



CHAPTER 11

Generating L2 and VPLS Reports

This chapter provides information on generating L2 and VPLS reports. It contains the following sections:

- [Overview, page 11-1](#)
- [Accessing L2 and VPLS Reports, page 11-1](#)
- [L2 and VPLS Reports, page 11-2](#)
- [Creating Custom L2 and VPLS Reports, page 11-11](#)

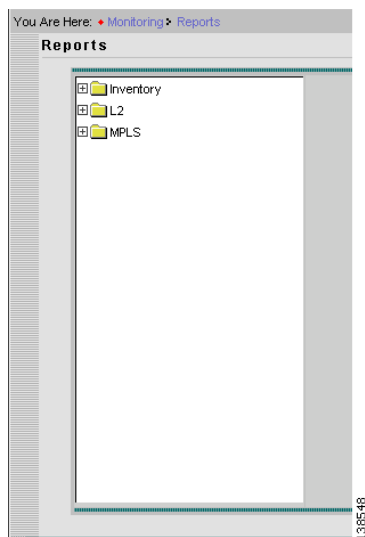
Overview

The ISC reporting GUI is used across multiple ISC modules, including L2 and VPLS. For a general coverage of using the reports GUI, running reports, using the output from reports, and creating customized reports, see “Monitoring” chapter in the *Cisco IP Solution Center Infrastructure Reference, 5.1*. The rest of this chapter provides information about the L2 and VPLS reports available in ISC.

Accessing L2 and VPLS Reports

Perform the following steps to access the L2 and VPLS reports.

- Step 1** To access the reports framework in the ISC GUI, choose **Monitoring > Reports**.
The Reports window appears. (See [Figure 11-1](#).)

Figure 11-1 Reports Window

Step 2 Click the L2 folder to display the available L2 and VPLS reports.

Step 3 Click the icon of a report to bring up the window associated with that report.

Details on each of the reports are provided in [L2 and VPLS Reports, page 11-2](#).

L2 and VPLS Reports

This section provides details on the following L2 and VPLS reports:

- [L2 End-to-End Wire Report, page 11-3](#)
- [L2 PE Service Report, page 11-6](#)
- [L2 VPN Report, page 11-7](#)
- [VPLS Attachment Circuit Report, page 11-8](#)
- [VPLS PE Service Report, page 11-10](#)
- [VPLS VPN Report, page 11-11](#)



Note

Several sample reports are provided in the L2 reports folder. These reports begin with the title **SAMPLE-**. These reports are provided for informational purposes only. They are untested and unsupported. You might want to use them as a basis for creating your own custom reports. For more information, see [Creating Custom L2 and VPLS Reports, page 11-11](#).

The following information is provided for each report:

- Description or purpose of the report.
- An illustration of the report window.
- List of filter values and descriptions.
- List of output values and descriptions.

L2 End-to-End Wire Report

An L2 end-to-end wire is a point-to-point connection containing two attachment circuits. The L2 EndtoEndWire report displays the services that are running on L2 end-to-end connections. You can use this report to view all the services and respective attachment circuit attributes for each connection.

Click the L2 EndtoEndWire Report icon to bring up the window for this report. (See [Figure 11-2](#).)

Figure 11-2 L2 EndtoEndWire Report

Filter Values:

- **EndToEndWire ID**—End-to-end wire identification number.
- **Customer Name**—Name of the customer.
- **VC ID**—Virtual circuit identification number.
- **SR Job ID**—Service request job identification number.
- **Service Type**—Type of service. Values can be:
 - ATM
 - ATM_NO_CE
 - FRAME_RELAY
 - FRAME_RELAY_NO_CE
 - L2VPN_ERS
 - L2VPN_ERS_NO_CE
 - L2VPN_EWS
 - L2VPN_EWS_NO_CE
- **SR State**—Service request state. Values can be:
 - BROKEN
 - DEPLOYED
 - FAILED_AUDIT
 - FAILED_DEPLOY
 - FUNCTIONAL

- INVALID
- LOST
- PENDING
- REQUESTED
- WAIT_DEPLOY
- **AC1-ID**—First attachment circuit (AC1) identification number.
- **AC2-ID**—Second attachment circuit (AC2) identification number.

Output Values:

- **EndToEndWire ID**—End-to-end wire identification number.
- **Customer Name**—Name of the customer.
- **VPN**—Name of the VPN.
- **VC ID**—Virtual circuit identification number.
- **SR ID**—Service request identification number.
- **SR Job ID**—Service request job identification number.
- **Service Type**—Type of service.
- **SR State**—Service request state.



Note The **SR State** output does not list service requests in the **CLOSED** state. Service requests in other states are listed, as determined by the filter values.

- **AC1-ID**—Identification number of the first attachment circuit (AC1).
- **AC1-UNI Device Interface**—UNI device interface of the first attachment circuit (AC1).
- **AC1-NPC**—Named physical circuit for the first attachment circuit (AC1).
- **AC2-VLAN ID/DLCI/VCD**—VLAN identification number, DLCI (data-link connection identifier) or VCD (virtual circuit descriptor) of the first attachment circuit (AC1).
- **AC1-VPI**—Virtual path identifier for the first attachment circuit (AC1).
- **AC1-VCI**—Virtual channel identifier for the first attachment circuit (AC1).
- **AC1-Interface Encap Type**—Encapsulation type used for the first attachment circuit (AC1).
- **AC1-AccessDomain**—Access domain name for the first attachment circuit (AC1).
- **AC1-Customer Facing UNI**—Customer-facing UNI port of the first attachment circuit (AC1).
- **AC1-Loopback IP Address**—Loop back address for the first attachment circuit (AC1).
- **AC1-STP Shutdown Threshold**—Spanning Tree Protocol shutdown threshold (in packets/second) for the first attachment circuit (AC1).
- **AC1-VTP Shutdown Threshold**—VLAN Trunk Protocol shutdown threshold (in packets/second) for the first attachment circuit (AC1).
- **AC1-CDP Shutdown Threshold**—Cisco Discovery Protocol shutdown threshold (in packets/second) for the first attachment circuit (AC1).
- **AC1-STP Drop Threshold**—Spanning Tree Protocol drop threshold (in packets/second) for the first attachment circuit (AC1).

- **AC1-CDP Drop Threshold**—Cisco Discovery Protocol drop threshold (in packets/second) for the first attachment circuit (AC1).
- **AC1-VTP Drop Threshold**—VLAN Trunk Protocol drop threshold (in packets/second) for the first attachment circuit (AC1).
- **AC1-UNI Recovery Interval**—Recovery interval (in seconds) of the UNI port for the first attachment circuit (AC1).
- **AC1-UNI Speed**—UNI port speed for the first attachment circuit (AC1).
- **AC1-UNI Shutdown**—Shutdown status of the UNI port for the first attachment circuit (AC1).
- **AC1-UNI PortSecurity**—Status of UNI port security for the first attachment circuit (AC1).
- **AC1-UNI Duplex**—Duplex status (none, full, half, or auto) of the UNI port for the first attachment circuit (AC1).
- **AC1-Maximum MAC Address**—Maximum MAC addresses allowed on the UNI port for the first attachment circuit (AC1).
- **AC1-UNI Aging**—Length of time, in seconds, that MAC addresses can stay in the UNI port security table for the first attachment circuit (AC1).
- **AC2-ID**—Second attachment circuit (AC2) identification number.
- **AC2-UNI Device Interface**—UNI device interface of the second attachment circuit (AC2).
- **AC2-NPC**—Named physical circuit for the second attachment circuit (AC2).
- **AC2-VLAN ID/DLCI/VCD**—The VLAN ID, DLCI or VCD of the second attachment circuit (AC2).
- **AC2-VPI**—Virtual path identifier for the first attachment circuit (AC2).
- **AC2-VCI**—Virtual channel identifier for the first attachment circuit (AC2).
- **AC2-Interface Encap Type**—Encapsulation type used for the second attachment circuit (AC2).
- **AC2-AccessDomain**—Access domain name for the second attachment circuit (AC2).
- **AC2-Customer Facing UNI**—Customer-facing UNI port of the second attachment circuit (AC2).
- **AC2-Loopback IP Address**—Loop back address for the second attachment circuit (AC2).
- **AC2-STP Shutdown Threshold**—Spanning Tree Protocol shutdown threshold for the second attachment circuit (AC2).
- **AC2-VTP Shutdown Threshold**—VLAN Trunk Protocol shutdown threshold for the second attachment circuit (AC2).
- **AC2-CDP Shutdown Threshold**—Cisco Discovery Protocol shutdown threshold for the second attachment circuit (AC2).
- **AC2-STP Drop Threshold**—Spanning Tree Protocol drop threshold for the second attachment circuit (AC2).
- **AC2-CDP Drop Threshold**—Cisco Discovery Protocol drop threshold for the second attachment circuit.
- **AC2-VTP Drop Threshold**—VLAN Trunk Protocol drop threshold for the second attachment circuit (AC2).
- **AC2-UNI Recovery Interval**—Recovery interval of the UNI port for the second attachment circuit (AC2).
- **AC2-UNI Speed**—UNI port speed for the second attachment circuit (AC2).
- **AC2-UNI Shutdown**—Shutdown status of the UNI port for the second attachment circuit (AC2).

- **AC2-UNI PortSecurity**—Status of UNI port security for the second attachment circuit (AC2).
- **AC2-UNI Duplex**—Duplex status (none, full, half, or auto) of the UNI port for the second attachment circuit (AC2).
- **AC2-Maximum MAC Address**—Maximum MAC addresses allowed on the UNI port for the second attachment circuit (AC2).
- **AC2-UNI Aging**—Length of time, in seconds, that MAC addresses can stay in the UNI port security table for the second attachment circuit (AC2).

L2 PE Service Report

The L2 PE Service report allows you to choose PEs and display their roles (for example, N-PE, U-PE or PE-AGG) and L2-related services that are running on them.

Click the L2 PE Service Report icon to bring up the window for this report. (See [Figure 11-3](#).)

Figure 11-3 L2 PE Service Report

The screenshot shows a configuration window for the L2 PE Service Report. The title is 'L2 PE Service Report'. The chart type is set to 'Tabular'. Under the 'Filters' section, there are two input fields for 'PE Role' and 'PE Name', both with asterisks indicating required fields. The 'Sorting' section shows 'Field' set to 'PE Role' and 'Ascending'. The 'Output Fields' section lists: PE Role, PE Name, SR ID, SR Job ID, SR State, and Service Type. A vertical label '138550' is visible on the right side of the window.

Filter Values:

- **PE Role**—PE device role (N-PE, U-PE, or PE-AGG).
- **PE Name**—PE device name.

Output Values:

- **PE Role**—PE device role (N-PE, U-PE, or PE-AGG).
- **PE Name**—PE device name.
- **SR ID**—Service request identification number.
- **SR Job ID**—Service request job identification number.
- **SR State**—Service request state.



Note The **SR State** output does not list service requests in the **CLOSED** state. Service requests in other states are listed, as determined by the filter values.

- **Service Type**—Type of service.

L2 VPN Report

The L2 VPN Report provides a way to track a VLAN ID and/or VC ID back to the VPN and customer without having to iterate through every link and every VPN service. Given a VLAN ID or VC ID, the respective customer and VPN details are displayed in the report.

Click the L2 VPN Report icon to bring up the window for this report. (See [Figure 11-4](#).)

Figure 11-4 L2 VPN Report

Layout		Output Fields	
Title:	L2 VPN Report	VLAN ID VC ID SR Job ID VPN Customer Name Service Type Access Domain Provider Name	
Chart Type:	Tabular		
Filters			
VLAN ID:	* <input type="text"/>		
VC ID:	* <input type="text"/>		
Customer Name:	* <input type="text"/>		
Access Domain:	* <input type="text"/>		
Sorting			
Field:	VLAN ID <input type="text"/> Ascending <input type="text"/>		

Filter Values:

- **VLAN ID**—VLAN identification number.
- **VC ID**—Virtual circuit identification number.
- **Customer Name**—Name of the customer.
- **Access Domain**—Access domain name.

Output Values:

- **VLAN ID**—VLAN identification number.
- **VC ID**—Virtual circuit identification number.
- **SR Job ID**—Service request job identification number
- **VPN**—Name of the VPN.
- **Customer Name**—Name of the customer.
- **Service Type**—Type of service.
- **Access Domain**—Access domain name.
- **Provider Name**—Name of the provider.

VPLS Attachment Circuit Report

The VPLS Attachment circuit report displays details of attachment circuits for a given customer VPN. Click the VPLS Attachment Circuit Report icon to bring up the window for this report. (See [Figure 11-5](#).)

Figure 11-5 VPLS Attachment Circuit Report

Filter Values:

- **SR ID**—Service request identification number.
- **SR Job ID**—Service request job identification number.
- **SR State**—Service request state. Values can be:
 - BROKEN
 - DEPLOYED
 - FAILED_AUDIT
 - FAILED_DEPLOY
 - FUNCTIONAL
 - INVALID
 - LOST
 - PENDING
 - REQUESTED
 - WAIT_DEPLOY
- **Customer Name**—Name of the customer.
- **VPN**—Name of the VPN.
- **Service Type**—Type of service. Values can be:
 - VPLS_ERS
 - VPLS_ERS_NO_CE
 - VPLS_EWS

- VPLS_EWS_NO_CE
- **VLAN ID**—VLAN identification number.
- **AccessDomain**—Access domain name.

Output Values:

- **VPLS Link ID**—VPLS link identification number.
- **SR ID**—Service request identification number
- **SR Job ID**—Service request job identification number.
- **SR State**—Service request state.



Note The **SR State** output does not list service requests in the **CLOSED** state. Service requests in other states are listed, as determined by the filter values.

- **Customer Name**—Name of the customer.
- **VPN**—Name of the VPN.
- **Service Type**—Type of service.
- **VLAN ID**—VLAN identification number.
- **Policy Name**—Name of the VPLS policy.
- **VFI Interface**—Virtual forwarding interface name.
- **Customer Facing UNI**—Customer-facing UNI port.
- **AccessDomain**—Access domain name.
- **NPC**—Named physical circuit.
- **UNI Port**—UNI port.
- **UNI Shutdown**—Shutdown status of the UNI port.
- **UNI Aging**—Length of time, in seconds, that MAC addresses can stay in the UNI port security table.
- **UNI Speed**—UNI port speed.
- **UNI Duplex**—Duplex status (none, full, half, or auto) of the UNI port.
- **Maximum MAC Address**—Maximum MAC addresses allowed on the UNI port.
- **CDP Shutdown Threshold**—Cisco Discovery Protocol shutdown threshold (in packets/second) on the UNI port.
- **STP Shutdown Threshold**—Spanning Tree Protocol shutdown threshold (in packets/second) on the UNI port.
- **VTP Shutdown Threshold**—VLAN Trunk Protocol shutdown threshold (in packets/second) on the UNI port.
- **CDP Drop Threshold**—Cisco Discovery Protocol drop threshold (in packets/second) on the UNI port.
- **VTP Drop Threshold**—VLAN Trunk Protocol drop threshold (in packets/second) on the UNI port.
- **STP Drop Threshold**—Spanning Tree Protocol drop threshold (in packets/second) on the UNI port.
- **Recovery Interval**—Recovery interval (in seconds) of the UNI port.

VPLS PE Service Report

The VPLS PE Service report allows you to choose PEs and display their roles (for example, N-PE, U-PE or PE-AGG) and the VPLS services that are running on them.

Click the VPLS PE Service Report icon to bring up the window for this report. (See [Figure 11-6](#).)

Figure 11-6 VPLS PE Service Report

Layout		Output Fields	
Title:	VPLS PE Service Report	PE Role	
Chart Type:	Tabular	PE Name	
Filters		SR ID	
PE Role:	*	SR Job ID	
PE Name:	*	Service Type	
Sorting		SR State	
Field:	PE Role		
	Ascending		

Filter Values:

- **PE Role**—PE device role (N-PE, U-PE, or PE-AGG).
- **PE Name**—PE device name.

Output Values:

- **PE Role**—PE device role (N-PE, U-PE, or PE-AGG).
- **PE Name**—PE device name.
- **SR ID**—Service request identification number.
- **SR Job ID**—Service request job identification number.
- **Service Type**—Type of service.
- **SR State**—Service request state.



Note

The **SR State** output does not list service requests in the **CLOSED** state. Service requests in other states are listed, as determined by the filter values.

VPLS VPN Report

The VPLS VPN report provides a way to track a VLAN ID and/or VFI Name back to the VPN and customer without having to iterate through every link and every VPN service. Given a VLAN ID or VFI name, the respective customer and VPN details are displayed in the report.

Click the VPLS VPN Report icon to bring up the window for this report. (See [Figure 11-7](#).)

Figure 11-7 VPLS VPN Report

The screenshot shows a configuration window for the VPLS VPN Report. The title is 'VPLS VPN Report' and the chart type is set to 'Tabular'. The 'Filters' section includes four input fields: 'VLAN ID', 'Customer Name', 'VFI Name', and 'Access Domain', each with an asterisk indicating a required field. The 'Sorting' section shows 'Field' set to 'VLAN ID' and 'Ascending' order. The 'Output Fields' section lists the following fields: 'VLAN ID', 'SR Job ID', 'VPN', 'Customer Name', 'Service Type', 'VFI Name', 'Access Domain', and 'Provider Name'. A vertical ID '138554' is visible on the right side of the window.

Filter Values:

- **VLAN ID**—VLAN identification number.
- **Customer Name**—Name of the customer.
- **VFI Name**—Virtual forwarding interface name.
- **Access Domain**—Access domain name.

Output Values:

- **VLAN ID**—VLAN identification number.
- **SR Job ID**—Service request job identification number.
- **VPN**—Name of the VPN.
- **Customer Name**—Name of the customer.
- **Service Type**—Type of service.
- **VFI Name**—Virtual forwarding interface name.
- **Access Domain**—Access domain name.
- **Provider Name**—Name of the provider.

Creating Custom L2 and VPLS Reports

The reports listed in the ISC GUI in the L2 folder are derived from an underlying configuration file. The file is in XML format. You can access the file in the following location:

`$ISC_HOME/resources/nbi/reports/ISC/l2_report.xml`

See the “Monitoring” chapter in *Cisco IP Solution Center Infrastructure Reference, 5.1* for details on how to modify report configuration files to create custom reports.

