

# AlliedView™-EMS 3.11

## VLAN MANAGER USER'S GUIDE

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## I Overview

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VLAN Manager is a tool that enables you to configure VLANs on a device using a graphical user interface (GUI) or by importing VLAN definitions from a file.


### Topics

- [Starting VLAN Manager](#)
- [Main Window](#)
- [Basic Operations](#)
- [Menus](#)
- [Device Support](#)

## 2 Starting VLAN Manager

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VLAN Manager can be started from Device Manager or from the command line. In a Windows environment, VLAN Manager can be started from the AlliedView-EMS program folder or from the Run command of the Start menu.

You can start VLAN Manager from Device Manager by clicking on **Tool > VLAN Manager** on the main menu or by clicking on the VLAN Manager icon  on the toolbar. If Device Manager is connected to a device, target host information is automatically passed on to VLAN Manager so that the VLAN configuration of the device can be retrieved and displayed in VLAN Manager's main window.

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2 Starting VLAN Manager

## 3 Main Window

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When started, VLAN Manager displays one of the following windows, depending on how it is started.

Topics:

- [Initial Window](#)
- [VLAN Information Window](#)

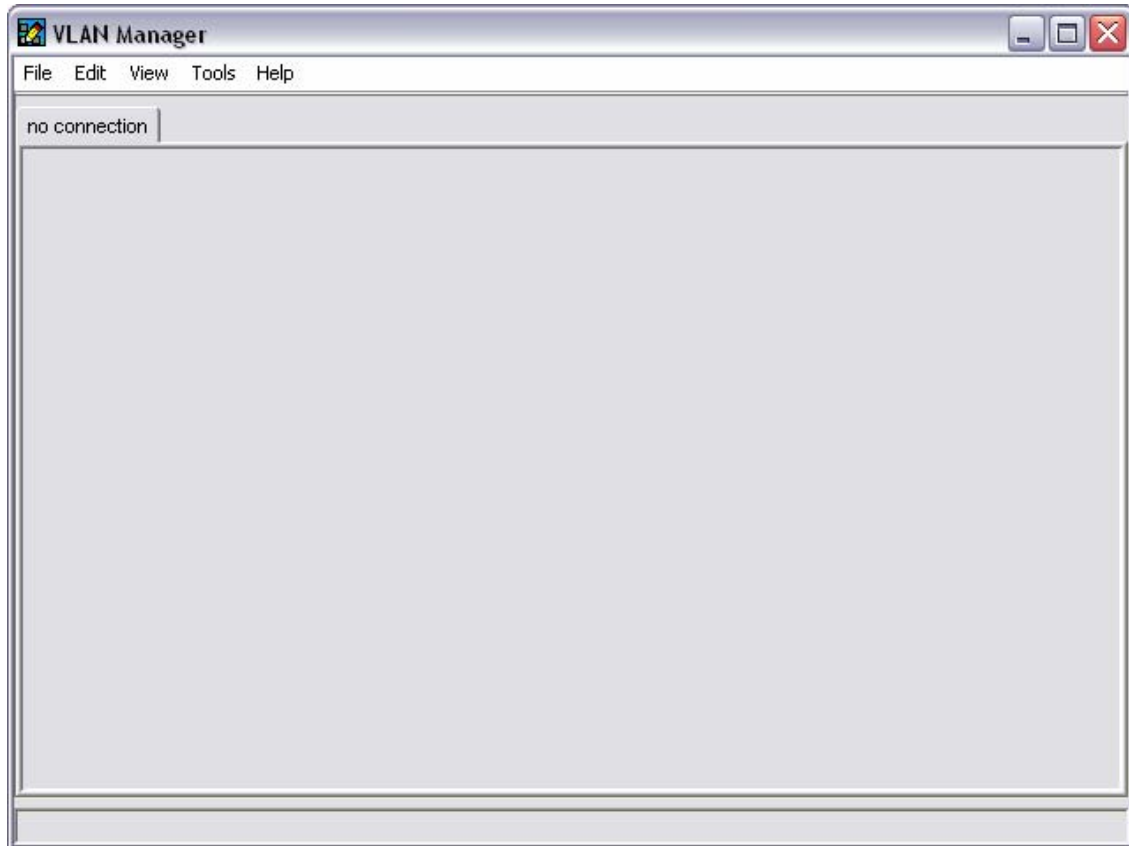
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3 Main Window

## 3.1 Initial Window

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If the target host is not specified, or if one or more connection parameters do not match what is configured on the host, the following window appears.



*Initial Window*

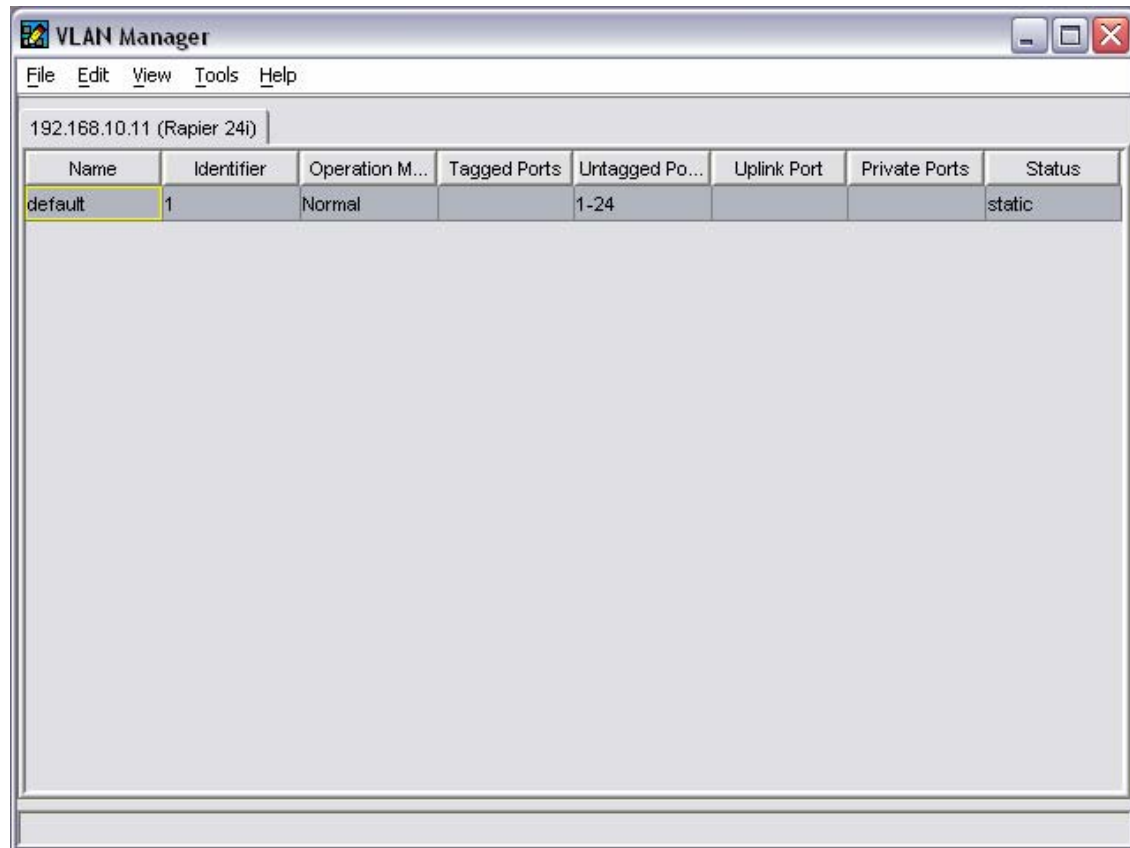
To specify a target host from this window, select **File > Open**. If the target host is a device model that is supported by VLAN Manager, the VLAN Information Window displaying the target host's VLAN configuration will appear.

---

3 Main Window

## 3.2 VLAN Information Window

When a target host is specified and VLAN Manager recognizes it as a device model that it supports, the following window appears.



*VLAN Information Window*

The menu bar provides access to VLAN Manager's operations.

The VLAN Information Window displays the VLAN configuration of the device being managed. Information is organized in a table format with each row representing one VLAN definition and each column representing one attribute of the VLAN. VLAN attributes displayed differ from one device series to another. Refer to [Section 6 - Device Support](#) for the specific attributes displayed for each device series.

## 4 Basic Operations

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This chapter discusses the basic operations within VLAN Manager windows.

### Topics

- [Selecting VLAN Definitions](#)
- [Device Panel](#)
- [VLAN Configuration Files](#)

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4 Basic Operations

## 4.1 Selecting VLAN Definitions

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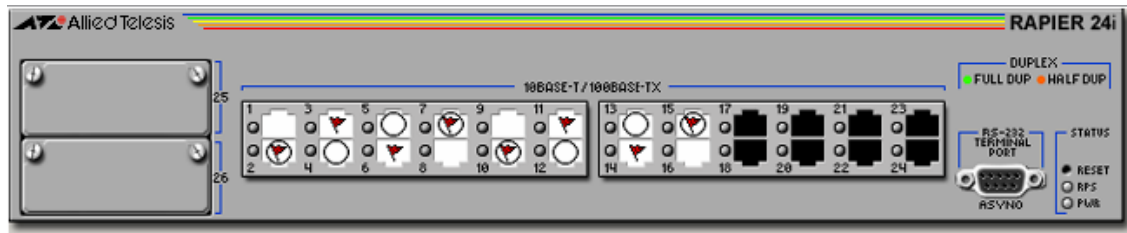
To select a VLAN definition in the VLAN Information Window or the Import VLAN dialog box, click on a row. To select multiple contiguous VLAN definitions, hold down the *Shift* key while clicking on the desired VLAN definitions. To select multiple non-contiguous VLAN definitions, hold down the *Ctrl* key while clicking on the desired VLAN definitions.

---

## 4.2 Device Panel

A device panel that reflects the actual ports available on the target host is used to create or modify a VLAN definition.

**Note** - The AT-A48/SC, AT-A48/MT and AT-A49 Expansion Modules for the AT-8350GB are not supported and will not show up on the device panel.








Device Panel

**Note** - For device models with redundant ports, use the RJ-45 ports to associate redundant ports to a VLAN.











**Note** - Rel 2.9.1 of the AT-8800 series firmware does not return the correct connector type for the GBIC ports. As a result, ports 25 and 26 of the AT-8824 and ports 49 and 50 of the AT-8848 will always display a copper port image even if the GBIC that is physically inserted in the GBIC slot has a fiber interface.

A port can be in any of the following states:






Port Image	State	Description
	Not Selected	This port does not belong to the VLAN.
	Selected	<p>This port is an <i>untagged</i> member of the VLAN.</p> <p><b>Note</b> - For the AT-8200XL Series, this port is considered a <i>member</i> of the VLAN.</p> <p><b>Note</b> - For the AT-8600, AT-8700XL, AT-8800 and Rapiere series, this port is a <i>private untagged</i> member of the Private VLAN.</p> <p><b>Note</b> - For the AT-8900 and AT-9900 series, this port is either a <i>private untagged</i> member of the Private VLAN or a <i>customer</i> port of the Nested VLAN.</p>
	Flagged	<p>This port is a <i>tagged</i> member of the VLAN.</p> <p><b>Note</b> - For the AT-8200XL Series, this port is considered an</p>



Port Image	State	Description
		<p>untagged (port-based) member of the VLAN.</p> <p><b>Note</b> - For the AT-8600, AT-8700XL, AT-8800 and Rapier series, this port is a <i>private tagged</i> member of the Private VLAN.</p> <p><b>Note</b> - For the AT-8900 and AT-9900 series, this port is either a <i>private tagged</i> member of the Private VLAN or a <i>core</i> member of the Nested VLAN.</p>
	Selected	<p><b>Note</b> - For the AT-8600, AT-8700XL, AT-8800, Rapier, AT-8900 and AT-9900 series, this port is an <i>uplink untagged</i> member of the Private VLAN.</p> <p><b>Note</b> - For the AT-9700, this port is a <i>forbidden</i> member of the VLAN.</p>
	Flagged	<p><b>Note</b> - For the AT-8600, AT-8700XL, AT-8800, Rapier, AT-8900 and AT-9900 series, this port is an <i>uplink tagged</i> member of the Private VLAN.</p>

Clicking on a *port* will change its state as follows:













Current State	New State
	
	
	
	
	

For the AT-8000S Series, a port can be in any of the following states:

Port Image	State	Description
	Not Selected	This port does not belong to the VLAN.
	Selected	This port is an <i>access untagged</i> member of the VLAN.
	T-Selected	This port is a <i>trunk untagged</i> member of the VLAN.
	T-Flagged	This port is a <i>trunk tagged</i> member of the VLAN.
	G-Selected	This port is a <i>general untagged</i> member of the VLAN.

Port Image	State	Description
	G-Flagged	This port is a <i>general tagged</i> member of the VLAN.
	Forbidden	This port is a <i>forbidden</i> member of the VLAN.

Clicking on a *port* will change its state as follows:

Current State	New State
	
	
	
	
	
	

## 4.3 VLAN Configuration Files

---

VLAN Configuration Files are Comma Separated Value (CSV) files containing VLAN definitions and are used by the **Import VLAN** and **Export VLAN** functions.

The format of the VLAN Configuration File is as follows:

```
VLAN_Entry1_Name, VLAN_Entry1_Identifier, attribute1,  
attribute2, etc.
```

```
VLAN_Entry2_Name, VLAN_Entry2_Identifier, attribute1,  
attribute2, etc.
```

```
and so on...
```

VLAN attributes will differ in number, order and allowed values from one device series to another. Refer to [Section 6 - Device Support](#) for details on the attributes applicable to each device series.

**Note** - VLAN Manager does not support the reserved word "ALL" for the Tagged Ports attribute. The VLAN definition will not be imported successfully if "ALL" is used.

The following is an example of a VLAN Configuration File for the Rapier 24i device that contains two (2) VLAN definitions:

```
prod,2,Private,"","10,12,14","12","10,14"
```

```
test,3,Normal,"20-21","19,22","",""
```

## 5 Menus

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This chapter describes the items on VLAN Manager's main menu.

Topics:

- [File](#)
- [Edit](#)
- [View](#)
- [Tools](#)
- [Help](#)

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5 Menus

## 5.1 File

---

The File menu lets you connect to and disconnect from a target host, check the properties of the target host, or exit VLAN Manager.

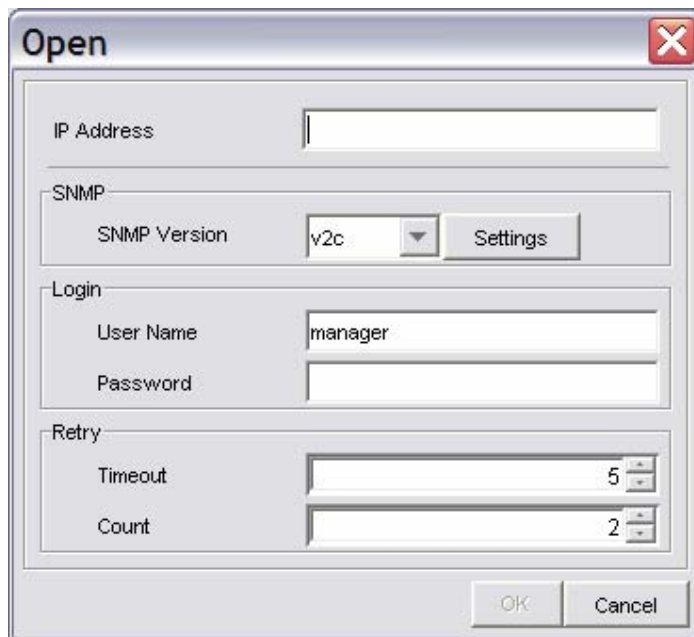
Topics:

- [Open](#)
- [Close](#)
- [Properties](#)
- [Exit](#)

### 5.1.1 Open

This option allows you to specify a target host to connect to. When you select **File > Open**, the following dialog box appears. To connect to the device, fill in parameters in the dialog box, and click OK.

**Note** - This option is not available if VLAN Manager is already connected to a target host.



*Open dialog box*

#### *IP Address*

This is the Host Name or IP Address of the target host.

## SNMP

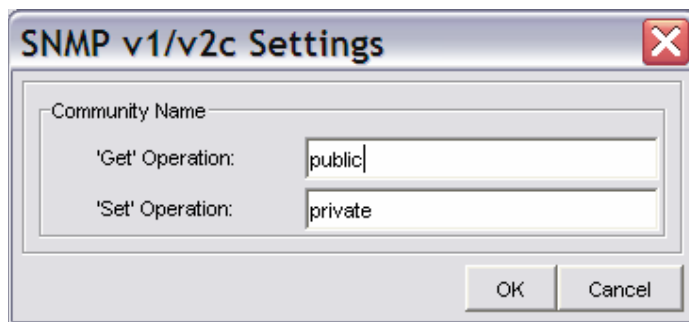
### Version

This drop down list allows you to select the SNMP version to use in managing the target device.

**Note** - Before choosing "v2c" or "v3", make sure that the target device you are connecting to supports SNMP v2c and/or SNMP v3 respectively.

### Settings

If the Version is set to "v1" or "v2c", this button opens the SNMP v1/v2c Settings window. Otherwise, if the Version is set to "v3", this button opens the SNMP v3 Settings window.



SNMP v1/v2c Settings dialog box

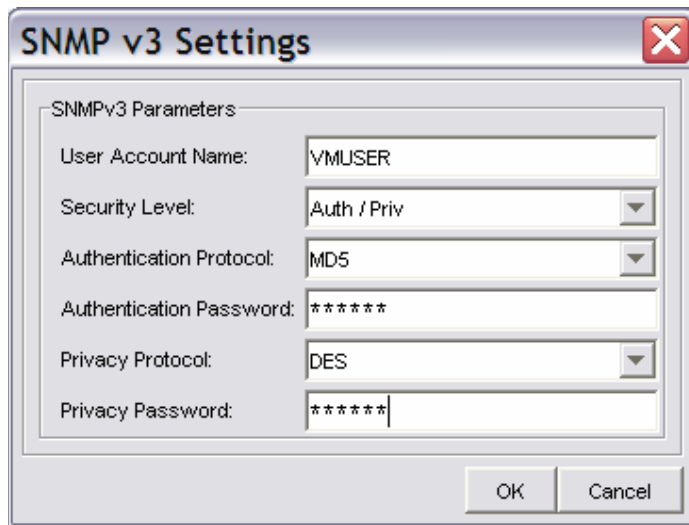
### Community Name

The community strings to use in performing SNMP operations on the target host. There are two types of community strings for SNMP. Be sure to specify strings which match the ones configured on the target host.

By default, the following strings are used:

*for the 'Get' operation*  
public

*for the 'Set' operation*  
private



SNMP v3 Settings dialog box

#### *User Account Name*

This is the SNMPv3 User Account to be used for accessing the MIB of the target device. Make sure to specify a User Account that has already been configured on the target device.

#### *Security Level*

This is the Security Level for the User Account Name that you have specified. Make sure to set the Security Level that is configured for the User Account Name on the target device.

These are the available Security Levels:

#### *No Auth / No Priv*

This Security Level uses no authentication and no privacy.

#### *Auth / No Priv*

This Security Level uses authentication without privacy.

#### *Auth / Priv*

This Security Level uses authentication and privacy.

#### *Authentication Protocol*

If the Security Level is "Auth / No Priv" or "Auth / Priv", you need to specify an Authentication Protocol that is configured for the User Account Name on the target device.

These are the available Authentication Protocols:

#### *MD5*

Use HMAC-MD5-96 protocol

*SHA*  
Use HMAC-SHA-96 protocol

*Authentication Password*

If the Security Level is "Auth / No Priv" or "Auth / Priv", you need to specify an Authentication Password that is configured for the User Account Name on the target device.

*Privacy Protocol*

If the Security Level is "Auth / Priv", you need to specify a Privacy Protocol. This is the available Privacy Protocol:

*DES*

Use Data Encryption Standard

*Privacy Password*

If the Security Level is "Auth / Priv", you need to specify a Privacy Password that is configured for the User Account Name on the target device.

*Login*

*User Name*

This is the account name to be used to log in to the device. By default, this field is set to *manager*. This field is used for non-L2 devices only. For L2 devices, this field is ignored.

*Password*

This is the password for the account to be used. This field is used for non-L2 devices only. For L2 devices, this field is ignored.

*Retry*

*Timeout*

The number of seconds VLAN Manager waits before it determines that the device is not responding. By default, this value is set to *5 seconds*.

*Count*

The number of times VLAN Manager sends SNMP messages to the agent before giving up. By default, this value is set to *2 retries*.

## 5.1.2 Close

This option closes the active connection with the device and empties the **VLAN Information Window**.

**Note** - This option is not available if VLAN Manager is not yet connected to a device.

### 5.1.3 Properties

The Properties dialog box allows you to modify the connection settings for the connected device. The Properties dialog box is identical to the Open dialog box used to open a connection. See [Section 5.1.1 - Open](#).

**Note** - This option is only available if VLAN Manager is already connected to a target host.

### 5.1.4 Exit

This option terminates connection to the target host and closes the VLAN Manager application.

## 5.2 Edit

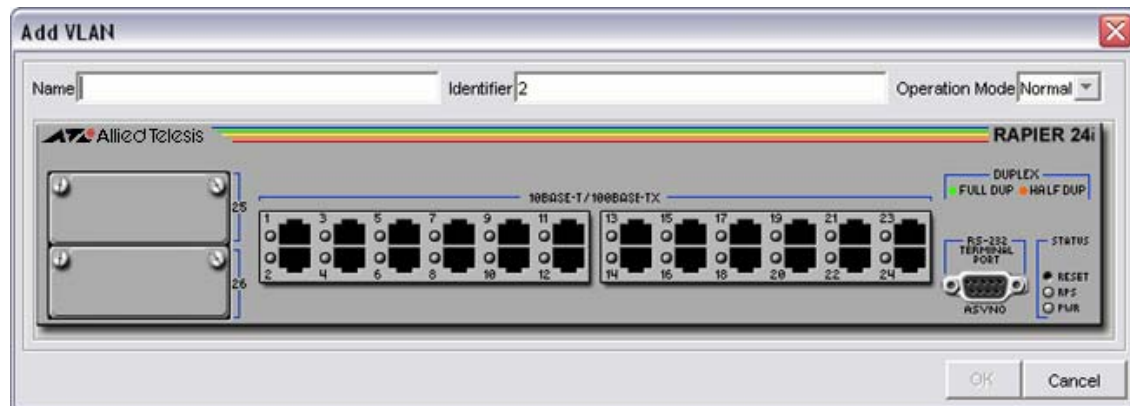
The Edit menu lets you modify the VLAN configuration of the currently connected device. You can also save the VLAN configuration of the device to a file.

Topics:

- [Add VLAN](#)
- [Modify VLAN](#)
- [Delete VLAN](#)
- [Update VLAN Mode](#)
- [Import VLAN](#)
- [Export VLAN](#)

### 5.2.1 Add VLAN

This option opens the Add VLAN dialog box that allows you to create a VLAN definition.



Add VLAN dialog box

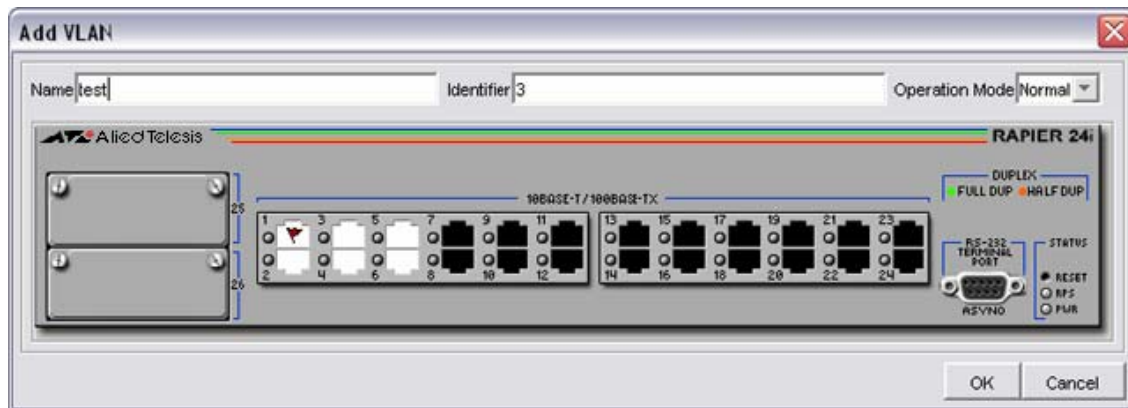
#### 5.2.1.1 Input Fields

The *Input Fields* are the attributes that serve as VLAN creation parameters. These fields differ from one device family to another. In the illustration above, the device panel shown is for a Rapier 24i. Since the required *Input Fields* for the Rapier Family are *Name*, *Identifier*, and *Operation Mode*, these are the fields that are displayed in the Add VLAN dialog box.

Refer to [Section 6 - Device Support](#) for details on the specific *Input Fields* available for each device family.

### 5.2.1.2 Adding/Removing Ports

You can add ports to or remove ports from a VLAN definition by clicking on the port images on the device panel. Refer to [Section 4.2 - Device Panel](#) for details on how to specify tagged and untagged ports, uplink untagged and uplink tagged ports, private untagged and private tagged ports, core and customer ports and to unselect ports.

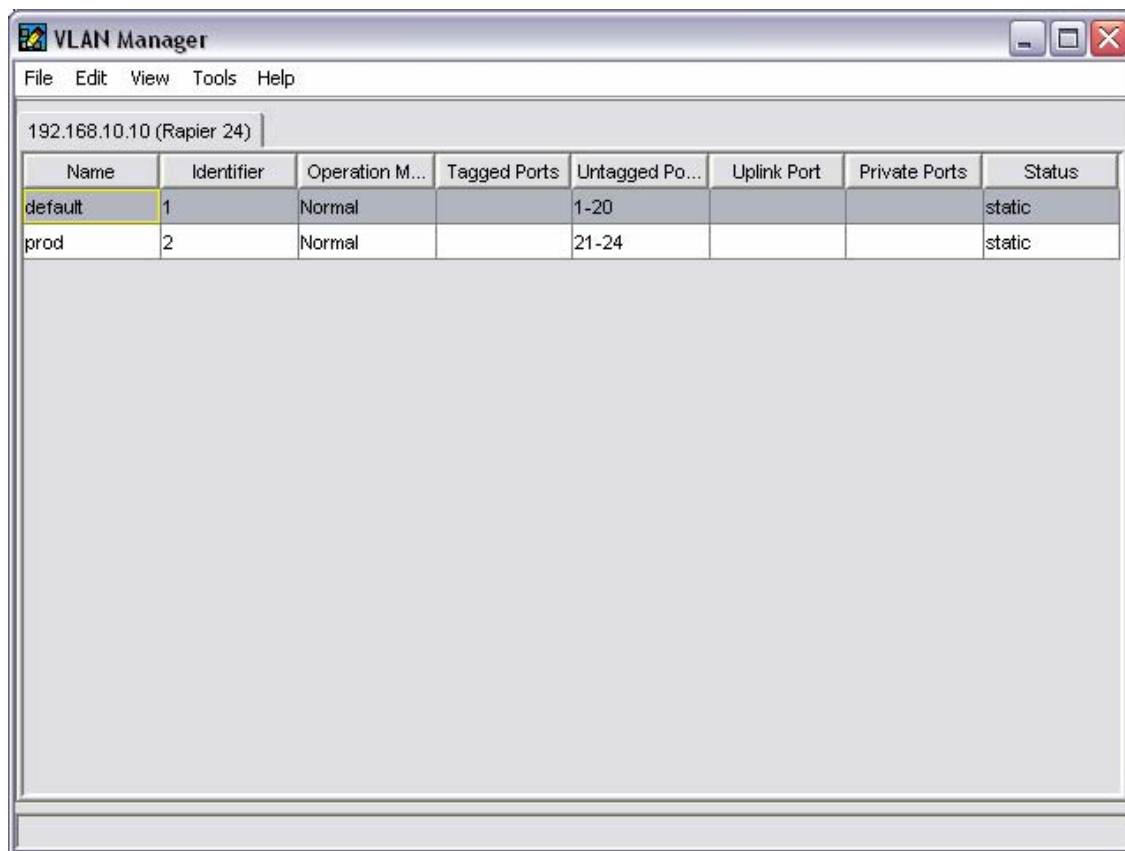


*Adding/Removing Ports*

In the illustration above, a new VLAN definition is being created for a Rapiere 24i. The VLAN Name is "test" while its Identifier is "3". Ports 2 to 6 are untagged members while Port 1 is a tagged member of the VLAN.

### 5.2.1.3 OK Button

The OK Button is disabled by default. It is only enabled when both the Name and Identifier fields are populated. When the OK button is clicked, VLAN Manager adds the new VLAN definition to the target host and updates the **VLAN Information Window**.



*New VLAN definition added to VLAN Information Window*

After clicking the *OK* button, the new Add VLAN dialog will be closed and the new VLAN entry will be added to the Main window's Information Pane.

### 5.2.1.4 Cancel Button

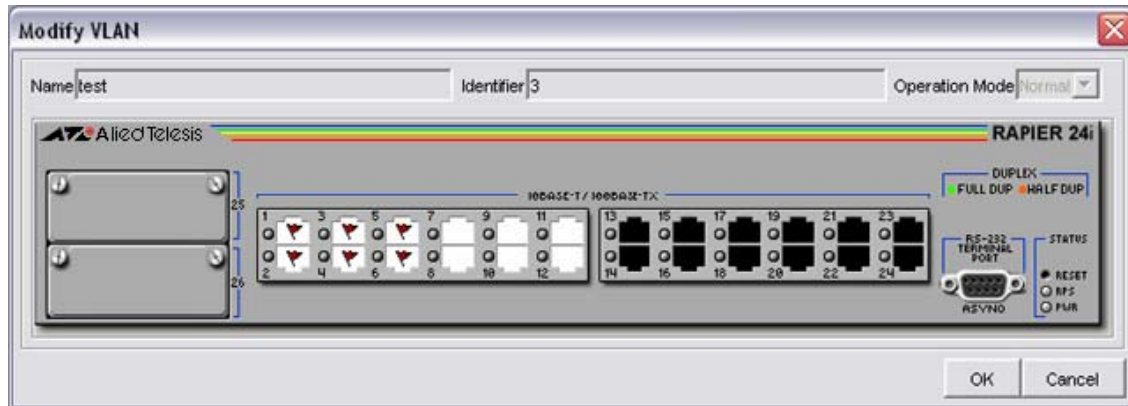
The Cancel Button cancels the Add VLAN operation and closes the Add VLAN dialog box.

### 5.2.2 Modify VLAN

This option opens the Modify VLAN dialog box that allows you to change specific attributes of a VLAN.

**Note** - This option is only available if a VLAN definition is selected.

Refer to [Section 4.1 - Selecting VLAN Definitions](#) for details on how to select a VLAN definition.



Modify VLAN dialog box

### 5.2.2.1 Input Fields

The *Input Fields* are attributes of the VLAN definition to be modified. Depending on the device, one or more of the fields may be disabled and cannot be modified.

Refer to [Section 6 - Device Support](#) for details on the specific attributes that can and cannot be modified for each device series.

### 5.2.2.2 Modifying Ports

You can add ports to or remove ports from a VLAN definition by clicking on the port images on the device panel. Refer to [Section 4.2 - Device Panel](#) for details on how to specify tagged and untagged ports, uplink untagged and uplink tagged ports, private untagged and private tagged ports, core and customer ports and to unselect ports.

### 5.2.2.4 OK Button

When the OK Button is clicked, VLAN Manager updates the VLAN definition in the target host and in the **VLAN Information Window**.

### 5.2.2.5 Cancel Button

The Cancel Button cancels the Modify VLAN operation and closes the Modify VLAN dialog box.

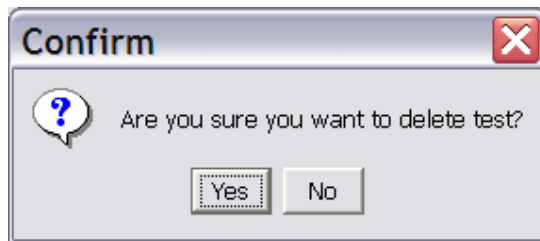
## 5.2.3 Delete VLAN

This option displays a delete VLAN confirmation dialog box.

**Note** - This option is only available if a VLAN definition other than the default VLAN is selected.

**Note** - You may select multiple VLAN definitions (except for the default VLAN) for deletion.

Refer to [Section 4.1 - Selecting VLAN Definitions](#) for details on how to select multiple VLAN definitions.



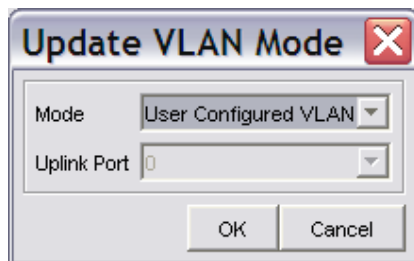
Delete VLAN confirmation dialog box

To remove the selected VLAN definition(s) from the target host and the *VLAN Information Window*, click Yes.

## 5.2.4 Update VLAN Mode

This option opens the Update VLAN Mode dialog box.

**Note** - This option is only available to the AT-8000 Series, AT-8200XL Series, AT-8400, AT-8500 Series, and AT-9400 Series.



Update VLAN Mode dialog box

### Mode

Sets the VLAN Mode for the device. The available options are:

- User Configured VLAN
- Multiple VLAN
- 802.1Q Multiple VLAN

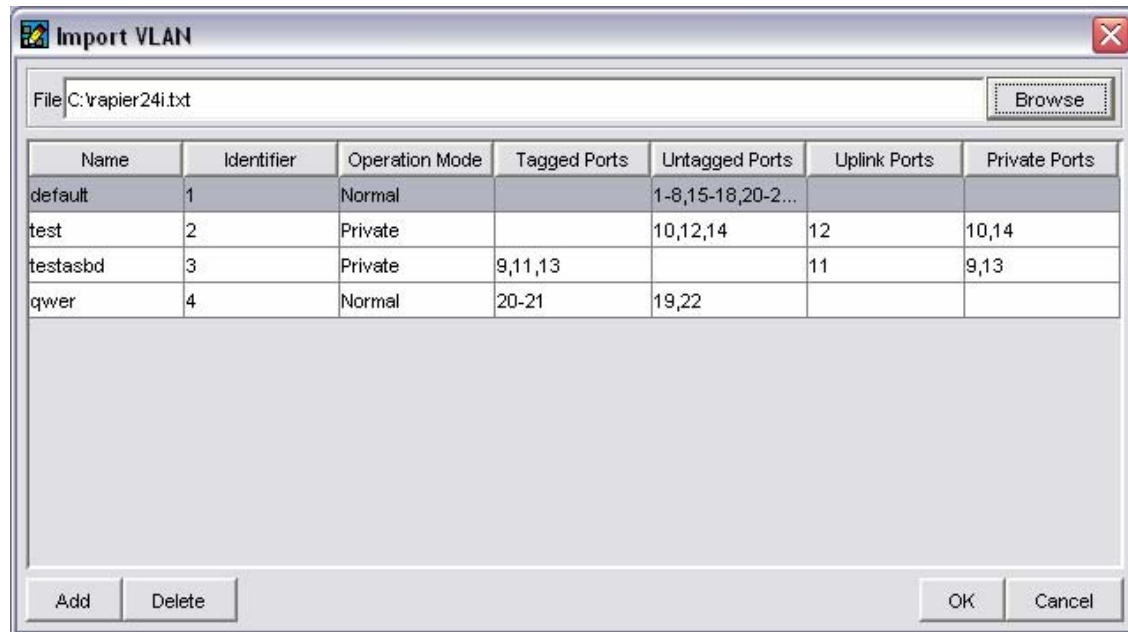
### Uplink Port

Designates a port as the uplink port that can be connected to a shared device.

**Note** - This field does not apply to the AT-8200XL Series.

## 5.2.5 Import VLAN

This option opens the Import VLAN dialog box that allows you to import VLAN definitions from a VLAN Configuration File, modify the VLAN entries, and overwrite the existing VLAN entries on the currently connected device.



Import VLAN dialog

**Note** - Make sure that VLAN Names specified in VLAN Configuration Files do not contain commas. VLAN Manager will ignore all device definitions that specify VLAN Names containing commas.

**Note** - SNMPv3: When an excluded VLAN record is included in the list of VLANs to import, the excluded VLAN record is deleted from the original VLAN configuration even if the Import VLAN operation does not succeed. This applies to the AT-9400 and AT-8500 series of devices.

### 5.2.5.1 File Field and Browse Button

You may specify a VLAN Configuration File (full path) in the *File field*. Alternatively, you can use the *Browse* button to locate the VLAN Configuration File to use. Once a valid VLAN Configuration File has been specified, the *VLAN Definitions Table* will be populated with the VLAN definitions contained in the file. You may then manually edit the definitions within the table.

**Note** - Be sure to specify a VLAN Configuration File that contains VLAN entries suitable for the currently opened device. Otherwise, the Import VLAN function will fail. Refer to [Section 4.3 - VLAN Configuration Files](#) for more details.

### 5.2.5.2 Add Button

Clicking the Add Button adds an empty row to the *VLAN Definitions Table*. Once a row is added, it can be used to define a new VLAN.

### 5.2.5.3 Delete Button

Clicking on the Delete Button removes the selected row(s) from the *VLAN Definitions Table*.

### 5.2.5.4 OK Button

Once the OK Button is clicked, VLAN Manager deletes all user-configured VLANs from the currently connected device and creates new user-configured VLANs based on the VLANs defined in the *VLAN Definitions Table*.

## 5.2.6 Export VLAN

This option opens a file browser dialog that allows you to specify a destination file and location in which to store exported VLAN definitions. Once a valid file and location is specified, VLAN Manager exports the VLAN definitions displayed in the *VLAN Information Window* to this file in CSV format. This file is then referred to as a VLAN Configuration File that can be used by the Import VLAN function.

## 5.3 View

---

The View menu lets you refresh the contents of the *VLAN Information Window*.

Topics:

- [Refresh](#)

### 5.3.1 Refresh

This option allows you to refresh the *VLAN Information Window* with the latest VLAN configuration of the currently connected device.

**Note** - This option is only available if VLAN Manager is already connected to a target host.

## 5.4 Tools

---

The Tools menu lets you restart the currently connected device.

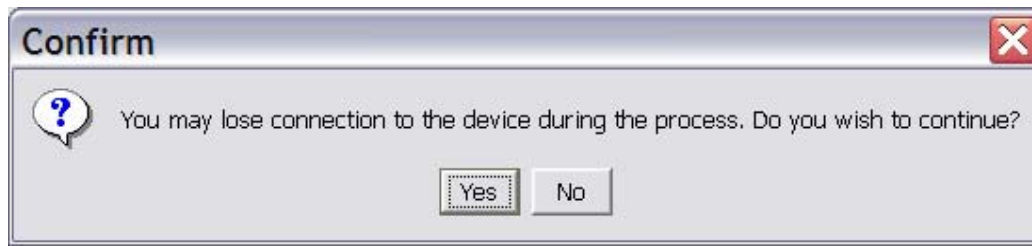
Topics:

- [Restart](#)

### 5.4.1 Restart

This option displays a restart confirmation dialog box.

**Note** - This option is only available if VLAN Manager is already connected to a target host.



*Restart Confirmation dialog box*

To restart the currently connected device, click Yes.

**Note** - During Restart operations, VLAN Manager may encounter a timeout error and display the message: "Unable to communicate. Confirm SNMP settings or login, and if the network is functional." To prevent this error message from appearing, go to File -> Properties and increase the Retry Timeout value.

## 5.5 Help

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The Help menu lets you view the online user's guide as well as some basic information about the application.

Topics:

- [Index](#)
- [About](#)

### 5.5.1 Index

This option displays the main page of the online user's manual.

### 5.5.2 About

This option displays version and copyright information for VLAN Manager. It also displays a list of the currently supported devices.

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5 Menus

## 6 Device Support

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This section describes, on a per device series basis, the specific VLAN attributes displayed in the **VLAN Information Window**, the input fields that are available in the **Add VLAN** and **Modify VLAN** dialog boxes, and any known issues and/or operational notes.

Topics:

- [AT-8000 Series](#)
- [AT-8000S Series](#)
- [AT-8124XL \(v2\)](#)
- [AT-8200XL Series](#)
- [AT-8324](#)
- [AT-8300GB Series](#)
- [AT-8400](#)
- [AT-8500 Series](#)
- [AT-8600 Series](#)
- [AT-8700XL/AT-8800/Rapier Series](#)
- [AT-8900/AT-9900/AT-x900-48 Series](#)
- [AT-9000/24 and AT-9410GB](#)
- [AT-9400 Series](#)
- [AT-9700 Series](#)
- [AT-9800/SwitchBlade Series](#)
- [AT-9900s/AT-x900-24X Series](#)
- [AT-RG600 Series](#)

## 6.1 AT-8000 Series

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.1.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Mirror Port	This is the number of the port on which all VLAN traffic is mirrored.
Status	<p>This indicates the status of the VLAN.</p> <ul style="list-style-type: none"> <li>• active</li> <li>• not in service</li> <li>• not ready</li> <li>• create and go</li> <li>• create and wait</li> <li>• destroy</li> </ul>

### 6.1.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name	<ul style="list-style-type: none"> <li>☐ Alphanumeric characters</li> <li>☐ Underscore ("_")</li> <li>☐ Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	1 - 19 characters
Identifier (cannot	1 - 4094	-

be modified)		
Mirror Port	0-65535 <b>Note</b> - The default value of 0 indicates that there is no port mirror defined for this VLAN.	-

### 6.1.3 Notes

- An uplink port must be specified to change the VLAN Mode to "Multiple VLAN" or to "802.1Q Multiple VLAN". Specifying an incorrect port as the uplink port will cause VLAN Manager to lose connection with the device without any warning. Exercise caution.

## 6.2 AT-8000S Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.2.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Access (Untagged Ports)	This is a list of the untagged member ports of the VLAN whose VLAN membership mode is set to access.
Trunk (Tagged Ports)	This is a list of the tagged member ports of the VLAN whose VLAN membership mode is set to trunk.
Trunk (Untagged Ports)	This is a list of the untagged member ports of the VLAN whose VLAN membership mode is set to trunk.
General (Tagged Ports)	This is a list of the tagged member ports of the VLAN whose VLAN membership mode is set to general.
General (Untagged Ports)	This is a list of the untagged member ports of the VLAN whose VLAN membership mode is set to general.
Forbidden Ports	This is a list of the forbidden member ports of the VLAN.

## 6.2.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Special characters except the following:               <ul style="list-style-type: none"> <li>• Hash Sign ("#")</li> <li>• Period (".")</li> <li>• Colon (":")</li> <li>• Right Angle Bracket ("&gt;")</li> <li>• Question Mark ("?")</li> </ul> </li> </ul>	1 - 32 characters
Identifier (cannot be modified)	2 - 4093	-

## 6.2.3 Notes

- On Import VLAN, VLAN Manager will automatically trim leading/embedded/trailing spaces from VLAN Names.
- For Import operations, ports that are members of a port channel should not be specified individually as forbidden ports of a VLAN in the VLAN configuration file. Doing so will result in a successful import status for the VLAN but the ports are not actually set to Forbidden. To set port channel members to Forbidden, specify the ports as a single unit using the port channel.
- If a port on a Non-Existing device is associated with a port channel, its tool tip text on the Device Panel will continue to show its interface name instead of its port channel number.
- The Default VLAN cannot be imported into or exported from VLAN Manager.
- VLAN Names that contain any of the invalid special characters may cause VLAN Manager to hang. To avoid this, do not use any of the invalid special characters when defining VLAN Names through the CLI.
- Ports or port channels that are General Untagged members of more than one VLAN cannot be associated as Trunk members of another VLAN. Attempting to do so will result in the error message: "Port <port no.> / Channel <channel no.> belongs to multiple untagged VLANs."
- Ports or port channels that are Trunk or General members of more than one VLAN cannot be associated as Access members of another VLAN. Attempting to do so will result in the error message: "Port <port no.> / Channel <channel no.> belongs to multiple VLANs. "

- Ports or port channels that are General members of a VLAN and whose PVID is not set to the default configuration (PVID=1) cannot be associated as Access/Trunk members of another VLAN. Attempting to do so will result in the error message: "Port <port no.>/ Channel <channel no.> is untagged in a VLAN which differs from PVID."
- During an Add/Modify VLAN operation, VLAN Manager processes and configures ports and port channels sequentially. When an error is encountered, succeeding ports and port channels are no longer processed. In a Modify VLAN operation, the port or port channel on which the error occurred will be returned to its original state.
- Any attempt to modify the VLAN membership mode of a port or port channel that is an Access/Trunk/General Untagged member of the Default VLAN to a Trunk/General Tagged member or a Forbidden member will result in the error message: "Forbidden or Tagged Member not allowed in Default VLAN."
- After initiating a Restart operation, VLAN Manager will continuously attempt to connect to the device for up to 1 minute until a connection is established. If a minute has elapsed and connection has still not been established, an error message will be displayed.
- It may take a while for VLAN Manager to retrieve or save VLAN information from/to the AT-8000S, especially if the device is in stack mode.
- The current firmware version allows you to pre-configure switches that may be added to the stack in the future. Pre-configured switches are identified by a "Non-Existing" label that appears above the device panel in the Add VLAN and Modify VLAN dialog boxes. Ports on pre-configured switches can be included in a VLAN provided they are not members of a port channel. Any attempt to associate a pre-configured switch port that is a member of a port channel to a VLAN will result in the error message: "Port <port no.> belongs to a Port-Channel."

## 6.3 AT-8124XL (v2)

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.3.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• idle</li> <li>• operational</li> <li>• under-construction</li> <li>• not-operational</li> </ul>

### 6.3.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name	- Alphanumeric characters - Underscore ("_") - Dash ("-")	0 - 20 characters
Identifier	1 - 4094	-

### 6.3.3 Notes

- The current firmware version does not allow the Default VLAN to be modified. As a result, all VLAN Manager operations involving the Default VLAN will fail.

## 6.4 AT-8200XL Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.4.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Member Ports	This is a list of the member ports of the VLAN.
Untagged Ports	This is a list of the untagged (port-based) member ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• idle</li> <li>• operational</li> <li>• under-construction</li> <li>• not-operational</li> </ul>

### 6.4.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash (" - ")</li> </ul>	0 - 20 characters
Identifier	1 - 4094	-

### 6.4.3 Notes

- Attempting to modify the Default VLAN will result in the error message "An error occurred during the operation. Error: Bad Value."

- If the VLAN Mode of the device is set to "Multiple VLAN", VLAN Manager will display an error message and will not be able to display VLAN definitions in the VLAN Information window.
- During an Import VLAN operation, all valid VLAN definitions will be imported successfully except for the Default VLAN.
- VLAN Manager will report a successful import of a VLAN definition even if the VLAN definition contains out-of-range member ports.

## 6.5 AT-8324

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)

### 6.5.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
<Stack ID> - Tagged Ports	This is a list of the tagged member ports of the VLAN that belong to a specific module on the stack.
<Stack ID> - Untagged Ports	This is a list of the untagged member ports of the VLAN that belong to a specific module on the stack.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"><li>• active</li><li>• not in service</li><li>• not ready</li><li>• create and go</li><li>• create and wait</li><li>• destroy</li></ul>

## 6.5.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash (" - ")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	1 - 19 characters
Identifier (cannot be modified)	1 - 2048	-

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6 Device Support

## 6.6 AT-8300GB Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.6.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
<Stack ID> - Tagged Ports	This is a list of the tagged member ports of the VLAN that belong to a specific module on the stack.
<Stack ID> - Untagged Ports	This is a list of the untagged member ports of the VLAN that belong to a specific module on the stack.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• idle</li> <li>• operational</li> <li>• under-construction</li> <li>• not-operational</li> </ul>

### 6.6.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name	- Alphanumeric characters - Underscore ("_") - Dash ("-")	0 - 32 characters
Identifier	1 - 4094	-

### 6.6.3 Notes

- Ports in the Default VLAN cannot be changed from untagged to tagged.
- VLAN definitions that only contain tagged ports cannot be deleted.
- The Retry Timeout value may have to be increased depending on the number of devices on the stack; otherwise, Add VLAN and Modify VLAN operations may fail.

## 6.7 AT-8400

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.7.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Type	This indicates the type of the VLAN. <ul style="list-style-type: none"> <li>• Port Based</li> <li>• MAC Based</li> <li>• Multiple</li> <li>• Multiple 802.1Q</li> </ul>
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• active</li> <li>• not in service</li> <li>• not ready</li> <li>• create and go</li> <li>• create and wait</li> <li>• destroy</li> </ul>

## 6.7.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p>	1 - 19 characters
Identifier (cannot be modified)	1 - 4094	-

## 6.7.3 Notes

- An uplink port must be specified to change the VLAN Mode to "Multiple VLAN" or to "802.1Q Multiple VLAN". Specifying an incorrect port as the uplink port will cause VLAN Manager to lose connection with the device without any warning. Exercise caution.
- Modifying the default VLAN definition will cause all other VLAN definitions to be deleted. When this happens, the device will need to be restarted.

## 6.8 AT-8500 Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.8.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• active</li> <li>• not in service</li> <li>• not ready</li> <li>• create and go</li> <li>• create and wait</li> <li>• destroy</li> </ul>

### 6.8.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name	- Alphanumeric characters - Underscore ("_") - Dash ("-") <b>Note</b> - VLAN names must contain at least one (1) alphabet character.	1 - 20 characters
Identifier (cannot be modified)	1 - 4094	-

### 6.8.3 Notes

- The current firmware version does not allow VLAN Manager to distinguish between Protected VLANs, Mac-based VLANs and standard Port-based VLANs. As a result, VLAN Manager will display and treat Protected VLANs and Mac-based VLANs as if they were standard Port-based VLANs. Furthermore, modifying a Protected VLAN or a Mac-based VLAN will convert that VLAN into a standard Port-based VLAN.
- An uplink port must be specified to change the VLAN Mode to "Multiple VLAN" or to "802.1Q Multiple VLAN". Specifying an incorrect port as the uplink port will cause VLAN Manager to lose connection with the device without any warning. Exercise caution.
- The current firmware version does not allow the Default VLAN to be modified. As a result, all VLAN Manager operations involving the Default VLAN will fail.
- For 20-character VLAN Names entered via telnet, only the first 19 characters are registered in VLAN Manager.
- AT-8550xx : Changing the VLAN Mode parameter setting from '802.1Q Multiple VLAN' to a different mode may result in the error message: "Unable to communicate. Confirm SNMP settings or login, and if the network is functional." However, VLAN Mode is still set to the new mode successfully. To prevent this error message from reappearing, go to File -> Properties and increase the Retry Timeout value.
- For the VLAN Name parameter, the current firmware version allows up to 19 characters to be entered via SNMP and up to 20 characters via telnet. Since VLAN Manager is an SNMP-based application, the 19-character limit will apply to all operations involving VLAN Name.
- AT-8550xx : The current firmware version does not allow VLAN Manager to perform Add VLAN, Modify VLAN and Import VLAN operations that involve ports 33 to 50. Attempting to perform such operations will result in the error message: "An error occurred during the operation. Error: Wrong value."
- As a general rule, no two VLANs can have the same name. However, using an SNMPv3 account, adding a VLAN using a name that is already being used by another VLAN that has been excluded from the user account's view will be allowed. Once added, this VLAN will have a status of "not in service" and the only operation that can be performed on it will be Delete VLAN.
- Changing the VLAN Mode parameter setting using the currently set VLAN Mode will result in the error message: "Error: Commit Failed."

- During Restart operations, VLAN Manager may encounter a timeout error and display the message: "Unable to communicate. Confirm SNMP settings or login, and if the network is functional." To prevent this error message from reappearing, go to File -> Properties and increase the Retry Timeout value.
- The AT-8500 series does not allow multiple manager sessions. As such, if an active manager session is detected during a Restart operation, VLAN Manager will display the message: "The system has detected an active manager session. Please end the active manager session before restarting the device."
- A Restart operation cannot be performed using an SNMPv3 account that has no write access to the atiStkSwSysReset object.

## 6.9 AT-8600 Series

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.9.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Operation Mode	This indicates the operation mode of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Uplink Port	This identifies the uplink port of the VLAN.
Private Ports	This is a list of the private ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• dynamic</li> <li>• static</li> </ul>

### 6.9.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore ("_")</li> <li>- Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	1 - 15 characters  If the software release version is 2.7.3 or higher: 1 - 32 characters
Identifier (cannot be modified)	1 - 4094	-

Input Field	Valid Values	Length
Operation Mode (cannot be modified)	- Normal - Private - Protected	-

### 6.9.3 Notes

- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports.
- During an Import VLAN operation, VLAN Manager will ignore the values specified for the Uplink Port and Private Ports fields if the value specified for the Operation Mode field is "Normal" or "Protected".
- When two Private VLANs specify the same Uplink port (Uplink port is untagged for the first Private VLAN and tagged for the second Private VLAN), modifying the Private VLAN that has the untagged Uplink port will result in the error message: "<VLAN Name> already has an uplink, more than one Uplink is not permitted." All ports in that Private VLAN will then be deleted.

## 6.10 AT-8700XL/AT-8800/Rapier Series

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.10.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Operation Mode	This indicates the operation mode of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Uplink Port	This identifies the uplink port of the VLAN.
Private Ports	This is a list of the private ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• dynamic</li> <li>• static</li> </ul>

### 6.10.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash (" - ")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	1 - 15 characters  If the software release version is 2.7.3 or higher: 1 - 32 characters
Identifier (cannot be modified)	1 - 4094	-

Input Field	Valid Values	Length
Operation Mode (cannot be modified)	AT-8700XL: Rel 2.6.4-00 to Rel 2.6.4-02 - field not applicable Rel 2.6.4-03 or later - Normal/Protected/Private  AT-8800: Rel 2.6.3 or lower - Normal/Protected Rel 2.6.4 - Normal/Private Rel 2.6.4-04 or later - Normal/Protected/Private  Rapier: Rel 2.6.1-10 to 2.6.1-12 - Normal/Protected/Private Rel 2.6.3 or lower - Normal/Protected Rel 2.6.4 -Normal/Private Rel 2.6.4-04 or later - Normal/Protected/Private	-

### 6.10.3 Notes

- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports.
- During an Import VLAN operation, VLAN Manager will ignore the values specified for the Uplink Port and Private Ports fields if the value specified for the Operation Mode field is "Normal" or "Protected".
- Modifying a Private VLAN to include an uplink port that is a tagged member of the Default VLAN will result in an error. However, the uplink port will still be added successfully.

## 6.1.1 AT-8900/AT-9900/AT-x900-48 Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.1.1.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Operation Mode	This indicates the operation mode of the VLAN.
Type	This indicates the type of the VLAN. <ul style="list-style-type: none"> <li>• Port-based</li> <li>• Multiple Type</li> </ul>
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Uplink Port	This identifies the uplink port of the VLAN.
Private Ports	This is a list of the private ports of the VLAN.
Core Ports	This is a list of the core ports of the VLAN.
Customer Ports	This is a list of the customer ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• dynamic</li> <li>• static</li> </ul>

### 6.11.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash (" - ")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	<p>AT-8900: 1 - 15 characters</p> <p>If the software release version is 2.7.3 or higher: 1 - 32 characters</p> <p>AT-9900/AT-x900-48: 1 - 32 characters</p>
Identifier (cannot be modified)	1 - 4094	-
Operation Mode (cannot be modified)	<ul style="list-style-type: none"> <li>- Normal</li> <li>- Private</li> <li>- Nested</li> </ul>	-

### 6.11.3 Notes

- AT-x900-48FS: The current firmware version does not allow VLAN 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.
- When adding/modifying a Nested VLAN, specifying a port that is already a member of an existing Normal VLAN will not generate any error. However, the specified port will be ignored. In addition, during modification, existing member ports having the same status (tagged/untagged) as the specified port will be deleted.
- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports.
- During an Import VLAN operation, VLAN Manager will ignore the values specified for certain fields depending on the value specified for the Operation Mode field:
  - If Operation Mode is "Normal" - Uplink Port, Private Ports, Core Ports and Customer Ports
  - If Operation Mode is "Private" - Core Ports and Customer Ports
  - If Operation Mode is "Nested" - Tagged Ports, Untagged Ports, Uplink Port and Private Ports
- User-created VLANs are classified as Multiple Type VLANs. There are three possible VLAN associations for a Multiple Type VLAN: IP Subnet, Protocol and Port.

Currently, VLAN Manager only supports Port association. As a result, when attempting to modify a VLAN with an association other than Port, VLAN Manager automatically changes the association of that VLAN to Port.

- When adding/modifying a Nested VLAN, specifying 2 or more core ports where one of the specified ports is already a member of an existing Nested VLAN will result in the error message: "Must return port <n> to the default VLAN as untagged port based."

## 6.12 AT-9000/24 and AT-9410GB

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.12.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• idle</li> <li>• operational</li> <li>• under-construction</li> <li>• not-operational</li> </ul>

### 6.12.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs display the following Input Fields:

Input Field	Valid Values	Length
Name	- Alphanumeric characters - Underscore ("_") - Dash ("-")	0 - 32 characters
Identifier	1 - 4094	-

### 6.12.3 Notes

- The current firmware version does not allow VLAN definitions to be created without a VLAN name. As a result, the Add VLAN, Modify VLAN and Import VLAN operations will fail when the VLAN Name field is left blank.
- Ports in the Default VLAN cannot be changed from untagged to tagged.
- VLAN definitions that only contain tagged ports cannot be deleted.

## 6.13 AT-9400 Series

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.13.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Type	<p>This indicates the type of the VLAN.</p> <ul style="list-style-type: none"> <li>• Port-based</li> <li>• Mac-based</li> </ul> <p><b>Note</b> - VLAN Type is only available to Layer 3 models with firmware version of 3.1.0 or higher.</p>
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Status	<p>This indicates the status of the VLAN.</p> <ul style="list-style-type: none"> <li>• idle</li> <li>• operational</li> <li>• under-construction</li> <li>• not-operational</li> </ul>

### 6.13.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore (" _ ")</li> <li>- Dash (" - ")</li> </ul> <p><b>Note</b> - VLAN names must contain at least</p>	1 - 20 characters

Input Field	Valid Values	Length
	one (1) alphabet character.	
Identifier (cannot be modified)	1 - 4094	-
Type (cannot be modified)	<ul style="list-style-type: none"> <li>• Port-based</li> <li>• Mac-based</li> </ul> <p><b>Note</b> - VLAN Type is only available to Layer 3 models with firmware version of 3.1.0 or higher.</p>	-

### 6.13.3 Notes

- AT-9400 L3 Models: The current firmware version does not allow the VLAN Manager to distinguish Protected VLANs. As a result, VLAN Manager will display and treat Protected VLANs as if they were standard Port-based VLAN or Mac-based VLAN depending on the type of existing VLAN prior to Protected VLAN. Furthermore, modifying a Protected VLAN will convert that VLAN into a standard Port-based VLAN or Mac-based VLAN depending also on the type of existing VLAN prior to modified Protected VLAN.

Ex.

- In CLI, VLAN record#1 is a Port-based VLAN and VLAN record#2 is a Protected VLAN. In VLAN Manager, VLAN record#2 will be displayed as standard Port-based VLAN. Furthermore, modifying VLAN record#2 will be converted into a standard Port-based VLAN.
  - In CLI, VLAN record#7 is a Mac-based VLAN and VLAN record#8 is a Protected VLAN. In VLAN Manager, VLAN record#8 will be displayed as standard Mac-based VLAN. Furthermore, modifying VLAN record#2 will be converted into a standard Mac-based VLAN.
- An uplink port must be specified to change the VLAN Mode to "Multiple VLAN" or to "802.1Q Multiple VLAN". Specifying an incorrect port as the uplink port will cause VLAN Manager to lose connection with the device without any warning. Exercise caution.
  - AT-9400 L2 Models: The current firmware version does not allow VLAN Manager to distinguish Protected VLANs, Mac-based VLANs and standard Port-based VLANs from each other. As a result, VLAN Manager will display and treat Protected VLANs and Mac-based VLANs as if they were standard Port-based VLANs. Furthermore, modifying a Protected VLAN or a Mac-based VLAN will convert that VLAN into a standard Port-based VLAN.

- The current firmware version does not allow the Default VLAN to be modified. As a result, all VLAN Manager operations involving the Default VLAN will fail.
- For 20-character VLAN Names entered via telnet, only the first 19 characters are registered in VLAN Manager.
- For the VLAN Name parameter, the current firmware version allows up to 19 characters to be entered via SNMP and up to 20 characters via telnet. Since VLAN Manager supports the AT-9400 series via SNMP, the 19-character limit will apply to all operations involving VLAN Name.
- AT-9400 L3 Models: Changing the VLAN Mode parameter setting from 'Multiple VLAN' or '802.1Q Multiple VLAN' to 'User Configured VLAN' may result in unpredictable behavior.
- Using an SNMPv3 account, adding a VLAN using a name that has been excluded from the user account's view will result in an error message and the VLAN will not be added.
- Changing the VLAN Mode parameter setting using the currently set VLAN Mode will result in the error message: "Error: Commit Failed."
- Changing the VLAN Mode parameter setting from '802.1Q Multiple VLAN' to a different mode may result in the error message: "Unable to communicate. Confirm SNMP settings or login, and if the network is functional." However, VLAN Mode is still set to the new mode successfully. To prevent this error message from reappearing, go to **File > Properties** and increase the Retry Timeout value.

## 6.14 AT-9700 Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.14.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Type	This indicates the type of the VLAN. <ul style="list-style-type: none"><li>• lq_vlan</li><li>• protocol</li></ul>
Advertisement	This specifies that the VLAN is able to join GVRP. <ul style="list-style-type: none"><li>• Enabled</li><li>• Disabled</li></ul>
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Forbidden Ports	This is a list of the forbidden member ports of the VLAN.

### 6.14.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	If the software release version is 2.03 or lower: <ul style="list-style-type: none"> <li>Alphanumeric characters</li> <li>Other characters except double quote ("")</li> </ul> If the software release version is 3.03: <ul style="list-style-type: none"> <li>Alphanumeric characters</li> <li>Underscore ("_")</li> <li>Dash ("-")</li> </ul>	1 - 32 characters
Identifier (cannot be modified)	<ul style="list-style-type: none"> <li>2 - 4094</li> </ul>	-
Advertisement (cannot be modified if VLAN Type is Protocol)	<ul style="list-style-type: none"> <li>Enabled</li> <li>Disabled</li> </ul>	-

### 6.14.3 Notes

- 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.
- The current firmware version allows a maximum of 32 characters for the VLAN Name parameter. When adding ports 1 and/or 2 as tagged/untagged ports of a VLAN whose name is of length 32, an additional character is appended to the name thereby causing the name to exceed 32 characters. When this happens, problems may be encountered while attempting to modify or delete this VLAN.
- The current firmware version allows you to pre-configure switches that may be added to the stack in the future. Pre-configured switches are identified by a “Non-Existing” label that appears above the device panel in the Add VLAN and Modify VLAN dialog boxes. Ports on pre-configured switches can be included in a VLAN but only those marked as “untagged” or “forbidden” will appear on the VLAN Information Window. Ports marked as “tagged” will not appear. They will appear only when a physical switch, whose box id matches the box id of the pre-configured switch to which the tagged ports belong, is added to the stack.

- Deleting a VLAN containing untagged port members that are Forbidden member ports of the Default VLAN will result in the error message “Command: delete vlan <vlan name> Fail!” However, performing a Refresh operation will show that the VLAN was successfully removed.

## 6.15 AT-9800/SwitchBlade Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.15.1 VLAN Information Window

The VLAN Information Window displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Type	This indicates the type of the VLAN. <ul style="list-style-type: none"><li>• Port-based</li><li>• IP subnet-based</li><li>• Protocol-based</li><li>• MAC address-based</li><li>• Limited protocol-based</li></ul>
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"><li>• dynamic</li><li>• static</li></ul>

### 6.15.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore ("_")</li> <li>- Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	<p>1 - 15 characters</p> <p>If the software release version is 2.7.1 or higher: 1 - 32 characters</p>
Identifier (cannot be modified)	<ul style="list-style-type: none"> <li>• 1 - 4090 (AT-9800 Series)</li> <li>• 1 - 4078 (SwitchBlade Series)</li> </ul>	-

### 6.15.3 Notes

- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports.

## 6.16 AT-9900s/AT-x900-24X Series

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Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.16.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Operation Mode	This indicates the operation mode of the VLAN.
Type	This indicates the type of the VLAN. <ul style="list-style-type: none"> <li>• Port-based</li> <li>• Multiple Type</li> </ul>
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Uplink Port	This identifies the uplink port of the VLAN.
Private Ports	This is a list of the private ports of the VLAN.
Core Ports	This is a list of the core ports of the VLAN.
Customer Ports	This is a list of the customer ports of the VLAN.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>• dynamic</li> <li>• static</li> </ul>

## 6.16.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore ("_")</li> <li>- Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names must contain at least one (1) alphabet character.</p> <p><b>Note</b> - "ALL" is a reserved word and cannot be used as a VLAN name.</p>	1 - 32 characters
Identifier (cannot be modified)	1 - 4094	-
Operation Mode (cannot be modified)	<ul style="list-style-type: none"> <li>• Normal</li> <li>• Private</li> <li>• Nested</li> </ul>	-

## 6.16.3 Notes

- When adding/modifying a Nested VLAN, specifying a port that is already a member of an existing Normal VLAN will not generate any error. However, the specified port will be ignored. In addition, during modification, existing member ports having the same status (tagged/untagged) as the specified port will be deleted.
- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports.  
During an Import VLAN operation, VLAN Manager will ignore the values specified for certain fields depending on the value specified for the Operation Mode field:
  - If Operation Mode is "Normal" - Uplink Port, Private Ports, Core Ports and Customer Ports
  - If Operation Mode is "Private" - Core Ports and Customer Ports
  - If Operation Mode is "Nested" - Tagged Ports, Untagged Ports, Uplink Port and Private Ports
- User-created VLANs are classified as Multiple Type VLANs. There are three possible VLAN associations for a Multiple Type VLAN: IP Subnet, Protocol and Port. Currently, VLAN Manager only supports Port association. As a result, when attempting to modify a VLAN with an association other than Port, VLAN Manager automatically changes the association of that VLAN to Port.

- When adding/modifying a Nested VLAN, specifying 2 or more core ports where one of the specified ports is already a member of an existing Nested VLAN will result in the error message: "Must return port <n> to the default VLAN as untagged port based."

## 6.17 AT-RG600 Series

Topics:

- [VLAN Information Window](#)
- [Add/Modify VLAN Dialogs](#)
- [Notes](#)

### 6.17.1 VLAN Information Window

The **VLAN Information Window** displays the following attributes for each VLAN definition:

Column Name	Description
Name	This is the name of the VLAN.
Identifier	This is the unique identifier of the VLAN.
Tagged Ports	This is a list of the tagged member ports of the VLAN.
Untagged Ports	This is a list of the untagged member ports of the VLAN.
Priority	This indicates the 802.1p Priority.
Status	This indicates the status of the VLAN. <ul style="list-style-type: none"> <li>▪ static</li> </ul>

### 6.17.2 Add/Modify VLAN Dialogs

The Add/Modify VLAN Dialogs have the following Input Fields:

Input Field	Valid Values	Length
Name (cannot be modified)	<ul style="list-style-type: none"> <li>- Alphanumeric characters</li> <li>- Underscore ("_")</li> <li>- Dash ("-")</li> </ul> <p><b>Note</b> - VLAN names cannot start with a digit and cannot contain period '.' or slash '/' symbols.</p>	1 - 15 characters
Identifier (cannot be modified)	<ul style="list-style-type: none"> <li>• 1 - 512 (AT-RG656BD)</li> <li>• 1 - 4094 (AT-RG613TX / AT-RG613SH / AT-RG644B / AT-RG634A / AT-RG613LH / AT-RG613BD)</li> </ul>	-

Input Field	Valid Values	Length
Priority (cannot be modified)	<ul style="list-style-type: none"> <li>0 - 7</li> </ul> <p><b>Note</b> - This field is implemented as a drop-down list.</p>	-

### 6.17.3 Notes

- The current firmware does not allow the deletion of a VLAN whose name starts with a number.
- Any attempt to remove untagged ports from the default VLAN will simply be ignored. On the other hand, tagged ports that are removed from the default VLAN are automatically converted to untagged ports.
- When importing the default VLAN, VLAN Manager disregards the values specified for Untagged Ports and Priority.
- As a general rule, a port can be a member of several VLANs but it can only be an untagged member of one VLAN. The current firmware version for the AT-RG600 ADSL series, however, operates differently and does not follow this rule. If a port is initially an untagged member of a VLAN, then it can no longer be a member of other VLANs. On the other hand, if a port is initially a tagged member of a VLAN, then it can only be added to other VLANs as a tagged member also.
- AT-RG600 ADSL: The current firmware version for the AT-RG600 ADSL series supports up to 16 VLAN entries only, including the default VLAN. Therefore, any attempt to create a 17th VLAN through the Add VLAN or Import VLAN operation will fail. However, even if the operation is not successful, no error message will be displayed.
- AT-RG600 ADSL: When performing an Add VLAN or Import VLAN operation, if the VLAN Name specified is of the form "vlan" + number and the VLAN Identifier specified does not match the number, the VLAN will not be created. However, even if the operation is not successful, no error message will be displayed.



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