

Smartport

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Smartport Properties

A Smartport is an interface (port, VLAN, or LAG) to which a built-in (or user-defined) macro may be applied. This Smartport feature applies a preconfigured setup to a switch port based on the type of device that is trying to connect. Auto Smartport lets the switch apply these configurations to interfaces automatically when it detects the device. Smartport types refer to the types of devices, which can be attached to Smartports.

To configure the Smartport feature, follow these steps:

Procedure

Step 1 Click **Smartport** > **Properties**.

Step 2 It displays is Telephony OUI is enabled or disabled. Auto Smartport and Telephony OUI are mutually exclusive.

Step 3 Configure the following:

- Administrative Auto Smartport-Select to enable or disable Auto Smartport. The following options are available:
  - Disable-Select to disable Auto Smartport on the device. This is the default setting.
  - Enable-Select to enable Auto Smartport on the device.
  - Enable by Auto Voice VLAN-This enables the Auto Smartport, but is enabled only when Auto Voice VLAN is on.
- Operational Auto Smartport-Displays the Auto Smartport status.

Note
The following settings are visible only in the Advanced Mode settings.

- Auto Smartport Device Detection Method-Select whether incoming CDP, LLDP, or both types of packets are used to detect the Smartport type of the attaching devices. At least one must be checked for Auto Smartport to identify devices.
- Operational CDP Status-Displays the operational status of CDP. Enable CDP if Auto Smartport is to detect the Smartport type based on a CDP advertisement.
- Operational LLDP Status-Displays the operational status of LLDP. Enable LLDP if Auto Smartport is to detect the Smartport type based on a LLDP/LLDP-MED advertisement.
- Auto Smartport Device Detection-Select each type of device for which Auto Smartport can assign Smartport types to interfaces. If unchecked, Auto Smartport doesn't assign that Smartport type to any interface.

Step 4 Click **Apply**. This sets the global Smartport parameters on the device.

Smartport Type Settings

Note This setting is only visible in the Advanced Mode view.

Use the Smartport Type Settings page to edit the Smartport Type settings and view the Macro Source. Editing the Smartport types parameters that are applied by the Auto Smartport configures the default values for these parameters.

Note Changes to Auto Smartport types cause the new settings to be applied to interfaces assigned to that type by the Auto Smartport. In this case, binding an invalid macro or setting an invalid default parameter value causes all ports of this Smartport type to become unknown.

Procedure

Step 1 Click **Smartport** > **Smartport Type Settings**.

Step 2 To view the Smartport macro associated with a Smartport type, select a Smartport type and click **View Macro Source...**.

Step 3 To modify the parameters of a macro, select a Smartport type and click **Edit**.

Step 4 Next, configure the following fields:

- Port Type—Select a Smartport type.
- Macro Name—Displays the name of the Smartport macro currently associated with the Smartport type.
- Macro Parameters—Displays the following fields for three parameters in the macro:
  - Parameter Name—Name of parameter in macro
  - Parameter Value—Current value of parameter in macro

- Parameter Description—Description of parameter

Step 5 Click **Apply** to save the changes to the running configuration. If the Smartport macro and/or its parameter values associated with the Smartport type are modified, Auto Smartport automatically reapplies the macro to the interfaces currently assigned with the Smartport type by Auto Smartport. Auto Smartport doesn't apply the changes to interfaces that statically assigned a Smartport type.

Click **Restore Defaults** to restore the default values for the selected Smartport type.

Note There's no method to validate macro parameters because they don't have a type association. Therefore, any entry is valid at this point. However, invalid parameters can cause errors to the Smartport type assigned to an interface, applying the associated macro.

Smartport Interface Settings

Note This setting is only visible in the Advanced Mode view.

Use the Interface Settings page to perform the following tasks:

- Statically apply a specific Smartport type to an interface with interface-specific values for the macro parameters.
- Enable Auto Smartport on an interface.
- Diagnose a Smartport macro that failed upon application, and caused the Smartport type to become Unknown.
- Reapply a Smartport macro to an interface. In some circumstances, you may want to reapply a Smartport macro so that the configuration at an interface is up to date. For instance, reapplying a switch Smartport macro at a device interface makes the interface a member of the VLANs created since the last macro application.
- Reset unknown interfaces, to set them to Default.

To apply a Smartport macro, follow these steps:

Procedure

Step 1 Click **Smartport** > **Interface Settings**.

To reapply the Smartport macros associated with a group of interfaces, select from the following and click **Apply**:

- All Switches, Routers, and Wireless Access Points—Reapplies the macros to all interfaces.

- All Switches—Reapplies the macros to all interfaces defined as switches.
- All Routers—Reapplies the macros to all interfaces defined as routers.
- All Wireless Access Points—Reapplies the macros to all interfaces defined as access points.

  To reapply the Smartport macros associated with an interface, select the interface and click **Reapply**.

  The Reapply action also adds the interface to all newly created VLANs.

Step 2 Smartport Diagnostic.

If a Smartport macro fails, the Smartport Type of the interface is Unknown. Select an interface which is of an unknown type and click **Show Diagnostics.** This displays the command at which application of the macro failed.

Step 3 Resetting all Unknown interfaces to Default type.

- Select the Smartport Type equals to the checkbox.
- Select **Unknown**.
- Click **Go**.
- Click **Reset All Unknown Smartports**. Then reapply the macro as described above. This performs a reset on all interfaces with type Unknown, meaning that all interfaces are returned to the Default type.

Step 4 Select an interface and click **Edit**.

Step 5 Enter the fields.

- Interface—Select the port or LAG.
- Smartport Type—Displays the Smartport type currently assigned to the port/LAG.
- Smartport Application—Select the Smartport type from the Smartport Application pull-down.
- Smartport Application Method—If Auto Smartport is selected, Auto Smartport automatically assigns the Smartport type based on the CDP and/or LLDP advertisement received from the connecting devices and applying the corresponding Smartport macro. To statically assign a Smartport type and apply the corresponding Smartport macro to the interface, select the desired Smartport type.
- Persistent Status—Select to enable the Persistent status. If enabled, the association of a Smartport type to an interface remains even if the interface goes down, or the device is rebooted. Persistent is applicable only if the Smartport Application of the interface is Auto Smartport. Enabling Persistent at an interface eliminates the device detection delay that otherwise occurs.
- Macro Parameters—Displays the following fields for up to three parameters in the macro:
  - Parameter Name—Name of parameter in macro
  - Parameter Value—Current value of a parameter in a macro This can be changed here.
  - Parameter Description—Description of parameter

Step 6 Click **Reset** to set an interface to Default if it's in Unknown status (as a result of an unsuccessful macro application). The macro can be reapplied on the main page.

Step 7 Click **Apply** to update the changes and assign the Smartport type to the interface.