Cisco Flexible Radio Assignment

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Flexible radio assignment actions

Flexible Radio Assignment (FRA) evaluates 2.4-GHz radio coverage to identify overlapping coverage causing radio interference. If there is an overlapping coverage, the dual-band radio moves to either 5-GHz client serving or monitor role.

Feature history for flexible radio assignment action

Table 1: Feature history for FRA Action

Release	Feature	Feature information
Cisco IOS XE Dublin 17.10.1	Flexible Radio Assignment (FRA) Action	In Cisco IOS-XE 17.10.1 and earlier releases, the FRA moves the redundant dual-band radios to either 5-GHz client-serving role or monitor role.
Cisco IOS XE Dublin17.11.1	Flexible Radio Assignment (FRA) Action	From Cisco IOS-XE 17.11.1 onwards, you can select the redundant dual-band radios in a network to operate in monitor only mode.

Release Information

In Cisco IOS-XE 17.10.1 and earlier releases, the FRA moves the redundant dual-band radios to either 5-GHz client-serving role or monitor role. From Cisco IOS-XE 17.11.1 onwards, you can set redundant dual-band radios in a network to operate in monitor-only mode.

Note The FRA action feature is disabled by default.

Configure FRA action in default RF profile (CLI)

Configure the FRA action in the default RF profile to optimize radio frequency management.

Procedure

Step 1 Configure terminal

Example:

```
Device# configure terminal
```

Enters global configuration mode.

Step 2 Configure the FRA action

Example:

```
Device(config)# ap dot11 24ghz fra action monitor
```

Configures the FRA action to monitor mode, moving all redundant dual-band APs solely to the monitor role.

Step 3 Exit configuration mode

Example:

```
Device(config)# end
```

Exits configuration mode and returns to privileged EXEC mode.

Upon completion, the FRA action is set, redundancy in dual-band radios is handled efficiently, and the system returns to privileged EXEC mode.

Configure FRA action in 2.4-GHz RF profile (CLI)

Procedure

Step 1 Configure terminal

Example:

```
Device# configure terminal
```

Enters global configuration mode

Step 2 Configure the RF profile name

Example:

```
Device(config)# ap dot11 24ghz rf-profile alpha-rfprofile-24ghz
```

Configures the RF profile name and enters RF profile configuration mode.

Step 3 Configure the FRA action as monitor

Example:

```
Device(config-rf-profile)# fra action monitor
```

Configures the FRA action as monitor, and moves all redundant dual-band radios to monitor role only.

Step 4 Exit configuration mode

Example:

```
Device(config-rf-profile)# end
```

Exits configuration mode and returns to privileged EXEC mode.

Verify FRA action configuration

To view the selected FRA action, use the following command:

```
Device# show ap fra
FRA State              : Enabled
FRA Freeze             : Disabled
FRA Operation State    : Up
FRA Sensitivity        : higher (85%)
FRA Interval           : 1 Hour(s)
Service Priority       : Coverage
Client Aware FRA       : Enabled
  Client Select        : 25%
  Client Reset         : 5%
FRA Action             : 2.4GHz/Monitor
  Last Run             : 3069 seconds ago
```

To view the FRA action details in an AP RF profile, use the following command:

```
Device# show ap rf-profile name madhu-rf-profile-24 detail | sec FRA
Client Aware FRA                 : Disabled
FRA Action                       : 2.4GHz/Monitor
```

To view the radio mode and role in an AP, use the following command:

```
Device# show ap name AP7872.5DED.CB74 config slot 0 | sec Attribute
Attributes for Slot 0
  Radio Type                                    : 802.11n - 2.4/5 GHz
  Radio Mode                                    : Monitor
  Radio Role                                    : Monitor
    Assignment Method                           : Auto
    Monitor Mode Reason                         : Automatically Switched by FRA
```