

Simple Network Management Protocol (SNMP) Views Configuration on the WAP551 and WAP561 Access Points

Objective

In SNMP, the Management Information Base (MIB) is a hierarchical information database containing Object Identifiers (OID) which acts as a variable that can be read or set via SNMP. MIB is organized in a tree-like structure. A subtree within the managed object naming tree is a view subtree. A MIB view is combination of a set of view subtrees or a family of view subtrees. MIB views are created to control the OID range that SNMPv3 users can access. SNMPv3 Views configuration is essential to restrict a user to view only the limited MIB. The WAPs can have up to sixteen views including the two default views.

This article explains how to configure SNMP Views on the Cisco WAP551 and WAP561 Access Points.

Applicable Devices

- WAP551
- WAP561

Software Version

- 1.0.4.2

SNMP View Configuration

Step 1. Log in to the web configuration utility and choose **SNMP > Views**. The *Views* page opens:

	View Name	Type	OID	Mask
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	

Add **Edit** **Delete**

Save

Step 2. Click **Add** to add a new SNMP View.

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	
<input checked="" type="checkbox"/>	view-new	included		

Add Edit Delete

Save

Step 3. Check the check box beside the newly created view and click **Edit**.

Step 4. Enter a name to identify the new MIB view in the View Name field. View names can contain up to 32 alphanumeric characters.

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	
<input checked="" type="checkbox"/>	view-new	included		

Add Edit Delete

Save

Step 5. Choose a type for the new view subtree from the Type drop-down list. This type specifies whether to include or exclude the view subtree or family of subtrees from the MIB view.

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	
<input checked="" type="checkbox"/>	view-new	included	1.3.6.1.2.1.1	

Add Edit Delete

Save

Step 6. Enter an OID string for the new subtree to either include or exclude from the view in the OID field. For example, if you want to specify the system subtree, enter 1.3.6.1.2.1.1. Each number is used to locate information and each number corresponds to a specific branch of the OID tree. OIDs are unique identifiers of managed objects in the MIB hierarchy. The top-level MIB object IDs belong to different standards organizations, while lower-level object IDs are allocated by associated organizations. Private branches can be defined by vendors to include managed objects for their own products. MIB files map OID numbers to human readable format. To translate the OID number to the object name click [here](#).

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	
<input checked="" type="checkbox"/>	view-new	included	1.3.6.1.2.1.1	FE:00

Add Edit Delete

Save

Step 7. Enter an OID mask in the Mask field. The mask field is used to control the elements of the OID subtree that should be considered as relevant when you determine the view in which an OID is. The format is 16 bits in length and each octet contains 2 hexadecimal characters separated by a period or colon. To determine the mask, count the number of OID elements and set that many bits to one. Consider the example OID 1.3.6.1.2.1.1, it has even elements, so if you set seven consecutive 1s followed by one zero in the first octet and all zeros in the second one, you get FE.00 as the mask.

Step 8. Click **Save** to save this configuration.

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input checked="" type="checkbox"/>	view-new	included	1.3.6.1.2.1.1	FE:00
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	

Add Edit Delete

Save

Step 9. (Optional) To edit a view, check the check box beside the desired view and click **Edit**. Click **Save** after changes are made.

Note: Default views cannot be edited.

Views

SNMPv3 Views

	View Name	Type	OID	Mask
<input checked="" type="checkbox"/>	view-new	included	1.3.6.1.2.1.1	FE:00
<input type="checkbox"/>	view-all	included	.1	
<input type="checkbox"/>	view-none	excluded	.1	

Add Edit Delete

Save

Step 10. (Optional) To remove a view from the list, check the check box for the appropriate View Name in the SNMPv3 area and click **Delete**. Click **Save** after deletion.

Note: Default views cannot be deleted.