Flexible Media Routing

The Flexible Media Routing feature supports the call legs in which media and signaling are sent over different virtual or physical networks. The signaling network is configured using the **vrf** command in the adjacency submode. All the call legs to and from an adjacency use the same VPN ID for signaling. The media network is configured using the *vrf* parameter in the **media-address** command.

When the Flexible Media Routing feature is enabled, the media address selection overrides the VPN ID-based selection. Therefore, the media VPN ID is no longer compared with the signaling VPN ID. Instead, the SBC selects the media address whose realm matches the adjacency realm. The IPv6 and H.323 protocols support the Flexible Media Routing feature.

Cisco Unified Border Element (SP Edition) was formerly known as Integrated Session Border Controller and may be commonly referred to as the session border controller (SBC) in this document.

For a complete description of the commands used in this chapter, refer to the *Cisco Unified Border Element (SP Edition) Command Reference: Unified Model* at:

http://www.cisco.com/en/US/docs/ios/sbc/command/reference/sbcu_book.html

For information about all Cisco IOS commands, use the Command Lookup Tool at http://tools.cisco.com/Support/CLILookup or a Cisco IOS master commands list.

Feature History for Flexible Media Routing

Release	Modification
Cisco IOS XE Release 3.5S	The Flexible Media Routing feature was introduced on the Cisco ASR 1000 Series Aggregation Services Routers.

Contents

This chapter contains the following sections:

Prerequisites for Configuring the Flexible Media Routing Feature

The following prerequisite is required to configure the Flexible Media Routing feature:

Ensure that the SBC is deactivated before configuring the Flexible Media Routing feature.

Configuring the Flexible Media Routing Feature

This task shows how to configure the Flexible Media Routing feature.

SUMMARY STEPS

1. **configure terminal**
2. **sbc** *sbc-name*
3. **no activate**
4. **allow diff-med-sig-vpn**
5. **activate**
6. exit

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Router# configure terminal`	Enables the global configuration mode.
Step 2	**sbc** *sbc-name* **Example:** `Router(config)# sbc test`	Enters the SBC configuration mode.
Step 3	**no activate** **Example:** `Router(config-sbc)# no activate`	Deactivates the SBC. **Note** If the SBC is active and you run the **allow diff-med-sig-vpn** command, the system issues a warning message, asking you to first deactivate the SBC. You can reactivate the SBC using the **activate** command.
Step 4	**allow diff-med-sig-vpn** **Example:** `Router(config-sbc)# allow diff-med-sig-vpn`	Allows media and signaling to use different VPN IDs in a call leg. The **no** version of this command allows media and signaling to use the same VPN ID in a call leg.

	Command or Action	Purpose
Step 5	**activate** **Example:** `Router(config-sbc)# activate`	Reactivates the SBC.
Step 6	**exit** **Example:** `Router(config-sbc)# exit`	Exits the SBC configuration mode.

Configuration Examples for the Flexible Media Routing Feature

The following example shows the SBC behavior when the Flexible Media Routing feature is configured:

```
sbc test
allow diff-med-sig-vpn
```

The following example shows how to configure different VRFs under the signaling and media networks.

```
sbe
    adjacency sip sipp1  ================== incoming
        force-signaling-peer all
        vrf vrf_sipp1
        nat force-on
        inherit profile preset-access
        signaling-address ipv4 192.0.2.1
        statistics method summary
        signaling-port 5060
        remote-address ipv4 192.0.2.3 255.255.255.0
        signaling-peer 192.0.2.3
        realm FMR
        attach
    adjacency sip sipp2  ================== outgoing
        force-signaling-peer all
        vrf vrf_sipp2
        nat force-off
        inherit profile preset-access
        signaling-address ipv4 192.0.2.2
        statistics method summary
        signaling-port 5060
        remote-address ipv4 192.0.2.4 255.255.255.0
        signaling-peer 192.0.2.4
        fast-register disable
        realm FMR
    call-policy-set 1
        first-call-routing-table start-table1
        first-reg-routing-table start-table1
        rtg-src-adjacency-table start-table1
        entry 1
        match-adjacency sipp1
        dst-adjacency sipp2
        action complete
        entry 2
        match-adjacency sipp2
        dst-adjacency sipp1
        action complete
    complete
    call-policy-set default 1
```

```
    network-id 9737
!
media-address ipv4 192.0.2.5 vrf vrf_media realm FMR
    port-range 16384 32767 any
activate
!
end
```

Changes in XML Billing Records

After the Flexible Media Routing feature is enabled, the SBC adds the **mediarealm** attribute to the adjacency element in the XML billing records as follows:

```
<adjacency type="orig" name="Adj1" account="Acc1" vpn="0X12345678" mediarealm="Internet"/>
```

For more information about the mediarealm attribute, see Appendix C, XML Billing Schema.