Cisco StadiumVision

Cisco StadiumVision Overview

Cisco StadiumVision solution is a proven, end-to-end, high-definition IPTV solution that provides advanced digital content management and delivery that can transform the look and feel of venues. It is built on top of the Cisco Connected Stadium solution and centrally-managed through the StadiumVision Director. Cisco StadiumVision solution enables the integration and automated delivery of customized and dynamic content from multiple sources to different areas of the stadium in high definition quality.

This technology allows you to replay certain exciting and critical moments of a game on Wi-Fi capable devices.

To enable Cisco StadiumVision solution on the controller , you need to configure these parameters:

1. On Wireless Controller :
    - Multicast Data Rate
    - RX Sensitivity SOP
    - Multicast Buffer
2. CAPWAP
3. AP Radio Driver and Firmware:
    - Multicast Data Rate
    - RX Sensitivity SOP
    - Multicast Buffer

Configure Parameters for Cisco StadiumVision (GUI)

Procedure

Step 1 Choose **Configuration** > **Wireless** > **Advanced**.

Step 2 Click the **High Density** tab.

Step 3 In the **Multicast Data Rate** section, set the data rate for 5 GHz radio or 2.4 GHz radio using the drop-down lists.

Step 4 Click **Apply** .

Configure Parameters for Cisco StadiumVision (CLI)

Note Multicast buffer and data rate configurations are supported for all AP models.

Procedure

	Command or Action	Purpose
Step 1	**wlan** *wlan-name wlan-id* **Example:** `Device(config)# wlan wlan1 10`	Configures a WLAN.
Step 2	**multicast buffer** *multicast-buffer-number* **Example:** `Device(config-wlan)# multicast buffer 45`	Configures enhanced multicast buffer size between 30 (default) and 60 on a WLAN. **Note** You can enable only two out of the possible 512 WLANs configured on Controller embedded wireless controller for enhanced multicast buffers.
Step 3	**ap dot11 [5ghz| 24ghz] multicast data-rate** *rate* **Example:** `Device(config)# ap dot11 [5ghz| 24ghz] rx-sop threshold custom -70`	Configures the radio receive sensitivity SOP threshold between -60 to -85 dB, which can also be configured as predefined auto, low, high, medium values specific to 5ghz or 24ghz bands. By default, the configuration is disabled and it's value is set to *auto*. If the RxSOP value of *auto* (0) is pushed, then the AP considers the value burnt-in during manufacturing.

Verify StadiumVision Configurations

- **show ap rf-profile name** *rf-name* **detail**
- **show ap dot11 5ghz** *high-density*

Rx SOP

```
Device#show ap rf-profile name Typical_Client_Density_rf_5gh detail | i SOP
Rx SOP Threshold                : auto
```

Multicast Buffer

```
Device#show wlan id 1 | sec Buffer
Multicast Buffer                              : Enabled
Multicast Buffer Size                         : 45

Device#

Device#sh wlan name vwlc-OpenAuth | inc Buffer
Multicast Buffer                              : Enabled
Multicast Buffer Size                         : 45
Device#
```

Multicast Data Rate

```
Device#sh ap dot11 24ghz high-density
AP Name                         Mac Address            Slot         Rxsop
Threshold Type Value (dbm)      Multicast Data Rate(Mbps)
-------------------------------------------------------------------------------------
-------------------------------------------------
test-1800-AP                     aaaa.bbbb.cccc            0         auto
        0                        54
AP4001.7AB2.BEB6                 aaab.bbbb.cccc            2         auto
        0                        54
AP70DF.2FA2.72EE                 aaac.bbbb.cccc            0         auto
        0                        0

Device#show ap dot11 5ghz high-density
AP Name                         Mac Address            Slot         Rxsop
Threshold Type Value (dbm)      Multicast Data Rate(Mbps)
-------------------------------------------------------------------------------------
-------------------------------------------------
Saji-1800-AP                     aaab.bbbb.cccc            1         auto
        0                        12
Saji-2802I-AP                    aaab.bbbb.cccc            0         custom
         -82                      12
Saji-2802I-AP                    aaac.bbbb.cccc            1         custom
         -82                      12
AP4001.7AB2.BEB6                 aaad.bbbb.cccc            0         custom
         -82                      12
AP4001.7AB2.BEB6                 aaae.bbbb.cccc            1         custom
         -82                      0
AP500F.8086.8B56                 aaaf.bbbb.cccc            0         custom
         -82                      12
AP500F.8086.8B56                 aaag.bbb.cccc           1         custom
```

```
         -82                          12
AP70DF.2FA2.72EE                  aaah.bbbb.cccc            1         auto
        0                         0

Device#
Device(config)#ap dot11 5ghz rf-profile test_5ghz_rf
Device(config-rf-profile)#high-density multicast data-rate RATE_18M


Device#  show ap rf-profile name test_5ghz_rf detail | inc Multicast
Multicast Data Rate               : 18 Mbps
Device#
```