

VLAN Configuration on the WAP351 Access Point

Objective

A VLAN (Virtual Local Area Network) is a switched network that is logically segmented by function, area, or application, without regard to the physical locations of the users. VLANs have the same attributes as physical LANs, but you can group end stations even if they are not physically located on the same LAN segment.

A tagged VLAN between a trunk port and a switch port contains the VLAN information in the Ethernet frame. An untagged VLAN sends traffic without the VLAN tag. A VLAN tag inserts information into Ethernet frames identifying which frame belongs to which VLAN. A trunk port is a port that handles multiple VLANs.

To add more security to the network, your network configuration must include a secured management VLAN. The management VLAN is the VLAN used to access the WAP with the web configuration utility. An attack on the management VLAN can compromise network security, so changing the management and untagged VLANs to something other than the default is recommended. The management VLAN ID on the WAP351 access point is configured to VLAN 1 by default.

The objective of this document is to show you how to configure VLANs on the WAP351 Access Point.

Applicable Devices

- WAP351

Software Version

- 1.0.0.39

Global Settings

Step 1. Log in to the Access Point Configuration Utility and choose **LAN > VLAN Configuration**. The *VLAN Configuration* page opens:

The screenshot shows a software interface titled "VLAN Configuration". At the top, there is a header "VLANs Setting Table" with columns: VLAN ID, Description, Management VLAN, LAN1, LAN2, LAN3, LAN4, LAN5. Below the header is a table row containing the following data:

VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged

Below the table are three buttons: "Add", "Edit", and "Delete". At the bottom of the form is a "Save" button.

Step 2. To add a new VLAN, click the **Add** button. If you want to edit or delete an existing VLAN, skip to the next step.

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>								
<input type="button" value="Save"/>								

An empty VLAN will be added to the table.

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input type="checkbox"/>			<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>								
<input type="button" value="Save"/>								

Step 3. To edit or delete an existing or newly added VLAN, click the checkbox next to the VLAN(s) you want to edit/delete.

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/>			<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>								
<input type="button" value="Save"/>								

Step 4. Click **Edit** or **Delete**. If you clicked **Delete**, skip to [Step 10](#). If you want to edit an existing (not empty) VLAN, skip to [Step 7](#).

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/>			<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>								
<input type="button" value="Save"/>								

Note: VLAN ID 1 cannot be deleted.

Step 5. Enter a VLAN ID in the *VLAN ID* field. The valid range is 1 – 4094, and each VLAN must have a different ID.

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/>	20		<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>								
<input type="button" value="Save"/>								

Step 6. Enter a description of the VLAN in the *Description* field. This field can only consist of alphanumeric characters and underscores, and must be only 64 or less characters long. The description does not have any effect on the functionality of the VLAN. Each VLAN must have

a different description.

VLANs Setting Table							
VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/> 1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/> 20	Secondary	<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded

Add **Edit** **Delete**

Save

Step 7. If you want a VLAN to be a management VLAN, click its corresponding checkbox in the *Management VLAN* field. The management VLAN is the VLAN used to access the web configuration utility.

VLANs Setting Table							
VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/> 1	Default	<input type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/> 20	Secondary	<input checked="" type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded

Add **Edit** **Delete**

Save

Note: By default, VLAN 1 is the management VLAN. If you do not want VLAN 1 to be the management VLAN, uncheck its checkbox. There can only be one management VLAN at a time. If there is no management VLAN, users will be unable to access the web configuration utility.

Step 8. If you are setting a VLAN to be a management VLAN, a notice will appear saying that the previous management VLAN will be set to unmanaged. Click **OK** to continue.

VLANs Setting Table							
VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/> 1	Default	<input type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/> 20	Secondary	<input checked="" type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded

Add **Edit**

Save

Alert

Configuring this association as Management VLAN ID will result in old Management VLAN ID being converted to unmanagement.

OK

Step 9. Each port on the WAP351 corresponds to a *LAN* field (*LAN1*, *LAN2*, etc.). For each port, choose an option from the drop-down menu.

VLANs Setting Table							
VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/> 1	Default	<input type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/> 20	Secondary	<input checked="" type="checkbox"/>	Excluded	Untagged	Excluded	Excluded	Excluded

Add **Edit** **Delete**

Save

Untagged
Tagged
Excluded

The options are:

- Untagged — Sets the port as a member of the VLAN. A packet of the VLAN sent out from the port will not be tagged with the VLAN header. However, an untagged packet received by the port will be tagged.

- Tagged — Sets the port as a member of the VLAN. A packet of the VLAN sent out from the port will be tagged with the VLAN header.
- Excluded — This port is not a member of the VLAN.

Step 10. Click **Save**. Your changes will be applied, and the WAP may lose connectivity depending on the settings applied.

VLAN Configuration

VLANs Setting Table								
	VLAN ID	Description	Management VLAN	LAN1	LAN2	LAN3	LAN4	LAN5
<input type="checkbox"/>	1	Default	<input checked="" type="checkbox"/>	Untagged	Untagged	Untagged	Untagged	Untagged
<input checked="" type="checkbox"/>	20	Secondary	<input type="checkbox"/>	Excluded	Excluded	Excluded	Excluded	Excluded

Add Edit Delete

Save