## **Configure Simple Network Management Protocol (SNMP) Views on a Cisco Business 250 or 350 Series Switch**

## Objective

The Simple Network Management Protocol (SNMP) is an Internet-standard protocol used to manage devices on IP networks. The SNMP messages are used to inspect and communicate information about managed objects. SNMP uses Management Information Bases (MIBs) to store available objects in a hierarchical or tree-structured namespace that contains object identifiers (OIDs). An OID identifies the information in the MIB hierarchy that can be read or set via SNMP.

SNMP Views are a subset of MIB objects that can be assigned to an SNMP access group to control write, read, and notification privileges of SNMP users over MIB object information. A view is a user-defined label for a collection of MIB subtrees. Each subtree ID is defined by the OID of the root of the relevant subtrees. Either well-known names can be used to specify the root of the desired subtree or an OID can be entered.

This article provides instructions on how to configure the SNMP Views on your Cisco Business 250 or 350 series switch.

#### **Applicable Devices | Software Version**

- CBS250 (DataSheet) | 3.0.0.69 (Download latest)
- CBS350 (Data Sheet) | 3.0.0.69 (Download latest)
- CBS350-2X (Data Sheet) | 3.0.0.69 (Download latest)
- CBS350-4X (Data Sheet) | 3.0.0.69 (Download latest)

### **Configure SNMP Views on your Switch**

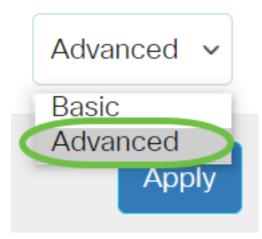
The Views page of the web-based utility of your switch allows you to create and edit SNMP views. The default views (Default and DefaultSuper) cannot be changed.

Views can be attached to groups in the Groups page or to a community which employs basic access mode through the Communities page.

**Note:** To know how to configure the SNMP Groups on a switch, click <u>here</u>. For instructions on how to configure SNMP Communities on a switch, click <u>here</u>.

#### View the SNMP Views Table

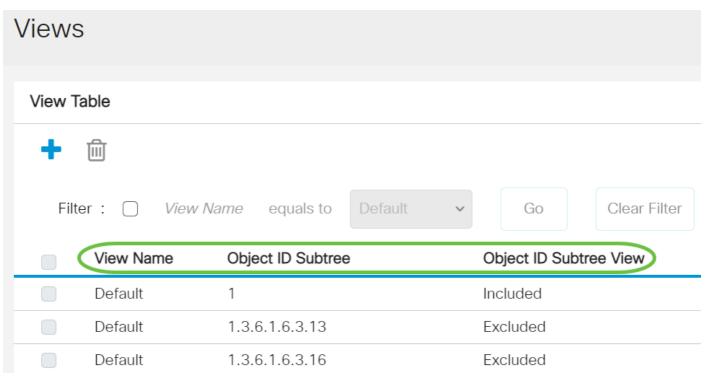
Step 1. Log in to the web-based utility of your switch then choose **Advanced** in the Display Mode drop-down list.



#### <u>Step 2</u>. Choose **SNMP > Views**.

SNMP 1	
Engine ID	
Views 2	

The View Table displays the following information:



• View Name - The name of the view.

- Object ID Subtree The subtree to be included or excluded in the SNMP view.
- Object ID Subtree View Displays whether the defined subtree is included or excluded in the selected SNMP view.

Step 3. (Optional) Check the **Filter** check box to filter the View Name that you want to be shown on the View Table.

#### 

Step 4. (Optional) Choose a view name from the View Name drop-down list.

Views	
View Table	
<b>+</b> ₪	
Filter : 🗹 View Name equals to Default - Go	Clear Filter
View Name Object ID Subtree Default DefaultSuper Object ID Subtree DefaultSuper	tree View

The following views are created by default:

- Default Default SNMP view for read and read/write views.
- DefaultSuper Default SNMP view for administrator views.

Note: In this example, Default is chosen.

Step 5. (Optional) Click Go.

Views					
View Table					
<b>+</b> 🛍					
Filter : 🗹	View Name	equals to	Default	~ Go	Clear Filter

Step 6. (Optional) Click Clear Filter to clear the filter settings.

View Table

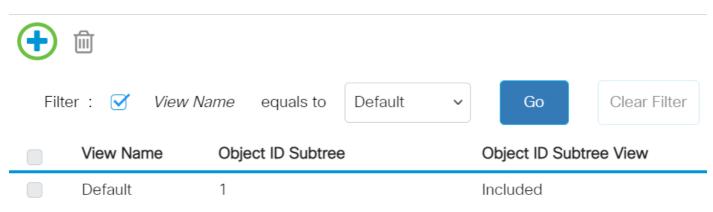
+			
Filt	er: 🗹 View N	ame equals to Default	✓ Go Clear Filter
	View Name	Object ID Subtree	Object ID Subtree View
	View Name Default	Object ID Subtree	Object ID Subtree View

You have now viewed the SNMP View on your switch.

#### Add a View in the View Table

Step 1. Click the **Add** button to add a new entry in the View Table.

View Table



Step 2. Enter the name of the new SNMP view in the *View Name* field. The character limit for this field is 30.

# Add View

(3/30 characters used)

Note: In this example, TCP is used as view name.

Step 3. In the Object ID Subtree area, click one of the following radio buttons that defines a method to select a node in the MIB tree that is included or excluded in the new SNMP view.

Note: In this example, Select from list is chosen.

#### Add View

🌣 View Name:	ТСР		(3/30 chara	acters used)	
object ID Subtree:	Select from list:	system interfaces ip icmp tcp udp	3	O User Defined:	1.3.6.1.2.1.1

The options are:

- Select from list Allows you to choose the node in the MIB tree from the available list.
- User Defined Allows the user to enter the object identifier that is not available in the Select From list. If this option is chosen, enter the OID in the User Defined field then skip to <u>Step 7</u>.

Step 4. (Optional) Scroll down the list and choose an OID subtree from the list.

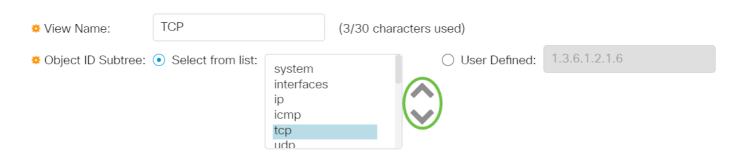
Add View

o View Name:	ТСР		(3/30 chara	acters used)	
Object ID Subtree:	<ul> <li>Select from list:</li> </ul>	system interfaces ip icmp tcp hds		User Defined:	1.3.6.1.2.1.6

Note: In this example, tcp is chosen.

Step 5. (Optional) Use the **Up** arrow to go to the level of the parent and siblings of the chosen node and click the **Down** arrow to descend to the level of the children of the chosen node.

#### Add View



Note: In this example, the Down arrow is clicked.

Step 6. (Optional) Scroll down the list and a child from the list. If the Up button is chosen in Step 5, choose the parent instead.

Add View

😋 View Name:	ТСР		(0/30 chara	acters used)	
object ID Subtree:	• Select from list:	tcpRtoMa tcpMaxCo tcpActive tcpPassiv tcpAttemp tcpEstabF	onn Opens eOpens otFails	O User Defined:	1.3.6.1.2.1.6.7

Note: In this example, tcpAttemptFails is chosen.

<u>Step 7</u>. Check or uncheck the **Include in view** check box. If this is checked, the chosen MIBs are included in the view, otherwise they are excluded.

Add View

Object ID Subtree: 💿 Selec	t from list: tcpRtoMax tcpMaxConn tcpActiveOpens tcpPassiveOpens tcpAttemptFails tcpEstabResets	O User Defined:	1.3.6.1.2.1.6.7

Step 8. Click Apply then click Close.

#### Add View

🗢 View Name:	ТСР		(0/30 char	acters u	sed)			
Object ID Subtree:	<ul> <li>Select from list:</li> </ul>	tcpRtoMax tcpMaxCo tcpActiveC tcpPassive tcpAttemp tcpEstabR	nn Opens eOpens otFails esets	<b>~</b>	O User Defined:	1.3.6.1.2.1.6.7		
	🕑 Include in view							
							Apply	Close

Step 9. (Optional) Click **Save** to save the settings to the startup configuration file.



You should now have successfully added a new SNMP view in the View Table of your switch.

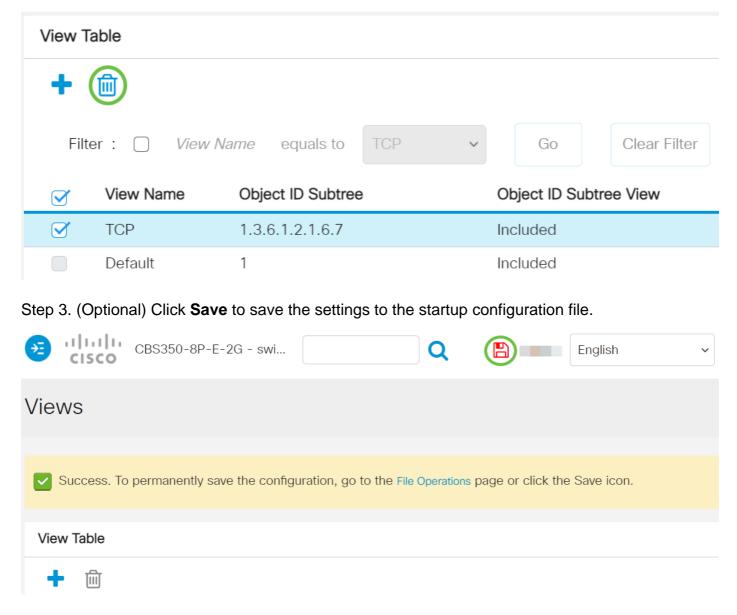
#### **Delete an SNMP View**

Step 1. In the View Table, check the check box of the view that you want to delete.

View Ta	able					
+	圃					
Filte	er: 🗌 View I	<i>Name</i> equals to	TCP v		Go	Clear Filter
	View Name	Object ID Subtree	•	Objec	ct ID Subt	tree View
$\bigcirc$	TCP	1.3.6.1.2.1.6.7		Includ	ded	
	Default	1		Includ	ded	

Note: In this example, TCP view is chosen.

Step 2. Click Delete.



You have now successfully deleted an SNMP view from the View Table of your Cisco Business 250 0r 350 series switch.

Looking for more articles on your CBS250 or CBS350 switch? Check out any of the links below for more information!

<u>SNMP Settings SNMP Groups DHCP Image Upgrade Password Strength TCP and UDP Settings</u> <u>Port Security Time Settings Upgrade Firmware Smartport Best Practices Troubleshoot: No IP</u> <u>Address Troubleshoot Smartports Troubleshoot Link Flapping Create VLANs</u>