



VRF-Aware Source Interface for Syslog Transactions

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The VRF Aware Source Interface for Syslog Transactions feature provides logging source-interface setting capability to Virtual Routing and Forwarding (VRF) syslog destinations on a per-VRF basis.

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Information About VRF-Aware Source Interfaces for Syslog Transactions

- [VRF-Aware Source Interfaces for Syslog Transactions, page 1](#)

VRF-Aware Source Interfaces for Syslog Transactions

The VRF Aware Source Interfaces for Syslog Transactions feature allows logging source-interface setting capability to VRF syslog destinations on a per-VRF basis. Syslog packets can be configured to be sent to



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hosts with a desired source IP address. This source IP address is typically the interface source address and can be subjected to interface up and down events. The **logging source-interface** command allows the user to configure the desired source IP address (usually a loopback address) enabling the syslog listeners to filter packets coming from a fixed address.

How to Configure VRF-Aware Source Interfaces for Syslog Transactions

- [Configuring VRF-Aware Source Interfaces for Syslog Transactions, page 2](#)

Configuring VRF-Aware Source Interfaces for Syslog Transactions

Perform this task to enable a VRF interface to be configured as the source interface when syslog messages are being exported to a VRF host.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **logging source-interface** *type numbervrfnumber*
4. **end**
5. **show running interface** *type numbervrf number*
6. **show running | include logging**

DETAILED STEPS

Command or Action	Purpose
Step 1 enable Example: Device> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2 configure terminal Example: Device# configure terminal	Enters global configuration mode.

Command or Action	Purpose
<p>Step 3 <code>logging source-interface type number vrf number</code></p> <p>Example:</p> <pre>Device(config)# logging source-interface ethernet 0</pre>	<p>Configures the syslog packets that contain the IPv4 or IPv6 address of a particular interface and specifies the source interface for syslog messages sent to remote syslog hosts.</p> <ul style="list-style-type: none"> Normally, a syslog message sent to remote hosts will use whatever interface is available at the time of the message generation. This command forces the device to send syslog messages to remote hosts only from the specified interface.
<p>Step 4 <code>end</code></p> <p>Example:</p> <pre>Device(config)# end</pre>	<p>Ends your current configuration session and returns the CLI to privileged EXEC mode.</p>
<p>Step 5 <code>show running interface type number vrf number</code></p> <p>Example:</p> <pre>Device# show running interface loopback 49 vrf 1</pre>	<p>Specifies the source IPV4 or IPv6 address of system logging packets.</p>
<p>Step 6 <code>show running include logging</code></p> <p>Example:</p> <pre>Device# show running include logging</pre>	<p>Specifies the source IPV4 or IPv6 address of system logging packets.</p>

Configuration Examples for VRF-Aware Source Interfaces for Syslog Transactions

- [Example: Configuring VRF-Aware Source Interfaces for Syslog Transactions, page 3](#)
- [Example: Source IP Tagging, page 4](#)

Example: Configuring VRF-Aware Source Interfaces for Syslog Transactions

In the following example, a VRF interface is configured as the source interface when sending syslog messages to a VRF host:

```
Device> enable
Device# configure terminal
Device(config)# logging source-interface ethernet 0 vrf1
Device(config)# end
Device> show running interface loopback 49
Device> show running | include logging
Device# show running interface loopback 49
```

```

Building configuration...
Current configuration : 84 bytes
!
interface Loopback49
 ip vrf forwarding vrf1
 ip address 10.4.2.39 255.0.0.0
end
Device# show running | includes logging
logging source-interface Loopback49 vrf1
logging host 192.0.2.1 vrf1

```

Example: Source IP Tagging

The **logging source-interface** CLI command can be used to specify a source IP address in all syslog packets sent from the device. The following syslog filter module example demonstrates the use of **show** CLI commands (**show running-config** and **show ip interface** in this case) within a filter module to add the source IP address to syslog messages. The script looks for the local namespace variable "source_ip::init" first. If the variable is not defined in the first syslog message processed, the filter will run the **show** commands and use regular expressions to get the source interface and then its IP address.

Note that in this script the **show** commands are run only once. If the source interface or its IP address were to be changed, the filter would have to be reinitialized to pick up the new information. (You could have the **show** commands run on every syslog message, but this practice would not scale very well.)

```

# =====
# Embedded Syslog Manager
#
# Source IP Module
#
#      . . . | | | | | | | : . . . | | | | | | | : . .
#      -----
#                    C i s c o   S y s t e m s
# =====
# Usage: Adds Logging Source Interface IP address to all messages.
#
# Namespace:source_ip
#
# ===== End User Setup =====
namespace eval ::source_ip {
  if { [info exists init] == 0 } {
    if { [catch {regexp {^logging source-interface (.*)} [exec show
run | inc logging source-interface] match source_int}] } {
      set suffix "No source interface specified"
    } elseif { [catch {regexp {Internet address is (.*)/.*$} [exec
show ip int $source_int | inc Internet] match ip_addr}] } {
      set suffix "No IP address configured for source interface"
    } else {
      set suffix $ip_addr
    }
    set init 1
  }

  if { [string length $::orig_msg] == 0 } {
    return ""
  }
  return "$::orig_msg - $suffix"
} ;# end namespace source_ip

```

Additional References for VRF-Aware Source Interfaces for Syslog Transactions

Related Documents

Related Topic	Document Title
Cisco IOS commands	<i>Cisco IOS Master Commands List, All Releases</i>
Network Management commands (including logging commands): complete command syntax, defaults, command mode, command history, usage guidelines, and examples	<i>Cisco IOS Network Management Command Reference</i>
Syslog logging	<i>Troubleshooting and Fault Management module</i>

Standards and RFCs

Standard/RFC	Title
No new or modified standards/RFCs are supported by this feature, and support for existing standards/RFCs has not been modified by this feature.	--

MIBs

MIB	MIBs Link
No new or modified MIBs are supported by this feature, and support for existing MIBs has not been modified by this feature.	To locate and download MIBs for selected platforms, Cisco software releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for VRF-Aware Source Interfaces for Syslog Transactions

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1 **Feature Information for VRF Aware Source Interfaces for Syslog Transactions**

Feature Name	Releases	Feature Information
VRF Aware Source Interfaces for Syslog Transactions	11.2 12.2(33)SRA 12.2SX 12.4(4)T 15.1(1)SY	The VRF-Aware Source Interface for Syslog Transactions feature allows logging source-interface setting capability to VRF syslog destinations on a per-VRF basis. The following command was introduced or modified: logging source-interface .

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