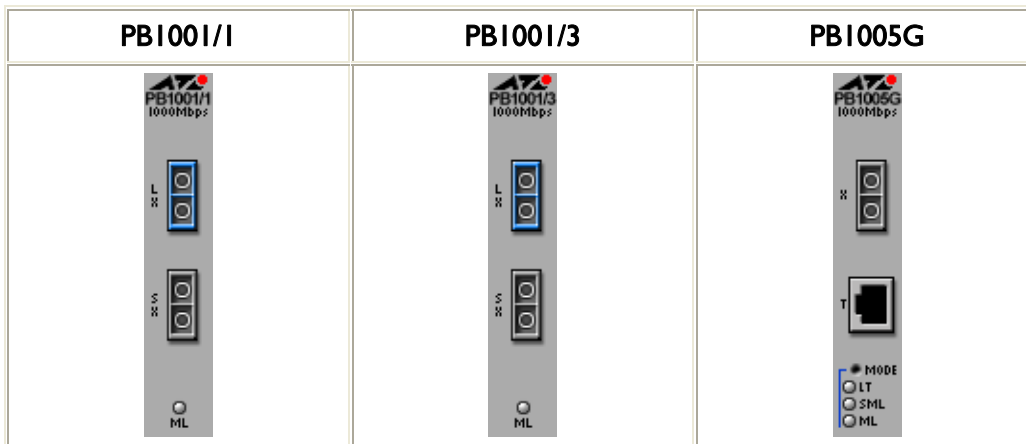
**Note** - Port A is displayed as an SC connector instead of a VF-45 connector.

**Note** - The Port A Mode parameter for this module has a fixed value of 'full' and cannot be modified.

**Note** - The current firmware version does not allow the Port B Mode parameter to be set to 'full' from the default value of 'half'. Likewise, it cannot be set to 'half' if it was set to 'full' using the Omega interface.

**Note** - Expect the DUP LED to be green when it should be orange and vice-versa when the Port B Mode parameter is set to 'auto'. This is because the current firmware version is unable to provide information on the negotiated mode for Port B.

## AT-PBI000 Series Media Converter Modules



LED	State	Description
LT	Green	Link Test is enabled
SML	Green	Smart Missing Link is enabled
ML	Green	Missing Link is enabled

**Note** - Smart Missing Link is only supported on the AT-PBI005G module. However, the current firmware version allows the Link Test parameter of the AT-PBI001/1 and AT-PBI001/3 modules to be set to 'smart-missing-link'.

**Note** - The Port A Mode and the Port B Mode parameters return 'not supported' for these modules.

**Note** - A GBIC image is always visible on the GBIC slot of the PBI005G module image even if there is no GBIC physically present in the slot.

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PowerBlade Modules



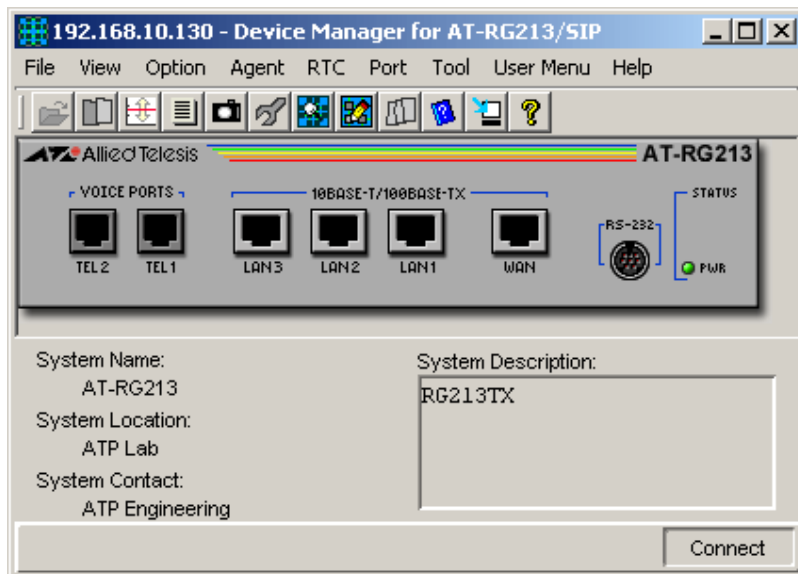
## AT-RG213 Family

This section describes Device Manager menus and operations specific to the AT-RG213FX and AT-RG213TX Residential VoIP Gateways.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [RTC Menu](#)
- [Port Menu](#)

### Main Window



AT-RG213

Device Manager LEDs for AT-RG213FX and AT-RG213TX		
LED	State	Description
PWR	Green	The residential gateway is receiving power.

**Note** - The AT-RG213FX and the AT-RG213TX share the same device image.

### Agent Menu

From the Agent menu, you can view the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version does not allow the following parameters to be configured:

- System Name
- System Location
- System Contact

Attempting to configure these parameters will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

### *Device Info*

Displays device information such as the application version and hardware version.

### *IP Interface Info*

Displays network-related information such as the addresses of the default gateway and the agents.

### *Configuration File List*

Displays a list of all configuration files available in non-volatile memory.

### *Telnet*

Starts a Telnet connection to the residential gateway.

## **RTC Menu**

From the RTC menu, you can view all information related to Network Time Protocol (NTP) and Real Time Clock (RTC).

### *RTC Info*

Displays RTC status information including current time, offset, last update, and last delta.

### *NTP Server Info*

Displays a list of all NTP servers available.

## **Port Menu**

From the Port menu, you can view MIB information about the ethernet and voice ports.

### *Interface Info*

#### *Ethernet*

Displays information for each ethernet port.

**Note** - The current firmware version returns 'not available' for the following parameters:

- Port Link State
- Port Type
- Port Speed
- Port Duplex Mode
- Port Autonegotiation State

#### Voice

Displays information for each voice port. Information displayed will vary depending on the protocol used : H.323, Media Gateway Control (MGCP), or Session Initiation (SIP).

**Note** - H.323 : The Port Capability parameter does not display all capabilities used during call setup.

**Note** - MGCP : The current firmware version returns 'deleted' for the Port State parameter even if an MGCP port has already been created.

**Note** - MGCP : The current firmware version returns 'data -> <MIB variable name>' instead of actual values for the following parameters:

- Port Operational State
- Port Type
- Port Profile
- Port Domain
- Port End Point Identifier
- Port Package
- Port Call Agent
- Port Notified Entity
- Port Digit Map
- Port Network Loss Rate

**Note** - MGCP : The current firmware version returns '0' instead of actual values for the following parameters:

- Port Suspicion Threshold
- Port Disconnection Threshold
- Port Initial Retransmission Delay
- Port Maximum Retransmission Delay
- Port History Time
- Port Maximum Propagation Delay

**Note** - SIP : The current firmware version returns 'Not Available' for the Port Registration Time parameter.

**Note** - SIP : The current firmware version returns the value of the Location Server IP Address parameter on the Port Proxy Server IP Address parameter and the value of the Proxy Server IP Address parameter on the Port Location Server IP Address parameter.

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AT-RG213 Family

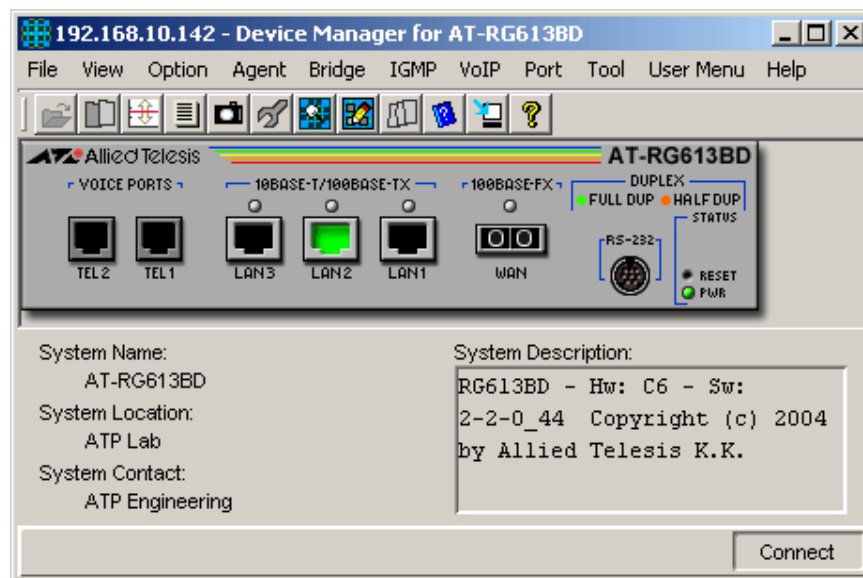
## AT-RG600 Series

This section describes Device Manager menus and operations specific to the AT-RG600 Ethernet and ADSL Residential Gateways.

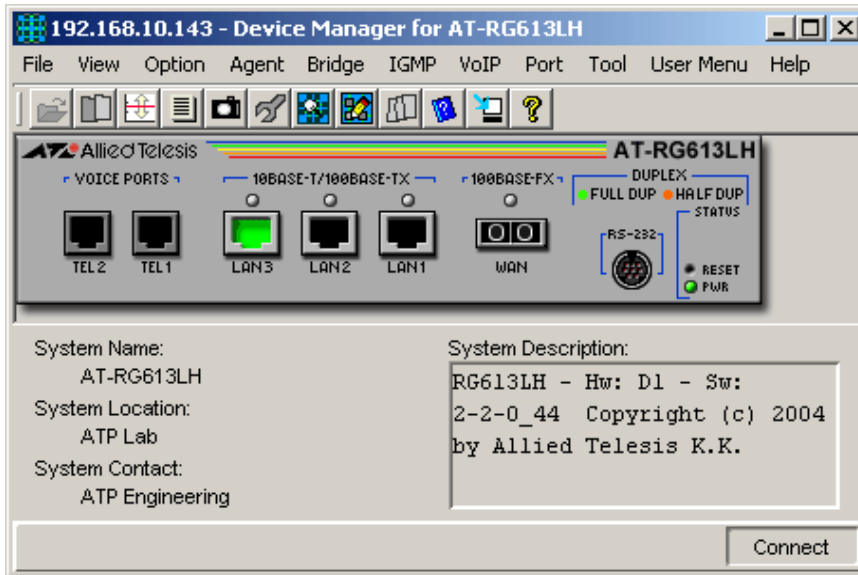
Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Bridge Menu](#)
- [IGMP Menu](#)
- [VoIP Menu](#)
- [Port Menu](#)

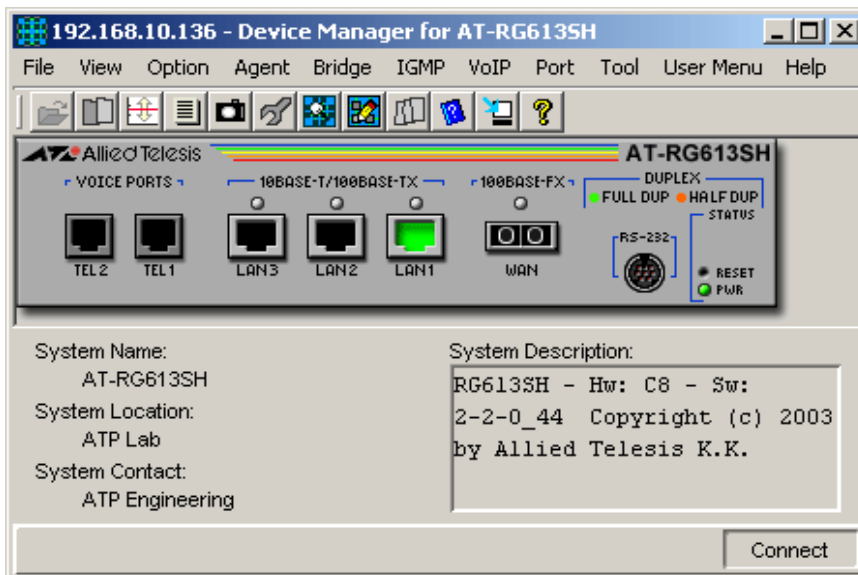
## Main Window



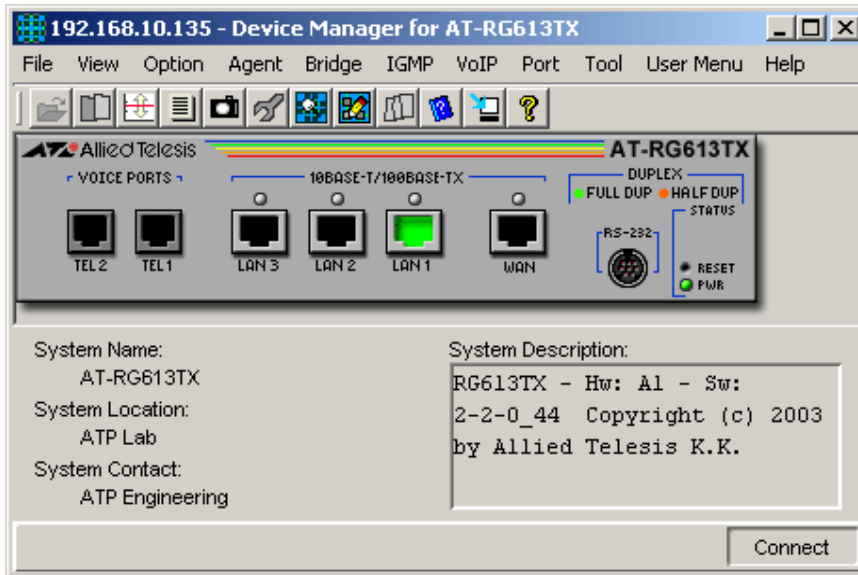
AT-RG613BD



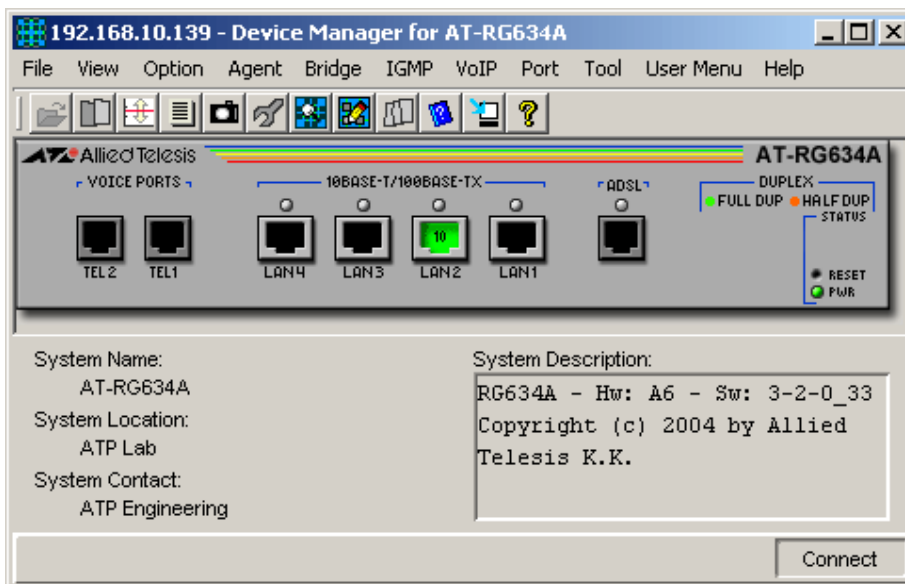
AT-RG613LH



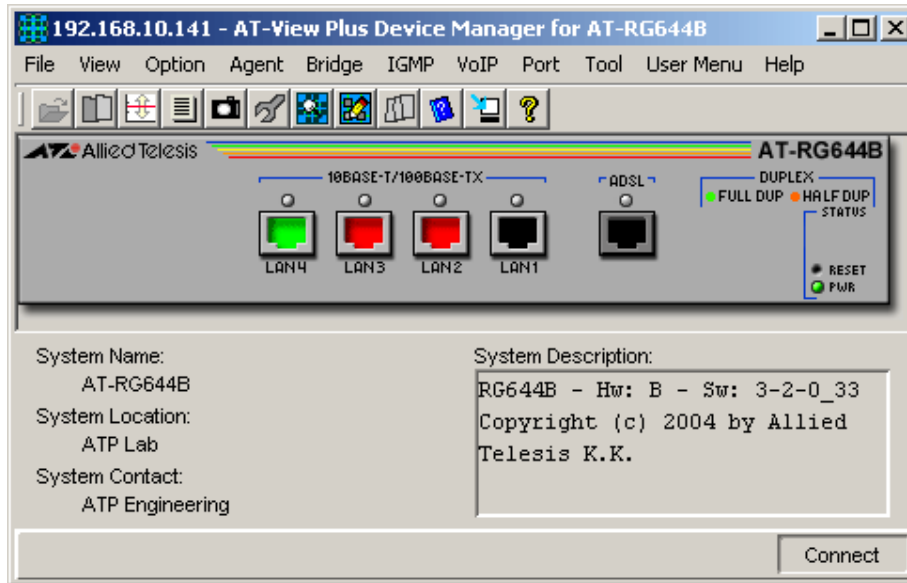
AT-RG613SH



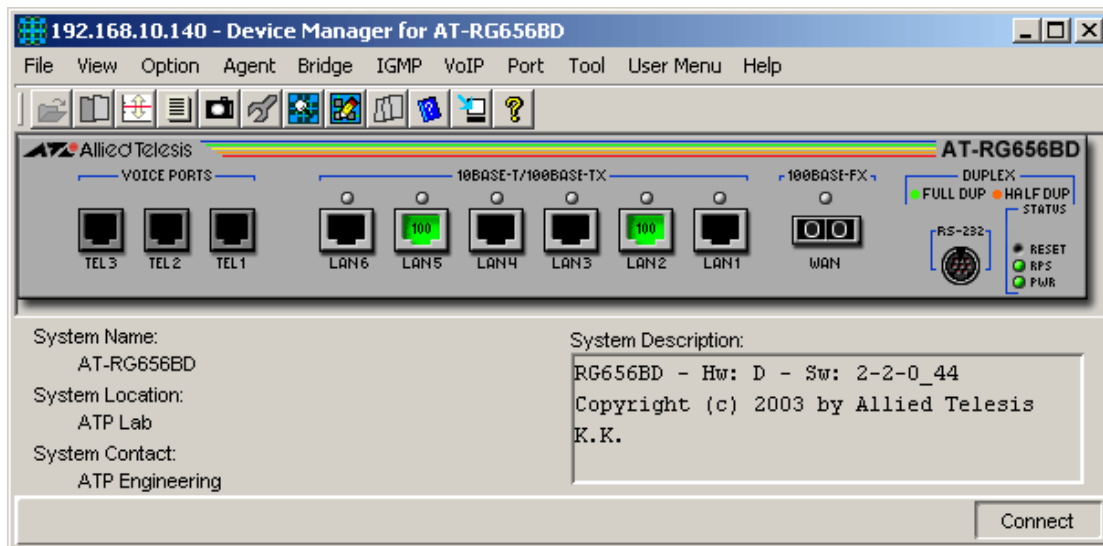
AT-RG613TX



AT-RG634A



AT-RG644B



AT-RG656BD

### Device Manager LEDs for AT-RG600 Series

LED	State	Description
PWR	Green	The residential gateway is receiving power.
DUPLEX	Green	The port is operating in full-duplex mode.
	Orange	The port is operating in half-duplex mode.

**Note** - If the user account used to connect to the AT-RG600 device is not the first user account defined in the Target Address table, Device Manager will not be able receive v3 traps from the device.



**Note** - The current firmware version does not allow Device Manager to determine the negotiated mode for active LAN or WAN ports that are configured to auto-negotiate. As a result, the Duplex LED will turn gray.

**Note** - When link is established on a LAN or WAN port that is configured to auto-negotiate, the current firmware version returns 'No such instance' for the Speed parameter under the Standard sub-menu option. As a result, no speed is displayed on the RJ-45 LAN or WAN port images.

**Note** - AT-RG613xx/AT-RG600 ADSL: When link is established on a LAN or WAN port that is configured to auto-negotiate, the current firmware version returns 'No such instance' for the Speed parameter under the Standard sub-menu option. As a result, no speed is displayed on the RJ-45 LAN or WAN port images.

**Note** - AT-RG634A : The Port Link State parameter may sometimes return the value "up" during the refresh process. As a result, even inactive ports may turn green.

**Note** - AT-RG656BD : The current firmware version does not allow Device Manager to support the RPS LED when using SNMPv1 and SNMPv2c.

**Note** - AT-RG656BD: The current firmware version does not allow Device Manager to support the Reset button when using SNMPv1 and SNMPv2c.

## Agent Menu

From the Agent menu, you can view and edit the system information for the device, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version does not allow the user to enter multiple-word values for the System Name parameter. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: commit Failed."

**Note** - Setting the System Name parameter to a value that begins with a numeric character will result in the error message: "The error occurred with 'Set' operation. Error: commit Failed."

**Note** - AT-RG600 Ethernet: The current firmware version accepts up to 190 characters for the System Name parameter if all characters are in lower case and up to 188 characters if all are in upper case. Attempting to specify more than the accepted length will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred."

#### Device Info

Displays device information such as the application version, hardware version and vendor information.

#### User Info

Displays user information such as the Configuration rights, Access and Password.

**Note** - If the user account used to connect to the AT-RG600 device has write but no read access to a supposedly configurable MIB variable under the User Info sub-menu option, a checkbox will not be displayed for that MIB variable. Since no checkbox is displayed, the user account will not be able to change the value of that MIB variable.

**Note** - AT-RG613TX: The current firmware version accepts up to 85 characters for the Comment parameter. Attempting to enter more than 85 characters will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred."

**Note** - AT-RG613xx/AT-RG644B: The current firmware version accepts up to 79 characters for the Password parameter. Attempting to enter more than 79 characters will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred."

**Note** - AT-RG634A: The current firmware version accepts up to 88 characters for the Comment parameter. Attempting to enter more than 88 characters will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred." The Comment parameter will then return to its default value. If GSPAN firmware is used, the same behavior may occur if the Comment parameter is set to a string value of length greater than 65 characters.

**Note** - AT-RG634A: The current firmware version accepts up to 87 characters for the Password parameter. Attempting to enter more than 87 characters will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred." The Password parameter will then return to its default value. If G-SPAN firmware is used, the same behavior may occur if the Password parameter is set to a string value of length greater than 84 characters.

**Note** - AT-RG656BD: Valid MIB Set values for the Comment parameter are in the range [0-89] inclusive. Attempting to set this parameter to a value outside the valid range will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred."

**Note** - AT-RG656BD: Valid MIB Set values for the Password parameter are in the range [0-75] inclusive. Attempting to set this parameter to a value outside the valid range will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: Time out occurred."

**Note** - AT-RG600 Ethernet: If a user account is created without a password, expect the default value of the Password parameter to be whatever the value of the Name parameter is.

**Note** - AT-RG613BD/LH/SH: The current firmware version accepts up to 81 characters for the Comment parameter. Attempting to enter more than 81 characters will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

#### *Battery Backup Info*

Displays power backup status such as the Backup Battery Status and Backup Primary Status

#### *Reset*

Resets the residential gateway.

#### *CPE Config Save*

Saves the configuration made in the residential gateway.

**Note** - The CPE Config Save option does not save the changes made to the configuration file.

#### *Telnet*

Starts a Telnet connection to the residential gateway.

## Bridge Menu

From the Bridge menu, you can view and edit bridge information such as forwarding database, aging time info and Quality of Service (QoS) info.

#### *Forwarding Database*

Displays the Forwarding Database table.

#### *Aging Time Info*

Displays information about the aging time status, mode, and value.

**Note** - AT-RG613xx/AT-RG600 ADSL: The Aging Time Value parameter has a fixed value of 0 and cannot be modified.

**Note** - AT-RG656BD : Changing the value of the Aging Time Mode parameter causes the Aging Time Value parameter to be set to 0.

**Note** - AT-RG656BD : Valid MIB Set values for the Aging Time Value parameter are in the range [0-2147483647] inclusive. However, the current firmware version truncates entered values to 7 digits.

### *Traffic Priority*

Displays the system base priority.

**Note** - Setting the Routing Limit parameter under Bridge -> Routing Limit to a value other than 'none' will cause the Base Priority parameter to be set to 0.

### *Routing Limit*

Displays the routing limit.

**Note** - When the Routing Limit parameter is set to a value other than 'none', the value '???(0)(???(0))' may sometimes be displayed for this parameter.

### *QoS Info*

Displays Differentiated Service Code Point (DSCP) entries and its QoS priority level.

## IGMP Menu

From the IGMP menu, you can view and edit information related to Internet Group Management Protocol (IGMP).

### *Leave Time*

Displays RTC status information including current time, offset, last update, and last delta.

**Note** - Valid MIB Set values for the Leave Time parameter are in the range [0-25] inclusive. Attempting to set this parameter to a value outside the valid range will not result in an error but the new value will not be applied.

**Note** - AT-RG634A: Valid MIB Set values for the Leave Time parameter are in the range [0-65535] inclusive. Setting this parameter to a valid or invalid value always results in the error message: "The error occurred with 'Set' operation. Error: commit Failed."

**Note** - AT-RG644B: When configuring the IGMP Leave Time parameter, the current firmware version is able to configure the parameter successfully for the CLI but not for SNMP. As a result, Device Manager will always display the value 0.

### *VLAN Info*

Displays the VLAN table.

### *Group Info*

Displays a list of all group multicast address.

### *Server Info*

Displays a list of all multicast servers.

**Note** - The Server Info sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

## VoIP Menu

From the VoIP menu, you can view and edit information related to telephony services available on the residential gateway.

**Note** - The current firmware version does not provide the information needed by Device Manager to support the H.323 and SIP protocols.

### *Profile Info*

Displays information related to admin profile.

### *DTMF Relay*

Displays Dual Tone Multi-Frequency (DTMF) relay status.

**Note** - AT-RG634A: It may take a while before the actual value for the Status parameter is displayed. The value '???(0)(???(0))' may initially be displayed while Device Manager is retrieving the actual value from the device.

### *Media*

Displays information related to media transport.

**Note** - If no VoIP protocol is enabled, the Start Port and Number of Ports parameters will not be displayed. Instead, a parameter called voipPortRange with a value of 'noSuchName' will be displayed.

**Note** - AT-RG600 ADSL: The value displayed for the RTCP Status parameter is '???(0)(???(0))'.

### *QoS*

Displays Differentiated Service Code Point (DSCP) entries and its QoS priority level.

**Note** - AT-RG613xx/AT-RG600 ADSL: It may take a while before the actual values for DSCP and TOS parameters are displayed. The value '0' may initially be displayed for both parameters while Device Manager is retrieving the actual values from the device.

### *MGCP*

#### *Protocol Info*

Displays general information about the protocol.

**Note** - Valid MIB Set values for the Default Port parameter are in the range [1024-2147483647] inclusive. Attempting to set this parameter to a value outside the valid range will not result in an error but the new value will not be applied.

**Note** - When setting the Profile parameter to 'none', the current firmware is able to set the parameter successfully for the CLI but not for SNMP. As a result, Device Manager will continue to display the old value.

**Note** - The current firmware version does not allow the user to enter multiple-word values for the NAT IP Address and Interface parameters. Attempting to do so will result in the error message: "The error occurred with 'Set' operation. Error: commit Failed."

**Note** - Valid MIB Set values for the Max Retransmit Time parameter are in the range [11-86400] inclusive. However, when the Roundtrip Time parameter is set to its minimum value of 500, the current firmware version allows the Max Retransmit Time parameter to be set to a value less than 11.

**Note** - AT-RG634A: Valid MIB Set values for the Interface parameter are in the range [1-75] inclusive. But the current firmware version allows the parameter to be set to more than 75 characters.

**Note** - AT-RG634A: Valid MIB Set values for the NAT IP Address parameter are in the range [0-255] inclusive. Attempting to set this parameter to a value outside the valid range will result in the error message: "No access error."

**Note** - AT-RG634A: Values displayed on the Protocol Info MIB variable window may not be consistent with what is set on the device.

**Note** - AT-RG634A: Valid MIB Set values for the Interface parameter is in the range [1-75] inclusive. Attempting to set this parameter to a value outside the valid range will not result to an error message but will cause the device to restart.

**Note** - AT-RG644B: The current firmware version accepts anywhere from 1 to 67 characters inclusive for the Interface parameter. Attempting to enter a string value whose length is outside of the valid range will cause the device to restart and will eventually result in the error message: "The error occurred with 'Set' operation. Error: time out occurred."

#### *Call Agent Info*

Displays a list of all call agents available.

**Note** - AT-RG634A: It may take a while before the correct number of call agents are displayed in Device Manager.

## Port Menu

From the Port menu, you can view and edit MIB information about the ethernet and voice ports.

### *Utilization*

Displays the port's utilization information.

**Note** - AT-RG613xx: The Utilization field is grayed out if the Port Speed and Mode parameter is set to auto-negotiate.

### *Interface Info*

#### *Ethernet*

Displays ethernet port statistics such as the number of frames received and transmitted on the port, bytes received and transmitted on the port and port status.

**Note** - Valid MIB Set values for the Port Speed and Mode parameter of the 100Base-FX WAN ports should only be '100Mbps full-duplex', '100Mbps half-duplex', and 'auto sense'. However, the current firmware version allows it to be set to '10Mbps full-duplex' or '10Mbps half-duplex' as well.

**Note** - Under the Additional Info sub-menu option, if the Port Speed and Mode parameter is currently set to '100Mbps full-duplex', it cannot be changed to '100Mbps half-duplex' directly. You will have to set it to some other speed and mode first. This is true for all LAN and WAN ports.

**Note** - The Port Flow Control parameter has a fixed value of 'flow' and cannot be modified.

**Note** - Port number assignment displayed in the Additional Info and Standard Info sub-menu options are inconsistent.

**Note** - The current firmware version does not return any value for the Physical Address parameter.

**Note** - Changing the value of the Port Speed and Mode parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred." However, the new value is still set.

**Note** - It may take a while before the actual values of the Port Description and Media Type parameters are displayed especially when there is an existing telnet connection of the device.

**Note** - The values displayed by Device Manager for the Receive Limit and Transmit Limit parameters may not be the same as the values displayed by the CLI.

**Note** - AT-RG600 ADSL: Attempting to configure the parameters under the Additional Info sub-menu option for LAN 4 will not result in an error but the new values will not be applied.

**Note** - AT-RG634A: Valid MIB Set values for the Receive Limit and Transmit Limit parameters are in the range [0-1000000] inclusive. However, the current firmware version allows these parameters to be set to more than the maximum value.

**Note** - AT-RG656BD : When a LAN or WAN port is configured to auto-negotiate and is connected to a 100Mbps full or half duplex port on another device, the current firmware version returns '10000000' for the Speed parameter under the Standard sub-menu option. As a result, the speed displayed on the RJ-45 LAN port images is '10' instead of '100'.

**Note** - AT-RG656BD: The current firmware version returns '???(195)' for the Port Type parameter of the 100Base-FX WAN port.

**Note** - AT-RG656BD : By default, the WAN port is enabled. However, once disabled, it can no longer be enabled until the device is reset to factory defaults.

**Note** - AT-RG613xx: Attempting to configure any of the parameters under the Additional Info sub-menu option while a telnet connection is open will not result in an error message, but the new values will not be applied.

#### Voice

Displays information for each voice port.

**Note** - If the user has no read access to the Admin Info MIB group, the association of the end-point to the voice port may be incorrect for the following context menu options:

- Dial Info
- Call Forwarding Info
- CLI Info
- Quality Info
- Statistics

As a result, when a user right clicks on a voice port (e.g. TEL1) and chooses any of these context menu options, the information that will be shown may be for TEL 2 instead.

**Note** - AT-RG634A: The value displayed for the Port parameter is '???(0)'.

**Note** - AT-RG634A: It may take a while to retrieve information from the device. As a result, the value 'no such instance' may be displayed by default. Once the retrieval process is complete, the actual values for the different MIB variables will be shown. This applies to the following sub-menu options:



- Admin Info
- Dial Info
- Call Forwarding Info
- CLI Info
- Quality Info
- Statistics

**Note** - AT-RG634A: Selecting the following sub-menu items from the voice port context menu will not launch their corresponding MIB variable windows:

- Admin Info
- Dial Info
- Call Forwarding Info
- CLI Info
- Quality Info
- Statistics

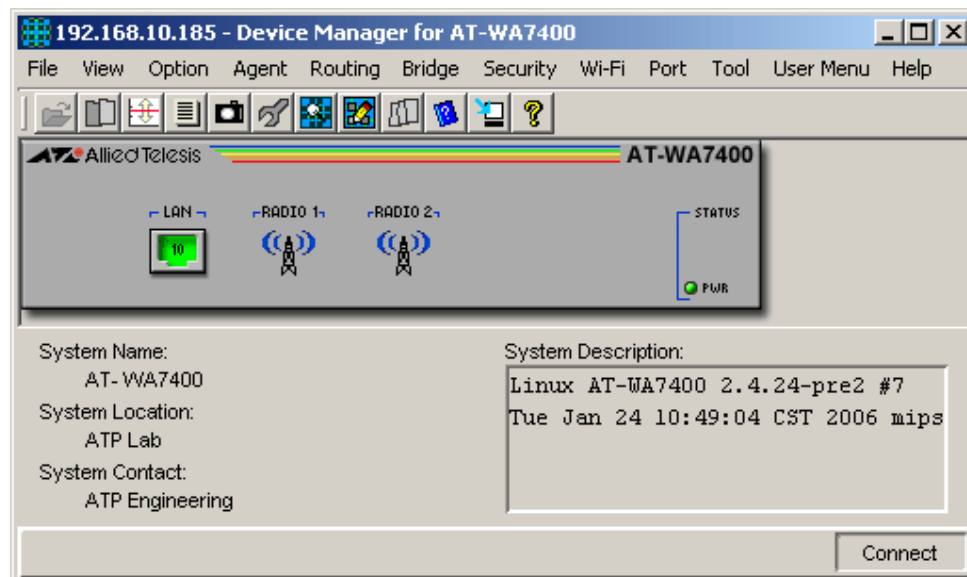
## AT-WA7400

This section describes Device Manager menus and operations specific to the AT-WA7400 Dual Radio Wireless Access Point.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Security Menu](#)
- [Wi-Fi Menu](#)
- [Port Menu](#)

### Main Window



AT-WA7400

Device Manager LEDs for AT-WA7400		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.

**Note** - The current firmware version does not allow Device Manager to reflect the correct speed on the ethernet port. Expect to see "10" even if the port is actually operating at 100Mbps.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

**Note** - The current firmware version accepts up to 254 characters for the System Contact, System Name and System Location parameters.

### *Firmware Info*

Displays upgrade firmware information, including SNMP Firmware, TFTP Server IP Address and Firmware Filename.

**Note** - Values for the TFTP Server IP Address parameter are displayed as octet strings. However, this parameter accepts input values in IP address format.

**Note** - The current firmware version accepts up to 254 characters for the Firmware Filename parameter.

**Note** - Attempting to set the Firmware Filename parameter to more than 34 characters will result in the error message: "The error occurred with 'Set' operation. Error: timeout occurred." However, the new value is still set successfully.

### *Telnet*

Starts a Telnet connection to the switch.

### *WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

### *IP*

#### *ARP Table*

Displays the ARP cache on the switch.

#### *Address Table*

Displays the list of IP interfaces on the switch.

**Note** - The current firmware version returns 'noSuchName' for the Re-assemble Max Size parameter.

#### *Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns 'noSuchName' for the following parameters:

- Destination Metric 2
- Destination Metric 3
- Destination Metric 4
- Route Updated Seconds
- Destination Metric 5

#### *IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

**Note** - The current firmware version does not allow the parameters under this table to be configured

### UDP

#### *Listener Info*

Displays UDP listener information.

#### *UDP Statistics*

Displays UDP statistics.

### TCP

#### *Connection Info*

Displays TCP connection-specific information.

**Note** - The current firmware version does not allow the Connection Status parameter to be configured.

#### *TCP Statistics*

Displays TCP statistics.

### ICMP Statistics

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view bridge information such as the discard/aging time information, spanning tree info and bridge statistics.

#### *Forwarding Database*

Displays the Forwarding Database table.

#### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

#### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

#### *Statistics*

Displays statistics about frames received/transmitted on the switch port.

## Security Menu

From the Security menu, you can view security settings information.

#### *Authentication Info*

Displays security authentication information.

**Note** - Values for the Radius IP and Radius Key parameters are displayed as octet strings. However, these parameters accept input values in IP address format and text string format respectively.

**Note** - Configuring the parameters under this table will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred." However, new values are still set successfully.

**Note** - Values set on port 3 (wlan0) will also be set on port 6 (wlan1) and vice versa.

**Note** - Device Manager allows the user to enter more than 255 characters for the Radius Key parameter. However, the current firmware version truncates it to 32 characters.

## Wi-Fi Menu

From the Wi-Fi menu, you can view wireless LAN information.

#### *Station Management Attributes*

##### *Station Config*

Displays station configuration attributes.

**Note** - Configuring the Beacon Period parameter will result in the error message: "The error occurred with 'Set' operation. Error: time out occurred." However, the new value is still set successfully.

**Note** - Values for the Desired SSID parameter are displayed as octet strings. However, this parameter accepts input values in text string format.

**Note** - The following parameters are "read-only" and are not configurable:

- Power Management Mode
- Association Response Timeout
- Multi Domain Capability Implemented
- Multi Domain Capability Enabled

#### *Authentication Algorithms*

Displays all the authentication algorithms supported by the stations.

**Note** - Only one authentication algorithm can be enabled at any one time. Setting the Enabled parameter of one algorithm to 'true' will automatically cause the Enabled parameter of the other algorithm to be set to 'false'.

#### *Privacy*

Displays privacy information.

**Note** - The WEP Key Mapping Length and Exclude Unencrypted parameters are not supported by the current firmware version and should be ignored.

#### *Multi Domain Capability*

Displays multi domain capability information.

**Note** - The current firmware version does not allow the parameters under this table to be configured.

### *MAC Attributes*

#### *Operation*

Displays MAC attributes pertaining to the operation of the MAC.

#### *Counters*

Displays attributes that are MAC counters.

### *Resource Type Attributes*

#### *Resource Type ID Name*

Displays resource type id name.

#### *Resource Info*

Displays information that identifies the source of the implementation.

### *PHY Attributes*

#### *Operation*

Displays PHY level attributes concerned with operation.

**Note** - Valid MIB Set values for the Current Regulatory Domain parameter are in the range [0-2147483647] inclusive.

#### *Antenna*

Displays PHY level attributes concerned with Antenna.

**Note** - The current firmware version does not allow the parameters under this table to be configured.

#### *Transmit Power*

Displays transmit power information.

**Note** - The current firmware version does not allow the Current Transmit Power parameter to be configured.

#### *DSSS*

Displays Direct Sequence Spread Spectrum information.

**Note** - The current firmware version does not allow the parameters under this table to be configured.

#### *Supported Regulatory Domains*

Displays the supported regulatory domains the PLCP and PMD support in this implementation.

#### *Antenna List*

Displays antenna list information.

**Note** - The current firmware version does not allow the parameters under this table to be configured.

#### *Supported Transmit Data Rates*

Displays the Transmit bit rates supported by the PLCP and PMD.

#### *Supported Receive Data Rates*

Displays the Receive bit rates supported by the PLCP and PMD.

#### *OFDM*

Displays orthogonal frequency division multiplexing information.

**Note** - The current firmware version does not allow the TI Threshold parameter to be configured.

### *Peer STA Statistics*

**Note** - The Standard and Extended STA Statistics sub-menu options may, at times, not display the correct parameters. Instead, they display the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Standard*

Displays statistics for peer STAs.

#### *Extended STA Statistics*

Displays extra statistics information for peer STAs.

### *Beacon Report*

Displays the current list of Beacon reports that have been received by the MLME.

**Note** - The current firmware version does not return any value for the following parameters:

- Actual Start Time
- Parent TSF
- Target TSF
- Received Elements

**Note** - The Beacon Report sub-menu option may, at times, not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

### *Utilization*

Displays the port's utilization information.

**Note** - The current firmware version does not allow Device Manager to provide port utilization information.

### *Interface Info*

Displays port information such as the number of packets received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The current firmware version does not allow the Administration Status parameter to be configured.



**Note** - The current firmware version returns 'noSuchName' for the following parameters:

- Last Change Time and Date
- Received Non Unicast Packets
- Received Unknown Protocol Packets
- Transmitted Non Unicast Packets

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AT-WA7400

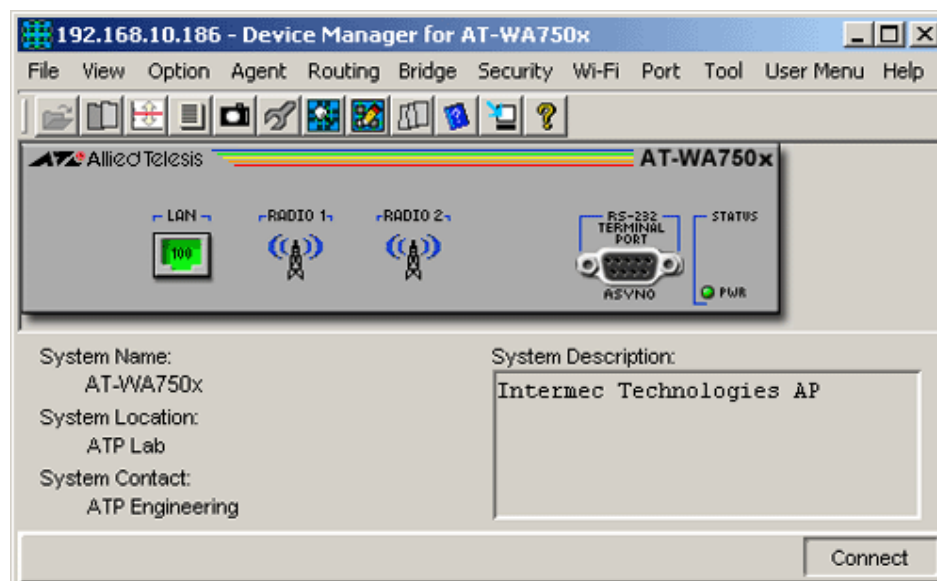
## AT-WA750x Series

This section describes Device Manager menus and operations specific to the AT-WA750x Series of Dual Radio Wireless Access Points.

Topics:

- [Main Window](#)
- [Agent Menu](#)
- [Routing Menu](#)
- [Bridge Menu](#)
- [Security Menu](#)
- [Wi-Fi Menu](#)
- [Port Menu](#)

## Main Window



AT-WA750x

Device Manager LEDs for AT-WA750x		
LED	State	Description
PWR	Green	The switch is receiving power from the main power supply.

**Note** - The current firmware version does not allow Device Manager to reflect the correct speed on the Ethernet port. Expect to see "100" even if the port is actually set to 10Mbps.

## Agent Menu

From the Agent menu, you can view and edit the system information for the switch, or log into the CLI using Telnet.

### *System Info*

Displays basic system information, including system name, location, contact and description.

### *Device Info*

Displays basic device information, including part number, description, revision, serial number, ID, extended serial number.

### *File System*

#### *File System Info*

Displays file system information.

#### *File Segement Info*

Displays file segment information.

#### *File Directory Info*

Displays file directory information.

### *Critical Errors*

#### *Critical Error Log*

Displays Critical Error Log information.

#### *Log Entries*

Displays Critical Error Log entries.

### *SNMP Community Config*

Displays communities and their access privileges.

### *SNMP Trap Target Config*

Displays trap target IP addresses.

**Note** - The current firmware version accepts up to 15 characters for the Name parameter.

### *Power Up Info*

Displays power up information.

### *Software Download*

Displays software download information .

**Note** - The current firmware version accepts up to 79 characters for the Script Filename parameter.

**Note** - The current firmware version does not allow the Start Time parameter to be configured.

*DHCP Info*

Displays information for addresses in the DHCP address pool.

*Event Log*

Displays errors or other notable events that have occurred.

*Telnet*

Starts a Telnet connection to the switch.

*WEB Browser*

Connects to the switch's HTTP server.

## Routing Menu

From the Routing menu, you can view and edit information about the switch's IP routing functions.

*IP*

*ARP Table*

Displays the ARP cache on the switch.

*Address Table*

Displays the list of IP interfaces on the switch.

*Route Table*

Displays the IP routing table on the switch.

**Note** - The current firmware version returns 'noSuchName' for the Routing Protocol MIB parameter.

*IP Statistics*

Displays statistics about IP routing, including the number of IP datagrams received.

*UDP*

*Listener Info*

Displays UDP listener information.

*UDP Statistics*

Displays UDP statistics.

*TCP*

Displays TCP statistics.

### *ICMP Statistics*

Displays ICMP statistics.

## Bridge Menu

From the Bridge menu, you can view bridge information such as the discard/aging time information, spanning tree info and bridge statistics.

### *Forwarding Database*

Displays the Forwarding Database table.

### *Discard/Aging Time Info*

Displays information about the number of address entries that were learned but discarded because either there was a lack of memory or the entry's aging timer expired.

**Note** - The current firmware version does not allow the Aging Time parameter to be configured.

### *Spanning Tree Info*

Displays spanning tree parameters such as priority and cost.

**Note** - The current firmware does not allow the following parameters to be configured:

- Priority
- Root Maximum Aging Time
- Root Hello Time
- Root Forward Delay Time

### *Statistics*

#### *Standard*

Displays statistics about frames received/transmitted on the switch port.

#### *Additional Info*

Displays additional statistical information about the bridge.

### *Route Table*

Displays routing information for child nodes which are reachable via a route.

### *Child Nodes*

Displays bridge information for child nodes which are reachable via a bridge.

### *Address Table*

Displays address information for all OWL nodes in the network.

### *Bridge State*

Displays status information about the bridge.

### *ARP*

#### *Basic Info*

Displays basic Address Resolution Protocol information.

#### *Server Info*

Displays Address Resolution Protocol server information.

## **Security Menu**

From the Security menu, you can view port-based authentication information.

### *Authentication Failure*

Displays the IP address of the station that failed authentication.

### *Security Events*

Displays security-related events that have occurred.

### *IAPP Security*

Displays the Nonce value of the Inter Access Point Protocol.

### *Authentication Status*

Displays Port Access Control Status

### *PAE Port Info*

Displays system level information for each port supported by the PAE.

### *Authenticator PAE Info*

Displays configuration objects for the Authenticator PAE associated with each port.

### *Authenticator PAE Statistics*

Displays statistics objects for the Authenticator PAE associated with each port.

### *Authenticator PAE Diagnostics*

Displays diagnostics objects for the Authenticator PAE associated with each port.

### *Authenticator PAE Session Statistics*

Displays session statistics objects for the Authenticator PAE associated with each port.

### *Supplicant PAE Info*

Displays configuration objects for the Supplicant PAE associated with each port.

### *Supplicant PAE Statistics*

Displays statistics objects for the Supplicant PAE associated with each port.

## Wi-Fi Menu

From the Wi-Fi menu, you can view wireless LAN information.

**Note** - All parameters under this menu option are "read only" and are not configurable.

### *Station Management Attributes*

#### *Station Config*

Displays station configuration attributes.

**Note** - AT-WA7501: The Station Config sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Authentication Algorithms*

Displays all the authentication algorithms supported by the stations.

### *MAC Attributes*

#### *Operation*

Displays MAC attributes pertaining to the operation of the MAC.

#### *Counters*

Displays attributes that are MAC counters.

### *Resource Type Attributes*

#### *Resource Type ID Name*

Displays the name of the Resource Type ID managed object.

#### *Resource Info*

Displays information that identifies the source of the implementation.

### *PHY Attributes*

#### *DSSS*

Displays attributes for Direct Sequencing Spread Spectrum.

**Note** - AT-WA7501: The DSSS sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Supported Regulatory Domains*

Displays the supported regulatory domains the PLCP and PMD support in this implementation.

#### *Supported Transmit Data Rates*

Displays the Transmit bit rates supported by the PLCP and PMD.

**Note** - AT-WA7501: The Supported Transmit Data Rates sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *Supported Receive Data Rates*

Displays the Receive bit rates supported by the PLCP and PMD.

**Note** - AT-WA7501: The Supported Receive Data Rates sub-menu option does not display the correct parameters. Instead, it displays the sub-menu option name as a parameter with a value of 'noSuchName'.

#### *OFDM*

Displays attributes for Orthogonal Frequency Division Modulation.

## Port Menu

From the Port menu, you can view and edit MIB information about selected ports.

#### *Utilization*

Displays the port's utilization information.

#### *Interface Info*

##### *Standard*

Displays port information such as the number of packets received and transmitted on the port, bytes received and transmitted on the port, and port status.

**Note** - The current firmware version does not allow the Administration Status parameter to be configured.

##### *Extended Interface Info*

Displays additional port information.

##### *Port State Info*

Displays port status information.

##### *Port Statistics*

Displays port statistics.

##### *Port Transmit Queue Info*

Displays port transmit queue information.

##### *Pending Message Info*

Displays pending messages information.

#### *Error Statistics*

Displays error statistics for the ethernet port.



**Note** - The Ethernet Chip Set parameter is not applicable to the AT-WA750x series and should be ignored.

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AT-WA750x Series

## Port Interface Cards

This section describes the Port Interface Cards supported in Device Manager.

If one of these PICs is installed in a PIC bay or in a [Network Service Module \(NSM\)](#) of a device, it will be displayed in the PIC bay image or NSM image of the device panel in the main window.

### AT-AR020



LED	State	Description
B DATA	Green	HDLC packets are being exchanged between the switch or router and another end system device (normally another switch or router) over any of the B (data) channels.
	Gray	No packet transmission over B channel.

### AT-AR021



LED	State	Description
B1 and B2	Green	For permanent circuits, HDLC packets are being exchanged between the switch or router and another end system device (normally another switch or router) over any of the B channel. For on-demand ISDN, there is a call up over the respective B-channel.
	Gray	No packet/data transmission over B-channel.

### AT-AR022 / AT-AR023 / AT-AR024



**Note** - There are no LEDs on these PICs.

### AT-AR026



LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.

**Note** - The four physical ports in this PIC are configured and behave as one ETH port from the viewpoint of the software running on the device.

### AT-AR027



**Note** - There are no LEDs on this PIC.

## Network Service Modules

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This section describes the Network Service Modules (NSMs) supported in Device Manager.

If one of these NSMs is installed in an NSM bay of a device, it will be displayed in the NSM bay image of the device panel in the main window. The operations available for the main device includes the ports in any of these NSMs.

### AT-AR040



4-PIC slot NSM

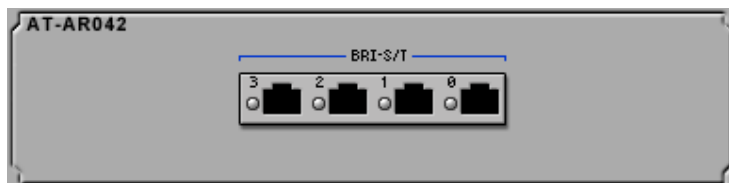
**Note** - Up to four [Port Interface Cards](#) can be installed in the AT-AR040 NSM.

**Note** - There are no LEDs on this NSM.

### AT-AR041 and AT-AR042



8-port BRI-S/T NSM



4-port BRI-S/T NSM

LED	State	Description
"DATA"	Orange	For permanent circuits, HDLC packets are being exchanged between the switch or router and another TE end system device (normally another switch or router) over the respective B-channel. For on-demand ISDN, there is a call up over the respective B-channel.
	Gray	No packet/data transmission over B-channel.

Network Service Modules

## Uplink Modules

This section describes the Uplink Modules that can be installed on a switch. If one of these uplink modules is installed in an uplink bay of a switch, it will be displayed in the uplink bay image of the device panel in the main window. The operations available for the main device include the ports in any of these uplink modules.

### AT-AIx



LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.

### AT-A16/AT-A17/AT-A19



**Note** - This image is only used on devices whose firmware does not allow Device Manager to differentiate the AT-A16, AT-A17 and AT-A19 uplink modules from each other.

LED	State	Description
DUPLEX	Green	The port is operating at full- duplex.
	Orange	The port is operating at half-duplex.

### AT-A35



**Note** - There are no LEDs on these modules.

### AT-A39/T



LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.

**Note** - Earlier versions of the AT-A39/T uplink module can only operate at 1000 Mbps.

### AT-A4x



LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.



### AT-STACKM



**Note** - There are no LEDs on this module.

### AT-A45/AT-A47/AT-STACKM



**Note** - There are no LEDs on this module.

**Note** - This image is only used on devices whose firmware does not allow Device Manager to differentiate the AT-A45, AT-A47 and AT-STACKM uplink modules from each other.

### AT-A60/AT-A60i (AT-XEM-1XP)



**Note** - There are no LEDs on these modules.

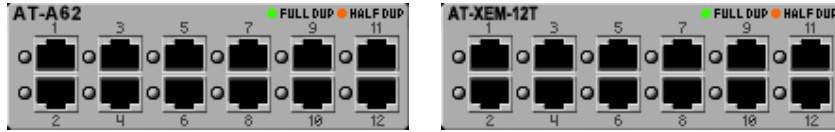
### AT-A61/AT-A61i (AT-XEM-12S)



**Note** - There are no LEDs on these modules.



## AT-A62/AT-A62i (AT-XEM-12T)



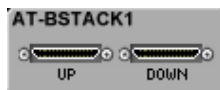
LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.

## AT-B1x



LED	State	Description
DUPLEX	Green	The port is operating at full-duplex.
	Orange	The port is operating at half-duplex.

## AT-BSTACK I



**Note** - There are no LEDs on this module.

## AT-XP9700



**Note** - There are no LEDs on this module.

Uplink Modules



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