



## Configuring Key Telephone System-Based CAC

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### Restrictions for Key Telephone System-Based CAC

- The controller ignores the SSID Capability Check Request message from the clients.
- Preferred call is not supported for KTS CAC clients.
- Reason code 17 is not supported in intercontroller roaming scenarios.
- To make the KTS-based CAC feature functional, ensure that you do the following:
  - Enable WMM on the WLAN
  - Enable ACM at the radio level
  - Enable processing of TSPEC inactivity timeout at the radio level
- All RLAN clients are disconnected when Call Admission Control (CAC) is enabled or disabled to apply policies.

### Key Telephone System-Based CAC

Key Telephone System-based CAC is a protocol that is used in NEC MH240 wireless IP telephones. You can configure the controller to support CAC on KTS-based SIP clients, to process bandwidth request message from such clients, to allocate the required bandwidth on the AP radio, and to handle other messages that are part of the protocol.

When a call is initiated, the KTS-based CAC client sends a Bandwidth Request message to which the controller responds with a Bandwidth Confirm message indicating whether the bandwidth is allocated or not. The call is allowed only if the bandwidth is available. If the client roams from one AP to another, the client sends another Bandwidth Request message to the controller.

Bandwidth allocation depends on the median time calculated using the data rate from the Bandwidth Request message and the packetization interval. For KTS-based CAC clients, the G.711 codec with 20 milliseconds as the packetization interval is used to compute the median time.

The controller releases the bandwidth after it receives the bandwidth release message from the client. When the client roams to another AP, the controller releases the bandwidth on the previous AP and allocates bandwidth on the new AP, in both intracontroller and intercontroller roaming scenarios. The controller releases the bandwidth if the client is dissociated or if there is inactivity for 120 seconds. The controller does not inform the client when the bandwidth is released for the client due to inactivity or dissociation of the client.

This section contains the following subsections:

## Configuring KTS-based CAC (GUI)

### Before you begin

To enable KTS-based CAC for a WLAN, ensure that you do the following:

- Set the QoS profile for the WLAN to Platinum.
- Set the WLAN in disabled state.
- Set the FlexConnect Local Switching in disabled state for the WLAN (On the WLANs > Edit page, click the **Advanced** tab and uncheck the **FlexConnect Local Switching** check box).

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- Step 1** Choose **WLANs** to open the WLANs page.
- Step 2** Click the ID number of the WLAN for which you want to configure the KTS-based CAC policy.
- Step 3** On the **WLANs > Edit** page, click the **Advanced** tab.
- Step 4** Under Voice, check or uncheck the **KTS based CAC Policy** check box to enable or disable KTS-based CAC for the WLAN.
- Step 5** Save the configuration.
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## Configuring KTS-based CAC (CLI)

### Before you begin

To enable KTS-based CAC for a WLAN, ensure that you do the following:

- Configure the QoS profile for the WLAN to Platinum by entering the following command:  
**config wlan qos *wlan-id* platinum**
- Disable the WLAN by entering the following command:  
**config wlan disable *wlan-id***
- Disable FlexConnect Local Switching for the WLAN by entering the following command:  
**config wlan flexconnect local-switching *wlan-id* disable**

**Step 1** To enable KTS-based CAC for a WLAN, enter the following command:

```
config wlan kts-cac enable wlan-id
```

**Step 2** To enable the functioning of the KTS-based CAC feature, ensure you do the following:

a) Enable WMM on the WLAN by entering the following command:

```
config wlan wmm allow wlan-id
```

b) Enable ACM at the radio level by entering the following command:

```
config 802.11a cac voice acm enable
```

c) Enable the processing of the TSPEC inactivity timeout at the radio level by entering the following command:

```
config 802.11a cac voice tspec-inactivity-timeout enable
```

## Related Commands

- To see whether the client supports KTS-based CAC, enter the following command:

```
show client detail client-mac-address
```

Information similar to the following appears:

```
Client MAC Address..... 00:60:b9:0d:ef:26
Client Username ..... N/A
AP MAC Address..... 58:bc:27:93:79:90

QoS Level..... Platinum
802.1P Priority Tag..... disabled
KTS CAC Capability..... Yes
WMM Support..... Enabled
Power Save..... ON
```

- To troubleshoot issues with KTS-based CAC, enter the following command:

```
debug cac kts enable
```

- To troubleshoot other issues related to CAC, enter the following commands:

- **debug cac event enable**

- **debug call-control all enable**

