



Call Features Configuration

The phone web user interface and the xml configuration files allows you to customize calling features of your phone such as call transfer, call park, conferencing, and speed-dial.

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Enable Call Transfer

You can enable attended call transfer and blind call transfer services for your user.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code. To configure each parameter, see the syntax of the string in [Parameters for Enable Call Transfer, on page 2](#) table.

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

-
- Step 1** Select **Voice > Phone**.
- Step 2** Under **Supplementary Services**, configure the parameters as defined in the [Parameters for Enable Call Transfer, on page 2](#) table.
- Step 3** Click **Submit All Changes**.
-

Parameters for Enable Call Transfer

The following table defines the function and usage of Enable Call Transfer parameters in the Supplementary Services section under the Phone tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

Table 1: Parameters for Enable Call Transfer

Parameter	Description
Attn Transfer Serv	<p>Attended call transfer service. The user answers the call before transferring it.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Attn_Transfer_Serv ua="na">Yes</Attn_Transfer_Serv></pre> In the phone web page, select Yes to enable the transfer service. Select No to disable it. <p>Options: Yes and No</p> <p>Default: Yes</p>

Parameter	Description
Blind Transfer Serv	<p>Blind call transfer service. The user transfers the call without speaking to the caller.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Blind_Transfer_Serv ua="na">Yes</Blind_Transfer_Serv></pre> In the phone web page, select Yes to enable the transfer service. Select No to disable it. <p>Options: Yes and No</p> <p>Default: Yes</p>

Call Forward

To enable call forward, you can enable the feature in two places: on the Voice tab and the User tab of the phone web page.

Enable Call Forward on Voice Tab

Perform this task if you want to enable call forward for a user.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code. To configure each parameter, see the syntax of the string in the [Parameters for Enable Call Forward on Voice Tab, on page 4](#) table.

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

-
- Step 1** Select **Voice > Phone**.
- Step 2** Under **Supplementary Services**, configure the parameters as described in the [Parameters for Enable Call Forward on Voice Tab, on page 4](#) table.
- Step 3** Click **Submit All Changes**.

Related Topics

- [DND and Call Forward Status Sync](#)
- [Enable Feature Key Sync](#)
- [Enable Call Forward Status Sync via XSI Service](#)

Parameters for Enable Call Forward on Voice Tab

The following table defines the function and usage of Enable Call Forward on Voice Tab parameters in the Supplementary Services section under the Phone tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

Table 2: Parameters for Enable Call Forward on Voice Tab

Parameter	Description
Cfwd All Serv	<p>Forwards all calls.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_All_Serv ua="na">Yes</Cfwd_All_Serv></pre> In the phone web page, select Yes to forward all calls. Select No to disable it. <p>Options: Yes and No</p> <p>Default: Yes</p>
Cfwd Busy Serv	<p>Forwards calls only if the line is busy.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_Busy_Serv ua="na">Yes</Cfwd_Busy_Serv></pre> In the phone web page, select Yes to forward calls when the line is busy. Select No to disable it. <p>Options: Yes and No</p> <p>Default: Yes</p>

Parameter	Description
Cfwd No Ans Serv	<p>Forwards calls only if the line is not answered.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_No_Ans_Serv ua="na">Yes</Cfwd_No_Ans_Serv></pre> In the phone web page, select Yes to forward calls if the line is not answered. Select No to disable it. <p>Options: Yes and No</p> <p>Default: Yes</p>

Enable Call Forward on User Tab

Perform the following task to change the call forward settings from the phone web page.

The settings of call forward are synchronized between the phone and the server when one of the following ways is enabled:

- Feature key synchronization (FKS)
- BroadSoft's Extended Services Interface (XSI) Synchronization

To ensure the settings of call forward on the local phone take effect, you need to disable FKS and XSI first. See [Enable Feature Key Sync](#) and [Enable Call Forward Status Sync via XSI Service](#).

The priority of taking effect for call forward setting in the supported modes is: FKS > XSI > Local.

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Ensure that the call forward setting is enabled on the Voice tab. See [Enable Call Forward on Voice Tab, on page 3](#).

Procedure

-
- Step 1** Select **Voice > User**.
- Step 2** In the **Call Forward** section, configure the parameters as described in the [Parameters for Enable Call Forward on User Tab, on page 6](#) table.
- Step 3** Click **Submit All Changes**.
-

Parameters for Enable Call Forward on User Tab

The following table defines the function and usage of Voice > User > Call Forward in the phone web page. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

Except for the parameter "Forward Softkey", other parameters in the following table take effect only when FKS and XSI disabled.

Table 3: Parameters for Enable Call Forward on User Tab

Parameter	Description
Cfwd All	<p>Forwards all calls. The setting of this parameter takes precedence over Cfwd Busy and Cfwd No Answer.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_All ua="rw">No</Cfwd_All></pre> In the phone web page, select Yes to forward all calls. Select No to disable it. <p>Options: Yes and No</p> <p>Default: No</p>
Cfwd All Dest	<p>Specifies the destination to which all calls are forwarded. The destination can be an alphanumeric input, a phone number, or a SIP URI.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_All_Dest ua="rw">DestinationNumber</Cfwd_All_Dest></pre> In the phone web page, enter the destination number in the field. <p>When you select Yes for Cfwd All, make sure to configure the parameter.</p> <p>Default: Empty</p>

Parameter	Description
Cfwd Busy	<p>Forwards calls only if the line is busy.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_Busy ua="rw">No</Cfwd_Busy></pre> In the phone web page, select Yes to forward calls when the line is busy. Select No to disable it. <p>Options: Yes and No Default: No</p>
Cfwd Busy Dest	<p>Specifies the destination to which calls are forwarded if the line is busy. The destination can be an alphanumeric input, a phone number, or a SIP URI.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_Busy_Dest ua="rw">DestinationNumber</Cfwd_Busy_Dest></pre> In the phone web page, enter the destination number in the field. <p>When you select Yes for Cfwd Busy, make sure to configure the parameter. Default: Empty</p>
Cfwd No Answer	<p>Forwards the incoming call only if the call isn't answered.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Cfwd_No_Answer ua="rw">No</Cfwd_No_Answer></pre> In the phone web page, select Yes to forward the incoming call if the call isn't answered. Select No to disable it. <p>Options: Yes and No Default: No</p>

Parameter	Description
Cfwd No Ans Dest	<p>Specifies the phone number of destination to which the incoming call is forwarded if the call isn't answered. The destination can be an alphanumeric input, a phone number, or a SIP URI.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="976 569 1484 625"><Cfwd_No_Answer_Dest ua="rw">DestinationNumber</Cfwd_No_Answer_Dest></pre> In the phone web page, enter the destination number in the field. <p>When you select Yes for Cfwd No Answer, make sure to configure the parameter.</p> <p>Default: Empty</p>
Cfwd No Ans Delay	<p>Assigns a response delay time (in seconds) for the no answer scenario.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="976 1077 1398 1134"><Cfwd_No_Answer_Delay ua="rw">20</Cfwd_No_Answer_Delay></pre> In the phone web page, enter the delay time in the field. <p>Default: 20</p>

Parameter	Description
Forward Softkey	<p>Controls the scope of the call forward services that the user can set up by a dedicated softkey. Options are:</p> <ul style="list-style-type: none"> • All Cfwds: Allows the user to set up all call forward services, including Call Forward All, Call Forward Busy, and Call Forward No Answer by pressing the Forward softkey. In this setting, the softkey name is Forward for activation and Clr fwd for deactivation. • Only the C fwd All: Allows the user to directly set up the Call Forward All service by pressing the softkey Forward all. The user can still set up all call forward services from the Settings > User preferences > Call preferences > Call forwarding > Call forward settings screen. In this setting, the softkey name is Forward all for activation and Clr fwd all for deactivation. <p>Perform one of the following:</p> <ul style="list-style-type: none"> • In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre><Forward_Softkey ua="na">All Cfwds</Forward_Softkey></pre> • In the phone web page, select the value that determines the scope of the call forward services for the users. <p>Note The parameter takes effect even though FKS, XSI, or FAC is enabled.</p> <p>Default: All Cfwds</p>

Enable Feature Activation Code Synchronization for Forward All Calls

You can synchronize forwarding all calls feature to the server with a Feature Activation Code (FAC). When you enable this feature, the FAC sends out the star code and the destination number with INVITE to the server.


Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

Step 1 Select **Voice > Ext (n)**.

Step 2 In the **Feature Activation Code Sync** field, select **Yes** to enable the feature.

After you enable this feature, your user can press the **Forward** or **Forward all** softkey on the phone and enter the destination contact number. When the user presses the **Call** softkey, a voice message plays to confirm the call forward setting status. After successful configuration, a call forward  icon displays at the top of the phone screen.

The softkey name is different based on the value of the parameter `Forward Softkey`, see [Parameters for Enable Call Forward on User Tab, on page 6](#).

In the phone configuration file with XML(cfg.xml), enter a string in this format:

```
<Feature_Activation_Code_Sync_n_ ua="na">Yes</Feature_Activation_Code_Sync_n_>
```

where, n is the extension number.

Default value: No

Allowed values: Yes or No

Step 3 Click **Submit All Changes**.

Set Feature Activation Code for the Call Forward All Service

You can set activation code (star code) that can be used to activate or deactivate the call forward all service.

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

Step 1 Select **Voice > Regional**.

Step 2 In the **Vertical Service Activation Codes** section, ensure that the **Cfwd All Act Code** field is set to the value defined by the server. The default value is *72.

In the phone configuration file with XML(cfg.xml), enter a string in this format:

```
<Cfwd_All_Act_Code ua="na">*72</Cfwd_All_Act_Code>
```

Step 3 In the **Vertical Service Activation Codes** section, ensure that the **Cfwd All Deact Code** field is set to the value defined by the server. The default value is *73.

In the phone configuration file with XML(cfg.xml), enter a string in this format:

```
<Cfwd_All_Deact_Code ua="na">*73</Cfwd_All_Deact_Code>
```

Step 4 Click **Submit All Changes**.

Your user can dial *72 in combination with the destination number and press the **Call** softkey to activate the call forward all service.

Your user can dial *73 and press the **Call** softkey to deactivate the call forward all service.

Enable Conferencing

You can enable your user to talk to several people in a single call. When you enable this feature, your user dials several people and add them to the call.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

Step 1 Select **Voice > Phone**.

Step 2 Under **Supplementary Services**, choose **Yes** for the **Conference Serv** parameter.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Conference_Serv ua="na">Yes</Conference_Serv>
```

Options: Yes and No

Default: Yes

Step 3 Click **Submit All Changes**.

Enable Remote Call Recording with SIP REC

You can enable call recording on a phone so that your user can record an active call. The recording mode configured on the server controls the display of the recording softkeys for each phone.



Table 4: Recording Mode and Recording Softkeys

Recording Mode in Server	Recording Softkeys Available on the Phone
Always	No softkeys available. Your user can't control recording from the phone. Recording starts automatically when a call is connected.
Always with Pause/Resume	PauseRec ResumeRec When a call is connected, recording starts automatically and your user can control the recording.

Recording Mode in Server	Recording Softkeys Available on the Phone
On Demand	Record PauseRec ResumeRec When a call is connected, recording starts automatically but the recording is not saved until the user presses the Record softkey. Your user sees a message when recording state changes.
On Demand with User Initiated Start	Record PauseRec StopRec ResumeRec The recording only starts when your user presses the Record softkey. Your user sees a message when recording state changes.

During a recording, your user sees different icons which depend on the recording state. The icons are displayed on the Calls screen and also on the line key on which the user is recording a call.

Table 5: Recording Icons

Icon	Meaning
	Recording in progress.
	Recording paused

Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

Step 1 Select **Voice > Phone**.

Step 2 In the **Supplementary Services** section, click **Yes** or click **No** to enable or to disable the **Call Recording Serv** parameter.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Call_Recording_Serv ua="na">Yes</Call_Recording_Serv>
```

Options: Yes and No

Default: No

Step 3 (Optional) In the **Programmable Softkeys** section, to enable softkeys, add a string in this format in the **Connected Key List** and **Conferencing Key List** fields.

```
crdstart;crdstop;crdpause;crdresume
```

- Step 4** Click the **Ext(n)** tab that requires call recording.
- Step 5** In the **SIP Settings** section, in the **Call Recording Protocol**, select **SIPREC** as the call recording protocol. You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:
- ```
<Call_Recording_Protocol_3_ua="na">SIPREC</Call_Recording_Protocol_3_>
```
- Options: SIPREC and SIPINFO
- Default: SIPREC
- Step 6** Click **Submit All Changes**.

## Enable Remote Call Recording with SIP INFO

You can enable call recording on a phone so that your user can record an active call.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

During a recording, your user sees different icons which depend on the recording state. The icons are displayed on the Calls screen and also on the line key on which the user is recording a call.


Your user presses the following softkeys to control the phone recording:

- **Record**
- **StopRec**

The recording only starts when your user presses the **Record** softkey. Your user sees a message when recording state changes and the recording icon displays on the call screen.

Once a phone recording starts, the **StopRec** softkey can work. The recording stops when your user presses the **StopRec** softkey. Your user sees a message when the recording state changes.

**Table 6: Recording Icons**

| Icon                                                                                | Meaning                |
|-------------------------------------------------------------------------------------|------------------------|
|  | Recording in progress. |

### Before you begin

- You need to set up call recording on the call control system.
- Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Supplementary Services** section, click **Yes** or click **No** to enable or to disable call recording in the **Call Recording Serv** parameter.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Call_Recording_Serv ua="na">Yes</Call_Recording_Serv>
```

Options: Yes and No

Default: No

- Step 3** (Optional) In the **Programmable Softkeys** section, to enable softkeys, add a string in this format in the **Connected Key List** and **Conferencing Key List** fields.

```
crdstart;crdstop;crdpause;crdresume
```

- Step 4** Click the **Ext(n)** tab that requires call recording.

- Step 5** In the **SIP Settings** section, for the **Call Recording Protocol** parameter, select **SIPINFO** as the call recording protocol.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Call_Recording_Protocol_1_ ua="na">SIPINFO</Call_Recording_Protocol_1_>
```

Options: SIPREC and SIPINFO

Default: SIPREC

- Step 6** Click **Submit All Changes**.

## Configure Missed Call Indication

You can configure a missed call alert on the phone handset LED.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- Step 1** Select **Voice > User**.

The user can select **User Login > Voice > User**.

- Step 2** In the **Supplementary Services** section, for the **Handset LED Alert** parameter, select **Voicemail, Missed Call**.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Handset_LED_Alert ua="rw">Voicemail,Missed Call</Handset_LED_Alert>
```

Options: Voicemail and Voicemail, Missed Call

Default: Voicemail

**Step 3** Click **Submit All Changes**.

---

## Enable Do Not Disturb

You can allow persons to turn the Do not disturb feature on or off. The caller receives a message that the person is unavailable. A person can press the **Ignore** softkey on the phone to divert an incoming call to another destination.

If the feature is enabled for the phone, users can turn the feature on or off with the DND softkey.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

---

**Step 1** Select **Voice > User**.

**Step 2** In the **Supplementary Services** area, for the **DND Setting** parameter, select **Yes**.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<DND_Setting ua="rw">Yes</DND_Setting>
```

Options: Yes and No

Default: No

**Step 3** Click **Submit All Changes**.

---

When you select a line (multiline phone), a Do Not Disturb banner displays at the top of the phone screen.

### What to do next

Change another setting to ensure that multiline phones correctly display the Do not disturb (currently, a steady, green color) status for each selected or unselected line. See [DND and Call Forward Status Sync](#).

Users can enable or turn off the DND feature for each phone line if you configure star codes for DND. See [Configure Star Codes for DND, on page 20](#).

### Related Topics

[DND and Call Forward Status Sync](#)

[Enable Feature Key Sync](#)

[Enable DND Status Sync via XSI Service](#)



# Enable Synchronization of Settings Between the Phone and the Server

Enable the synchronization of settings between the phone and the server.

This setting must be enabled for the following features and types of users:

- Call forward all
- DND
- Executives and assistants (Cisco IP Phone 6871 only)

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

If a line key is configured with feature key sync and is also enabled with DND or call forward feature, the respective DND  icon or the call forward  icon is displayed next to the line key label. If the line key has a missed call, a voice message, or an urgent voicemail alert, the DND icon or the call forward icon is also displayed with the alert notification.

## Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

## Procedure

---

**Step 1** Select **Voice > Ext [n]** (where [n] is the extension number).

**Step 2** In the **Call Feature Settings** section, set the **Feature Key Sync** parameter to **Yes**.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<!-- Call Feature Settings -->
<Feature_Key_Sync_1_ ua="na">Yes</Feature_Key_Sync_1_>
```

Options: Yes and No

Default: No

**Step 3** Click **Submit All Changes**.

---

# Enable Webex Contacts on the Phone

When you onboard a phone to Webex cloud successfully, you can enable the phone to support Webex contacts. When you enable this feature on the phone, your user can see the Webex directory under the phone directory list.

When you configure **Max Display Records** parameter value more than 100, the query result displays only hundred contacts for a search in Webex directory and All directory. When search result has count more than



the allowed display record value, user see a message: Too many matches found. Refine your search. For more information on **Max Display Records** parameter, see [Parameters for Directory Services](#).

### Before you begin

- Phone onboards to Cisco Webex cloud successfully. For more information on phone onboarding to Webex Cloud, see [Webex for Cisco BroadWorks Solution Guide](#).
- Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

---

**Step 1** Select **Voice > Phone**.

**Step 2** In the **Webex** section, set the **Directory Enable** to **Yes**.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Webex_Directory_Enable ua="na">Yes</Webex_Directory_Enable>
```

Default value: No

**Step 3** In the **Directory Name** field, enter a name for the Webex directory.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Webex_Directory_Name ua="na">wkdir</Webex_Directory_Name>
```

Default value: Empty

The name you enter (for example, **wkdir** ), displays as the Webex directory name on the phone under the directory list. You can modify this name from the phone administration web page or from the configuration XML file string. When required, your user can also modify this name from the phone. When the **Directory Name** field is empty, by default, the Webex directory name on the phone appears as **Webex directory**.

When the phone is not onboarded to Cisco Webex cloud successfully, the **Webex directory** doesn't appear under the directory list.

**Step 4** Click **Submit All Changes**.

---

## Configure Webex Contacts on a Line Key

You can configure Webex contacts on a line key. This line key becomes a shortcut to the Webex directory.

### Before you begin

- Phone onboards to Cisco Webex cloud successfully.
- Access the phone administration web page. See [Access the Phone Web Interface](#).
- **Directory Enable** on the phone administration web page is set to **Yes**.

## Procedure

---

- Step 1** Select **Voice > Phone**.
- Step 2** Select a line key.
- Step 3** (Optional) Set the **Extension** parameter to **Disabled** to disable the extension.

**Note** If the Direct PLK Configuration feature is disabled, you must disable the extension to configure Webex contacts on the line key. If the feature is enabled, you can skip this step. For details, see [Enable Direct PLK Configuration, on page 37](#).

You can also configure this parameter in the phone configuration file (cfg.xml). The parameter is line-specific. Enter a string in this format:

```
<Extension_n_ua="na">Disabled</Extension_n_>
```

where *n* is the extension number.

- Step 4** In the **Extended Function** parameter, enter a string in this format:

```
fnc=shortcut;url=webexdir;nme=cloudplk
```

where `fnc=shortcut` means function=shortcut, `url` is the menu to open this line key, and `nme` is the name for the Webex directory.

In the string, when `nme` is empty or you don't include `nme` in the string, by default, the line key displays the directory name as **Webex directory**.

You can also configure this parameter in the configuration file (cfg.xml). Enter a string in this format:

```
<Extended_Function_n_ua="na">fnc=shortcut;url=webexdir;nme=cloudplk</Extended_Function_n_>
```

where *n* is the extension number.

The line key is configured with the feature. For example, if you assign the feature in line key number nine, the user sees **cloudplk** appears in the line number nine as a shortcut to the Webex directory. By pressing this configured line key, user can access the **Search Webex directory** screen and can search the Webex contacts.

If **Directory Enable** on the phone administration web page is set to **No**, the line key doesn't work.

If the phone is not onboarded to the Webex cloud successfully, the line key doesn't work.

- Step 5** Click **Submit All Changes**.
- 

## Add a Softkey for Webex Contacts

You can configure Webex contacts to a softkey. This softkey becomes a shortcut to the Webex directory.

### Before you begin

- Phone onboards to Cisco Webex cloud successfully.
- Access the phone administration web page. See [Access the Phone Web Interface](#).

- **Directory Enable** on the phone administration web page is set to **Yes**.

### Procedure

---

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Programmable Softkeys** section, set the **Programmable Softkey Enable** to **Yes**.
- Step 3** Configure a PSK field from PSK 1 through PSK 16 with a string in this format:

```
fnc=shortcut;url=webexdir;nme=cloudplk
```

You can also configure this parameter in the configuration file (cfg.xml). Enter a string in this format:

```
<PSK_n ua=na>fnc=shortcut;url=webexdir;nme=cloudplk</PSK_n>
```

A softkey is configured with the feature and appears on the phone. For example, **cloudplk** appears as a softkey and acts as a shortcut to the Webex directory. By pressing this softkey, user can access the **Search Webex directory** screen and can search the Webex contacts.

In the string, when `nme` is empty or you don't include `nme` in the string, by default, the softkey displays the directory name as **Webex Dir**.

If **Directory Enable** on the phone administration web page is set to **No**, the softkey doesn't work.

If the phone is not onboarded to Cisco Webex cloud successfully, the softkey doesn't work.

---

## Enable Webex Call Logs on the Phone

You can now enable a phone to support Webex call logs. When you enable this feature, the **Display recents from** menu under the **Recents** screen includes the **Webex** option in the calls list. The user then can set the option **Webex** to see the list of recent Webex calls.

### Before you begin

- Phone onboards to Webex cloud successfully. For more information on phone onboarding to Webex cloud, see [Webex for Cisco BroadWorks Solution Guide](#).
- Access the phone administration web page. See [Access the Phone Web Interface](#).
- Under the **Call Log** section, enable the **CallLog Enable** parameter and select a phone line from **CallLog Associated Line** for which you want to display the Webex recent call logs.

### Procedure

---

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Call Log** section, set the **CallLog Enable** parameter to **Yes** and **Display Recents From** parameter to **Webex**.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<CallLog_Enable ua="na">Yes</CallLog_Enable>
<Display_Recents_From ua="na">Webex</Display_Recents_From>
```

Default value of **Display Recents From** : Phone

**Step 3** Click **Submit All Changes**.

---

## Configure Star Codes for DND

You can configure star codes that a user dials to turn on or off the do not disturb (DND) feature on a phone. You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

---

**Step 1** Select **Voice > Regional**.

**Step 2** In the **Vertical Service Activation Codes** section, enter \*78 for the **DND Act Code** parameter.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<DND_Act_Code ua="na">*78</DND_Act_Code>
```

**Step 3** In the **Vertical Service Activation Codes** section, enter \*79 for the **DND Deact Code** parameter.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<DND_Deact_Code ua="na">*79</DND_Deact_Code>
```

**Step 4** Click **Submit All Changes**.

---

## Set Up a Call Center Agent Phone

You can enable a phone with Automatic Call Distribution (ACD) features. This phone acts as a call center agent's phone and can be used to trace a customer call, to escalate any customer call to a supervisor in emergency, to categorize contact numbers using disposition codes, and to view customer call details.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code. To configure each parameter, see the syntax of the string in the [Parameters for Call Center Agent Setup, on page 21](#) table.

### Before you begin

- Set up the phone as a call center phone on the BroadSoft server.

- Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- 
- Step 1** Select **Voice > Ext(n)**.
- Step 2** In the **ACD Settings** section, set up the fields as described in [Parameters for Call Center Agent Setup, on page 21](#) table.
- Step 3** Click **Submit All Changes**.
- 

## Parameters for Call Center Agent Setup

The following table defines the function and usage of Call Center Agent Setup parameters in the ACD Settings section under the Ext(n) tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

**Table 7: Parameters for Call Center Agent Setup**

| Parameter     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Broadsoft ACD | <p>Enables the phone for Automatic Call Distribution (ACD).</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>• In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre>&lt;Broadsoft_ACD_1_ua="na"&gt;Yes&lt;/Broadsoft_ACD_1_&gt;</pre> </li> <li>• In the phone web page, select <b>Yes</b> to enable this feature and select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No</p> <p>Default: No</p> |

| Parameter               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Call Information Enable | <p>Enables the phone to display details of a call center call.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="976 506 1479 558">&lt;Call_Information_Enable_1_ua="na"&gt;Yes&lt;/Call_Information_Enable_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: Yes</p> |
| Disposition Code Enable | <p>Enables the user to add a disposition code.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="976 947 1479 999">&lt;Disposition_Code_Enable_1_ua="na"&gt;Yes&lt;/Disposition_Code_Enable_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: Yes</p>                 |
| Trace Enable            | <p>Enables the user to trace the last incoming call.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="976 1388 1349 1440">&lt;Trace_Enable_1_ua="na"&gt;Yes&lt;/Trace_Enable_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: Yes</p>                               |

| Parameter                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emergency Escalation Enable      | <p>Enables the user to escalate a call to a supervisor in case of emergency.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="1013 506 1523 562">&lt;Emergency_Escalation_Enable_1_ua="na"&gt;Yes&lt;/Emergency_Escalation_Enable_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: Yes</p>                                         |
| Queue Status Notification Enable | <p>Displays the call center status and the agent status.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="1013 947 1523 1003">&lt;Queue_Status_Notification_Enable_1_ua="na"&gt;Yes&lt;/Queue_Status_Notification_Enable_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: Yes</p>                                                  |
| Auto Available After Sign-In     | <p>Sets the agent status to Available automatically when the user signs into the phone as a call center agent.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre data-bbox="1013 1423 1523 1480">&lt;Auto_Available_After_Sign-In_1_ua="na"&gt;Yes&lt;/Auto_Available_After_Sign-In_1_&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to enable this feature and select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No<br/>Default: No</p> |

## Restore the ACD Status

You can enable the phone to automatically set the ACD status to the last local value in one of the following situations:

- Phone is powered on.
- Phone status is changed to “Registered” from “Unregistered” or “Registration failed” status.
- Registration destination server IP address is changed when failover happens, a fallback happens, or a DNS response is changed.

### Before you begin

- Set up the phone as a call center phone on the BroadSoft server.
- Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

**Step 1** Select **Voice > Ext(n)**.

**Step 2** In the **ACD Settings** section, set **BraodSoft ACD** to **Yes**.

**Step 3** From **ACD Status** field, select one of the options:

- **Sync From Local:** Select this option to restore the last local status as ACD status when the phone boots up, status is changed to "Registered" from "Unregistered" or "Registration failed", or registration destination ip address is changed due to failover, fallback or DNS response is changed.

When the intial ACD status is configured to sync from local, and the last local status is unavailable with a reason code, after the phone boots up, the reason code will not be restored.

- **Sync From Server:** Select this option to get ACD intial status from the server. This is the default value.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<ACD_Status_n_ ua="na">Sync From Local</ACD_Status_n_>
```

where n = 1 to 16

**Step 4** Click **Submit All Changes**.

## Display or Hide Unavailable Menu Text Box of Agent Status on the Phone

You can control if your user wants to hide the **Unavailable** menu text box of the **Set agent status** screen on the phone.

### Before you begin

- Set up the phone as a call center phone on the BroadSoft server.
- Access the phone administration web page. See [Access the Phone Web Interface](#).



### Procedure

---

**Step 1** Select **Voice > Ext(n)**.

**Step 2** In the **ACD Settings** section, set the **Unavailable Reason Code Enable** parameter to **No** to hide the **Unavailable** text box on the phone.

To display the text box, select **Yes**. This is the default value.

You can configure this parameter in the phone configuration XML file (cfg.xml) by entering a string in this format:

```
<Unavailable_Reason_Code_Enable_1_ ua="na">Yes</Unavailable_Reason_Code_Enable_1_>
```

**Step 3** Click **Submit All Changes**.

---

## Set Up a Phone for Presence

You can enable the BroadSoft XMPP directory for the phone user.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code. To configure each parameter, see the syntax of the string in the [Parameters for Set Up Presence, on page 26](#) table.

### Before you begin

- Set up the BroadSoft server for XMPP.
- Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

---

**Step 1** Select **Voice > Phone**.

**Step 2** In the **Broadsoft XMPP** section, set the fields as described in the [Parameters for Set Up Presence, on page 26](#).

**Step 3** Click **Submit All Changes**.

---

## Parameters for Set Up Presence

The following table defines the function and usage of Set Up Presence parameters in the Broadsoft XMPP section under the Phone tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

**Table 8: Parameters for Set Up Presence**

| Parameter   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XMPP Enable | <p>Enables the BroadSoft XMPP directory for the phone user.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:           <pre>&lt;XMPP_Enable ua="na"&gt;Yes&lt;/XMPP_Enable&gt;</pre> </li> <li>In the phone web page, select <b>Yes</b> to forward all calls. Select <b>No</b> to disable it.</li> </ul> <p>Options: Yes and No</p> <p>Default: No</p> |
| Server      | <p>Name of the XMPP server; for example, xsi.iop1.broadworks.net.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:           <pre>&lt;XMPP_Server<br/>ua="na"&gt;xsi.iop1.broadworks.net&lt;/XMPP_Server&gt;</pre> </li> <li>In the phone web page, enter a name for the server.</li> </ul> <p>Default: Empty</p>                                      |

| Parameter | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | <p>Server port for the XMPP server.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre>&lt;XMPP_Port ua="na"&gt;5222&lt;/XMPP_Port&gt;</pre> </li> <li>In the phone web page, enter the server port.</li> </ul> <p>Allowed values: An integer from 0 through 65535</p> <p>If the value is set to 0, the phone first sends a DNS SRV query for the domain (specified in <b>Server</b> or <b>User ID</b>) to obtain the XMPP server IP address. If there is no A record in the DNS SRV response, then the phone sends as fallback an A record lookup for the same domain to obtain the IP address. In this scenario, the actual port number is 5222.</p> <p><b>Note</b> When both <b>Server</b> and <b>User ID</b> contain the domain names, the domain name in <b>Server</b> is preferred.</p> <p>If the value isn't set to 0, the phone directly sends an A record lookup for the domain (specified in <b>Server</b> or <b>User ID</b>) to obtain the XMPP server IP address.</p> <p>Default: 5222</p> |
| User ID   | <p>BroadSoft User ID of the phone user; for example, username1@xdp.broadsoft.com or username1.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre>&lt;XMPP_User_ID<br/>ua="na"&gt;username1&lt;/XMPP_User_ID&gt;</pre> </li> <li>In the phone web page, enter the user ID.</li> </ul> <p>If the value doesn't contain the domain name, the phone first generates a new user ID by combining the values of this parameter and <b>Server</b>. For example, the server is xsi.iop1.broadworks.net and user ID is username1, the generated user ID is username1@xsi.iop1.broadworks.net.</p> <p>Then, the phone sends A record lookup or DNS SRV query for the domain xsi.iop1.broadworks.net to obtain the XMPP server IP address.</p> <p>Default: Empty</p>                                                                                                                                                                                                                                              |

| Parameter       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Password        | <p>Alphanumeric password associated with the User ID.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <pre>&lt;XMPP_Password ua="na"&gt;&lt;/XMPP_Password&gt;</pre> </li> <li>In the phone web page, enter a supported password.</li> </ul> <p>Default: Empty</p>                                                                                                                                                      |
| Login Invisible | <p>When enabled, the user's presence information is not published when the user signs in.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <pre>&lt;Login_Invisible ua="na"&gt;Yes&lt;/Login_Invisible&gt;</pre> </li> <li>In the phone web page, select Yes to enable the feature.</li> </ul> <p>Options: Yes and No</p> <p>Default: No</p>                                                                             |
| Retry Intvl     | <p>Interval, in seconds, to allow a reconnect without a log in after the client disconnects from the server. After this interval, the client needs to reauthenticate.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <pre>&lt;Login_Invisible ua="na"&gt;Yes&lt;/Login_Invisible&gt;</pre> </li> <li>In the phone web page, select Yes to enable the feature.</li> </ul> <p>Options: Yes and No</p> <p>Default: No</p> |

## Use DNS SRV for XMPP

You can configure the phone to use DNS SRV to obtain the IP address of the BroadSoft XMPP server.

**Before you begin**

- Set up the BroadSoft server for XMPP.
- Access the phone administration web page. See [Access the Phone Web Interface](#).

**Procedure**

---

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Broadsoft XMPP** section, set **XMPP Enable** to **Yes**.
- Step 3** Set the field **Port** to **0**.
- Step 4** Set the fields **Server**, **User ID**, and **Password** as described in the [Parameters for Set Up Presence, on page 26](#) table.
- Step 5** Click **Submit All Changes**.
- 

## Configure the Number of Call Appearances Per Line

Phones that support multiple call appearances on a line can be configured to specify the number of calls to allow on the line.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code.

**Before you begin**

Access the phone administration web page. See [Access the Phone Web Interface](#).

**Procedure**

---

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Miscellaneous Line Key Settings** section, for the **Call Appearances Per Line** parameter, specify the number of calls per line to allow.
- You can also configure this parameter in the configuration file (cfg.xml) by entering a string in this format:
- ```
<Call_Appearances_Per_Line ua="na">2</Call_Appearances_Per_Line>
```
- The allowed values range from 2 to 10. The default value is 2.
- Step 3** Click **Submit All Changes**.
-

Enable Reverse Name Lookup

Reverse name lookup searches for the name of a number in an incoming, outgoing, conference, or transferred call. The reverse name lookup acts when the phone cannot find a name using the service provider directory,

Call History, or your contacts. Reverse name lookup needs a valid BroadSoft (XSI) Directory, LDAP Directory, or XML Directory configuration.

The reverse name lookup searches the phone's external directories. When a search succeeds, the name is placed in the call session and in the call history. For simultaneous, multiple phone calls, reverse name lookup searches for a name to match the first call number. When the second call connects or is placed on hold, reverse name lookup searches for a name to match the second call. The reverse lookup searches the external directories for 8 secs, if in 8secs there are no results found, there will be no display of the name. If results are found in 8secs, the name is displayed on the phone. The external directory search priority order is : **BroadSoft (XSI) > LDAP > XML**.

While searching if the lower priority name is received before the higher priority name, the search shows the lower priority name first and then replaced it with the higher priority name if the higher priority name is found within 8 secs.

The precedence of the phone list lookup in BroadSoft (XSI) Directory is:

1. Personal phone list
2. Group common phone list
3. Enterprise common phone list

Reverse name lookup is enabled by default.

Reverse name lookup searches the directories in the following order:

1. Personal Address Book
2. SIP Header
3. Call History
4. BroadSoft (XSI) Directory
5. LDAP Directory
6. XML Directory



Note The phone searches the XML directory using this format: `directory_url?n=incoming_call_number`

Example: For a multiplatform phone using a third-party service, the phone number (1234) search query has this format, `http://your-service.com/dir.xml?n=1234`.

Before you begin

- Configure one of these directories before you can enable or disable the reverse name lookup:
 - BroadSoft (XSI) Directory
 - LDAP Corporate Directory
 - XML Directory
- Access the phone administration web page. See [Access the Phone Web Interface](#).

Procedure

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Supplementary Services** area, set the **Reverse Phone Lookup Serv** parameter to **Yes** to enable this feature.
- You can also configure this parameter in the configuration file (cfg.xml) by entering a string in this format:
- ```
<Reverse_Phone_Lookup_Serv ua="na">Yes</Reverse_Phone_Lookup_Serv>
```
- The allowed values are Yes|No. The default value is Yes.
- Step 3** Click **Submit All Changes**.
- 

# Emergency Calls

## Emergency Call Support Background

Emergency call service providers can register a phone's location for each IP-based phone in a company. The location information server (LIS) transfers the emergency response location (ERL) to the phone. The phone stores its location during registration, after the phone restarts, and when a person signs in to the phone. The location entry can specify the street address, building number, floor, room, and other office location information.

When you place an emergency call, the phone transfers the location to the call server. The call server forwards the call and the location to the emergency call service provider. The emergency call service provider forwards the call and a unique call-back number (ELIN) to the emergency services. The emergency service or public safety answering point (PSAP) receives the phone location. The PSAP also receives a number to call you back, if the call disconnects.

See [Emergency Call Support Terminology, on page 32](#) for the terms used to describe emergency calls from the phone.

You insert the following parameters to obtain the phone's location for any phone extension number:

- **Company Identifier**—A Unique number (UUID) assigned to your company by the NG9-1-1 service provider.
- **Primary Request URL**—The HTTPS address of the primary server used to obtain the phone location.
- **Secondary Request URL**—The HTTPS address of a secondary server (backup) used to obtain the phone location.
- **Emergency Number**—A sequence of digits that identify an emergency call. You can specify multiple emergency numbers, by separating each emergency number with a comma.

Common emergency service numbers include:

- North America—911
- European countries—112
- Hong Kong—999

The phone requests new location information for the following activities:

- You register the phone with the call server.
- A person restarts the phone and the phone was previously registered with the call server.
- A guest signs in to the phone.
- You change the network interface used in the SIP registration. For example, change Wi-Fi to Ethernet.
- You change the IP address of the phone.

If all of the location servers do not send a location response, the phone re-sends the location request every two minutes.

## Emergency Call Support Terminology

The following terms describe emergency call support for the Cisco Multiplatform Phones.

- **Emergency Location ID Number (ELIN)**—A number used to represent one or more phone extensions that locate the person who dialed emergency services.
- **Emergency Response Location (ERL)**—A logical location that groups a set of phone extensions.
- **HTTP Enabled Location Delivery (HELD)**—An encrypted protocol that obtains the PIDF-LO location for a phone from a location information server (LIS).
- **Location Information Server (LIS)**—A server that responds to a SIP-based phone HELD request and provides the phone location using a HELD XML response.
- **Emergency Call Service Provider**—The company that responds to a phone HELD request with the phone's location. When you make an emergency call (which carries the phone's location), a call server routes the call to this company. The emergency call service provider adds an ELIN and routes the call to the emergency services (PSAP). If the call is disconnected, the PSAP uses the ELIN to reconnect with the phone used to make the emergency call.
- **Public Safety Answering Point (PSAP)**—Any emergency service (for example, fire, police, or ambulance) joined to the Emergency Services IP Network.
- **Universally Unique Identifier (UUID)**—A 128-bit number used to uniquely identify a company using emergency call support.

## Configure a Phone to Make Emergency Calls

### Before you begin

- Obtain the E911 Geolocation Configuration URLs and the company identifier for the phone from your emergency call services provider. You can use the same Geolocation URLs and company identifier for multiple phone extensions in the same office area.
- Access the phone administration web page. See [Access the Phone Web Interface](#).



## Procedure

- 
- Step 1** Select **Voice > Ext  $n$** , where  $n$  is the phone extension number (1-10) of the phone web dialog.
  - Step 2** In the **Dial Plan** section, set the **Emergency Number** parameter
  - Step 3** In the **E911 Geolocation Configuration** section, set the **Company UUID**, **Primary Request URL**, and **Secondary Request URL** parameters as described in the [Parameters to Make an Emergency Call](#) , on page 33.
  - Step 4** Click **Submit All Changes**.
- 

## Parameters to Make an Emergency Call

The following table defines the function and usage of Making of Emergency Calls parameters in the Dial Plan and E911 Geolocation Configuration sections under the Ext( $n$ ) tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file with XML(cfg.xml) code to configure a parameter.

*Table 9: Parameters to Make an Emergency Call*

| Parameter                 | Description |
|---------------------------|-------------|
| <b>Section: Dial Plan</b> |             |

| Parameter                                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emergency Number                               | <p>Enter a comma-separated list of emergency numbers.</p> <p>To specify multiple emergency numbers, separate each emergency number with a comma.</p> <p>When one of these numbers is dialed, the unit disables processing of CONF, HOLD, and other similar softkeys or buttons to avoid accidentally putting the current call on hold. The phone also disables hook flash event handling.</p> <p>Only the far end can terminate an emergency call. The phone is restored to normalcy after the call is terminated and the receiver is back on-hook.</p> <p>Perform one of the following: to the digits that correspond to the customer emergency service numbers.</p> <ul style="list-style-type: none"> <li>• In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <pre>&lt;Emergency_Number_1_ ua="na"/&gt;</pre> </li> <li>• In the phone web page, set <b>Emergency Number</b> parameter to the digits that correspond to the customer emergency service numbers.</li> </ul> <p>Valid Values: Maximum number length is 63 characters</p> <p>Default: Blank (no emergency number)</p> |
| <b>Section: E911 Geolocation Configuration</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Company UUID                                   | <p>The Universally Unique Identifier (UUID) assigned to the customer by the emergency call services provider.</p> <p>For example:<br/>07072db6-2dd5-4aa1-b2ff-6d588822dd46</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>• In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <pre>&lt;Company_UUID_1_ ua="na"/&gt;</pre> </li> <li>• In the phone web page, enter a valid identifier assigned by the call services provider.</li> </ul> <p>Valid Values: Maximum identifier length is 128 characters.</p> <p>Default: Blank</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Parameter             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Request URL   | <p>Encrypted HTTPS phone location request. The request uses the phone IP addresses, MAC address, Network Access Identifier (NAI), and chassis ID and port ID assigned by the network switch manufacturer. The request also includes the location server name and the customer identifier.</p> <p>The server used by the emergency call services provider responds with an Emergency Response Location (ERL) that has a location Uniform Resource Identifier (URI) tied to the user phone IP address.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre>&lt;Primary_Request_URL_1_ua="na"/&gt;</pre> </li> <li>In the phone web page, enter encrypted HTTPS phone location request.</li> </ul> <p>For example:</p> <pre>https://prod.blueearth.com/erl/locate/erl/erl_request.action</pre> <p>Default: Blank</p> |
| Secondary Request URL | <p>Encrypted HTTPS request sent to the emergency call services provider's backup server to obtain the user's phone location.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format: <pre>&lt;Secondary_Request_URL_1_ua="na"/&gt;</pre> </li> <li>In the phone web page, enter the encrypted for the backup server that can return location information.</li> </ul> <p>For example:</p> <pre>https://prod.blueearth.com/erl/locate/erl/erl_request.action</pre> <p>Default: Blank</p>                                                                                                                                                                                                                                                                                                                                     |

# PLK Configuration

## Programmable Line Keys

The Programmable Line Key (PLK) feature allows you to program feature buttons or services URL buttons on the line key buttons. You can configure the line keys with:

- Line buttons—see [Enable the Extension of a Line Key, on page 36](#)
- Speed dials—see [Configure Speed Dial on a Line Key](#)
- Call Park—see [Add Call Park to a Line Key](#)
- Busy Lamp Field (BLF)—see [Phone Configuration for Monitoring Other Phones](#)
- Executive and Assistant—  
see [Configure Executive and Assistant Menu Access on a Line Key](#)



---

**Note** Only the Cisco IP Phone 6871 Multiplatform Phones support the feature.

---

- XML Services—see [Add an XML Service to a Line Key, on page 38](#)
- Voicemail—see [Configure the Voicemail PLK on a Line Key](#)

## Enable the Extension of a Line Key

You can use the buttons on both sides of the phone screen as line keys when you enable the extensions of the line keys.

You can also configure the parameter in the phone configuration file with XML (cfg.xml) code. The parameter for the extension is line-specific.

```
<Extension_n_ ua="rw">1</Extension_n_>
```

where *n* is the extension number.

### Before you begin

Access the phone administration web interface. See [Access the Phone Web Interface](#).

### Procedure

---

- Step 1** Select **Voice > Phone**.
- Step 2** Choose a line key and assign an extension number in the **Extension** parameter to enable it.
- When **Extension** is set to **Disabled**, the user can't use the line key as a telephony extension.

**Step 3** Click **Submit All Changes**.

---

## Enable Direct PLK Configuration

You can directly perform the Programmable Line Key (PLK) configuration on a line key, which means you don't need to disable the extension function of a line key. Before the firmware release 11.3(7), you must disable the line extension to achieve the PLK configuration.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

---

**Step 1** Select **Voice > Phone**.

**Step 2** In the **Miscellaneous Line Key Settings** section, set the **Enable Direct PLK Configuration** parameter to **Yes**.

You can also configure the parameter in the phone configuration file (cfg.xml) with the following XML string:

```
<Enable_Direct_PLK_Configuration ua="na">Yes</Enable_Direct_PLK_Configuration>
```

Allowed values: Yes and No

Default value: Yes

**Note** If you set the parameter to **No**, the extension of a line key must be disabled for the PLK configuration.

**Step 3** Select **Voice > Ext [n]** (where [n] is the extension number).

**Step 4** In the **Proxy and Registration** section, ensure that the **Proxy** parameter is empty.

You can also configure this parameter in the configuration file (cfg.xml) by entering a string in this format:

```
<Proxy_n_ ua="na"></Proxy_n_>
```

where *n* is the extension number.

**Step 5** In the **Subscriber Information** section, ensure that the **User ID** parameter is empty.

You can also configure this parameter in the configuration file (cfg.xml) by entering a string in this format:

```
<User_ID_n_ ua="na"></User_ID_n_>
```

where *n* is the extension number.

**Step 6** Click **Submit All Changes**.

---

## Phone Configuration for Monitoring Other Phones

You can configure the phone to monitor the status of lines on other phones. This feature is useful if users routinely handle calls for colleagues and need to see if they are available to answer calls. The phone monitors

each line on a separate line key. The monitoring line keys function as Busy Lamp Field (BLF) keys. A BLF is an LED that changes color to indicate the status of the monitored line:

**Table 10: BLF Key LED Status**

| LED Color    | Meaning                          |
|--------------|----------------------------------|
| Green        | The monitored line is available. |
| Red          | The monitored line is busy.      |
| Blinking red | The monitored line is ringing.   |
| Amber        | Error in BLF key configuration.  |

If the phone is registered to a BroadSoft server, you can set up the phone to monitor multiple users, with a single set of configurations.

## Add an XML Service to a Line Key

You can add an XML service to a line key to enable the user to access the XML application or directory.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

**Step 1** Select **Voice > Phone**.

**Step 2** Select a line key.

**Step 3** (Optional) Set the **Extension** parameter to **Disabled** to disable the extension.

**Note** If the Direct PLK Configuration feature is disabled, you must disable the extension to add an XML service to the line key. If the feature is enabled, you can skip this step. For details, see [Enable Direct PLK Configuration, on page 37](#).

You can also configure this parameter in the phone configuration file (cfg.xml). The parameter is line-specific. Enter a string in this format:

```
<Extension_n_ ua="na">Disabled</Extension_n_>
```

where *n* is the extension number.

**Step 4** In the **Extended Function** parameter, enter a string in this format:

```
fnc=xml;url=http://xml.service.url;nme=name
```

where:

- fnc= prk means function=call park.
- url= http://xml.service.url is the URL for the xml application or directory.
- nme= XXXX is the name displayed on the phone for the xml service. Replace XXXX with a name.





You can also configure the line-specific parameter in the configuration file (cfg.xml). Enter a string in the following format:

```
<Extended_Function_2_
ua="na">fnc=xml;url=http://xml.service.url;nme=name</Extended_Function_2_>
```

**Step 5** Click **Submit All Changes**.

## Spam Indication for Incoming Webex Calls

To support a spam indication for the incoming calls in Webex environment, server sends the `X-Cisco-CallerId-Disposition` disposition information to the phone. The phone translates this information as authentication icons. Based on the caller's STIR/SHAKEN verification result, the phone displays three types of icons. The icons are displayed next to the caller ID for call session, local call logs, Webex cloud call logs.

- Validated call - The server sends the disposition information, `X-Cisco-CallerId-Disposition=valid`, to the phone. The phone displays an extra icon  next to the caller ID with a color screen indicating a validated caller. For a phone with grayscale screen, an extra icon  next to the caller ID is displayed.
- Invalidated or Spam call - The server sends the disposition information, `X-Cisco-CallerId-Disposition=invalid`, to the phone. The phone displays an extra icon  next to the caller id indicating an illegitimate caller.
- Unverified call - The server sends the disposition information, `X-Cisco-CallerId-Disposition=unverified`, to the phone. The phone displays an extra icon  next to the caller id indicating an unverified call.

When there is no disposition information, the phone displays the same icons as before.

## Programmable Softkeys Configuration

### Customize Display of the Softkeys

You can customize display of the softkeys on the phone screen during a specific state.

You can also configure the parameters in the phone configuration file with XML (cfg.xml) code. To configure each parameter, see the syntax of the string in [Parameters for Programmable Softkeys, on page 40](#).

#### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

## Procedure

- 
- Step 1** Select **Voice > Phone**.
- Step 2** In the **Programmable Softkeys** section, edit the softkeys depending on the call state that you want the softkey to display. For more information, see [Parameters for Programmable Softkeys, on page 40](#) and .
- Step 3** Click **Submit All Changes**.
- 

## Parameters for Programmable Softkeys

The following table defines the function and usage of the programmable softkeys parameters in the **Programmable Softkeys** section under the **Voice > Phone** tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file (cfg.xml) with the XML code to configure a parameter.

*Table 11: Parameters for Programmable Softkeys*

| Parameter                   | Description and default value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Programmable Softkey Enable | <p>Enables or disables the programmable softkeys. Set this field to <b>Yes</b> to enable the programmable softkeys.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/> <code>&lt;Programmable_Softkey_Enable ua="na"&gt;Yes&lt;/Programmable_Softkey_Enable&gt;</code></li> <li>In the phone web interface, set this field to <b>Yes</b> or <b>No</b> to enable or disable the programmable softkeys.</li> </ul> <p>Allowed values: Yes   No</p> <p>Default: No</p> |



| Parameter            | Description and default value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PSK 1 through PSK 16 | <p>Programmable softkey fields. Enter a string in these fields to configure softkeys that display on the phone screen. You can create softkeys for speed dials to numbers or extensions, vertical service activation codes (* codes), or XML scripts.</p> <p>Configure the PSKs in this format:</p> <ul style="list-style-type: none"> <li>• Speed Dial:<br/><code>fnc=sd;ext=extension_number@\$PROXY;vid=n;nme=display_name</code></li> <li>• Vertical Service Activation Code:<br/><code>fnc=sd;ext=star_code@\$PROXY;vid=n;nme=display_name</code><br/>See <a href="#">Vertical Service Activation Codes</a>.</li> <li>• XML Service:<br/><code>fnc=xml;url=http://server_IP/services.xml;vid=n;nme=display_name</code></li> <li>• Menu shortcut:<br/><code>fnc=shortcut;url=userpref;nme=User preferences</code></li> </ul> <p>For more information, see <a href="#">Menu Shortcuts Mapping on PLK and PSK</a>.</p> <p>When you add a programmable softkey to a softkey list, such as Idle Key List, Missed Call Key List, and so on, the programmable softkey displays on the phone screen.</p> <p>Perform one of the following:</p> <ul style="list-style-type: none"> <li>• In the phone configuration file with XML(cfg.xml), enter a string in this format:<br/><code>&lt;PSK_1 ua="na"&gt;fnc=xml;url=http://server_IP/services.xml;vid=n;nme=display_name&lt;/PSK_1&gt;</code></li> <li>• In the phone web interface, set the PSKs in the valid format.</li> </ul> <p>Default: Empty</p> |

## Customize a Programmable Softkey

The phone provides sixteen programmable softkeys (fields PSK1 through PSK16). You can define the fields by a speed-dial script.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- 
- Step 1** Select **Voice > Phone**.
  - Step 2** In the **Programmable Softkeys** section, set the **Programmable Softkey Enable** to **Yes**.
  - Step 3** Select a programmable softkey number field on which to configure a phone feature.

- Step 4** Enter the string for the programmable soft key. See the different types of programmable softkeys described in [Configure Speed Dial on a Programmable Softkey, on page 42](#).
- Step 5** Click **Submit All Changes**.

## Configure Speed Dial on a Programmable Softkey

You can configure programmable softkeys as speed dials. The speed dials can be extensions or phone numbers. You can also configure programmable softkeys with speed dials that perform an action that a vertical service activation code (or a star [\*] code) defines. For example, if you configure a programmable softkey with a speed dial for \*67, the call is placed on hold.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- Step 1** Select **Voice > Phone**.
- Step 2** In the **Programmable Softkeys** section, set the **Programmable Softkey Enable** to **Yes**.
- Step 3** To configure a speed dial PSK, enter the following in the **PSK number** field:

```
fnc=sd;ext=extensionname/starcode@$PROXY;vid=n;nme=name
```

Where:

- fnc= function of the key (speed dial)
- extensionname=extension being dialed or the star code action to perform
- vid= n is the extension that the speed dial will dial out
- name is the name of the speed dial being configured

**Note** The **name** field displays on the softkey on the IP phone screen. We recommend a maximum of 10 characters for a phone. If more characters are used, the label might be truncated on the phone screen.

- Step 4** Edit the following:
- **Idle Key List:** Edit the field as described in the following example:

```
redial|1;newcall|2;dnd;psk1
```

If the user incorrectly configures the programmable softkey list features on the phone, the key list on the phone LCD does not update. For example:

- If a user enters **rdeial;newcall;cfwd** (redial has been misspelt), the key list is not updated and the user does not see any change on the LCD.
- If a user enters **redial;newcall;cfwd;delchar**, the user will not see a change on the LCD, as the delchar softkey is not allowed in the **Idle Key List**. Hence, this is an incorrect configuration of the programmable softkey list.

- **PSK1:**

```
fnc=sd;ext=5014@$PROXY;nme=sktest1
```

**Note** In this example, we are configuring a softkey on a phone as a speed dial number for extension 5014 (sktest1).

You can also configure an XML service on the programmable softkey. Enter the string in this format:

```
<PSK_1 ua="na">fnc=xml;url=http://xml.service.url;nme=name</PSK_1>
```

**Step 5** Click **Submit All Changes**.

## Configure a PSK with DTMF Support

You can configure programmable softkeys (PSK) with dual tone multifrequency (DTMF). This configuration enables the phone to send digital pulses inband (or out-of-band via SIP INFO) to the server during an active call. When you enable a function on a PSK, the user sees the softkey name, and presses it to perform the named function. The applied actions to the DTMF digit string are similar to those applied to Speed Dial, such as the following:

- **Pause** represented by ,
- **Wait** represented by X

For example, `ext=<DTMF_DIGITS>[[,|X][<DTMF_DIGITS>]]`, where the valid DTMF digits are 0-9,\*,#, a, b, c, d, and where the parts in [ ] brackets are optional.

This feature applies only to programmable softkeys. It doesn't apply to the programmable line keys (PLK) on the desk phones. If you configure any PLK for this feature, the display will present the Circled X icon (⊗), and nothing will happen if you press the key.

This feature supports only **Connected Key List** and **Connected Video Key List**.

### Before you begin

[Access the Phone Web Interface](#).

### Procedure

- Step 1** Select **Voice > Phone > Programmable Softkeys**.
- Step 2** Set the **Programmable Softkey Enable** field to **yes**.
- Step 3** From the PSK list (PSK#1 - PSK#16), select a PSK to configure.
- Step 4** In the **PSK(n)** field, where **n** is a programmable softkey number, enter a string in this format:

```
fnc=dtmf;ext=<dtmf_digits_to_be_outpulsed>;nme=<softkey_display_name>;
vid=<extension_n_to_be_associated>
```

When a phone has more than one registered line, you must include the **vid=** that is associated with the particular line/extension in order for the softkey to appear. Otherwise, the softkey will not display.

- Step 5** (Optional) To configure the PSK softkey to toggle within a pair (outpulse-display) each time you press it, enter a string in this format:

```
fnc=dtmf;ext=<dtmf_digits_to_be_outpulsed>;nme=<softkey_display_name>;
ext2=<second_set_of_dtmf_digits_to_be_outpulsed>;nme2=<second_softkey_display_name_after_first_press>;
vid=<extension_n_to_be_associated>
```

The PSK softkey toggle always starts with the **ext/nme** for each new call.

**Step 6** In the **Connected Key List** field or **Connected Video Key List** field, enter the configured PSK keywords according to where on the phone screen you wish the softkey name to appear.

For example, in the following entry, the **hold** softkey name appears in the first position. The softkey name that is listed in the **psk1** field appears in the second position, and so on.

```
hold;psk1;endcall;xfer;conf;xferLx;confLx;bxfer;phold;redial;dir;park
```

**Step 7** Select **Voice > Ext(n)**, where **n** is the extension number you wish to configure.

**Step 8** In the **Audio Configuration** section, set the **DTMF Tx Method** to one of the following methods from the drop-down list.

- InBand
- AVT
- INFO
- Auto
- InBand+INFO
- AVT+INFO

**Step 9** Click **Submit All Changes**.

Use these examples to help you understand how to configure PSK with DTMF Support options:

Example: PSK toggles when pressed.

- **Voice > Phone > Programmable Softkeys > Programmable Softkey Enable: Yes**
- **Connected Key List: psk1|1 ;endcall|2;conf|3;xfer|4;**
- **PSK 1: fnc=dtmf;ext=#1;nme=PressStart;ext2=\*2;nme2=PressStop;vid=1**
- **Voice > Ext 1 > DTMF Tx Method: Auto**

Example: Phone sends DTMF digits inband via a PSK softkey.

- **Voice > Phone > Programmable Softkeys**
- **Programmable Softkey Enable: yes.**
- **Connected Key List: psk1|1;endcall|2;conf|3;xfer|4;**
- **PSK 1: fnc=dtmf;ext=#1;nme=PressMe;vid=1**
- **Voice > Ext 1 > DTMF Tx Method: Auto**

Example: The PSK softkey pauses between digits.

- **Voice > Phone > Programmable Softkeys > Programmable Softkey Enable: Yes**
- **Connected Key List: psk1|1;endcall|2;conf|3;xfer|4;**

- **PSK 1:** `fnc=dtmf;ext=#1,1006;nme=PressMe;vid=1`
- **Voice > Ext 1 > DTMF Tx Method:** **Auto**

Example: The PSK softkey waits for the user's input between digits.

- **Voice > Phone > Programmable Softkeys > Programmable Softkey Enable:** **Yes**
- **Connected Key List:** `psk1|1;endcall|2;conf|3;xfer|4;`
- **PSK 1:** `fnc=dtmf;ext=#1X1006;nme=PressMe;vid=1`
- **Voice > Ext 1 > DTMF Tx Method:** **Auto**

## Enable Softkeys to Calls History List Menu

You can configure the **Option**, **Call**, **Edit call**, **Filter**, and **Back** softkeys on the screen for All, Placed, Received, and Missed calls list. When you press the **Recents** softkey on the phone, you can directly access the **All calls** screen and see the list of all types of recents calls.

### Before you begin

Access the phone administration web page. See [Access the Phone Web Interface](#).

### Procedure

- Step 1** Select **Voice > Phone**.
- Step 2** Configure the XSI account information by providing values in the **XSI Host Server**, **XSI Authentication Type**, **Login User ID**, **Login Password**, and **CallLog Associated Line** parameters.  
For more information about configuring XSI account, see [Configure BroadSoft Settings](#).
- Step 3** Set the **CallLog Enable** parameter to **Yes**.
- Step 4** Set **Display Recents From** to **Server**.
- Step 5** In the **Programmable Softkeys** section,
  - a. Set the **Programmable Softkey Enable** parameter to **Yes**.
  - b. In the **Broadsoft Call History Key List** field, the default string is: `option|1;call|2;editcall|3;back|4;`

Supported strings are option, call, editcall, filter, and back. This parameter doesn't support psk string.

Availability of all these softkeys under the All, Placed, Received, and Missed calls list or the **Option** menu in these calls list depends on the following conditions:

- **Programmable Softkey Enable = Yes** and **Broadsoft Call History Key List = `option|1;call|2;editcall|3;back|4;`** - **Option**, **Call**, **Edit call**, **Back** softkeys appear on the All, Placed, Received, and Missed calls list. **Filter** appears in the **Option** menu of calls list.

- **Programmable Softkey Enable = Yes** and **Broadsoft Call History Key List = option|1;call|2;back|4;** - **Option**, **Call**, **Back** softkeys appear on the All, Placed, Received, and Missed calls list. **Edit call** and **Filter** appears in the **Option** menu of calls list.
- **Programmable Softkey Enable = Yes** and **Broadsoft Call History Key List = option|1;call|2;editcall|3;filter|4;** - **Option**, **Call**, **Edit call**, **Filter** softkeys appear on the All, Placed, Received, and Missed calls list.
- **Programmable Softkey Enable = Yes**, **PSK 1 = fnc=shortcut;url=missedcalls**, and **Broadsoft Call History Key List = option|1;call|2;psk1|3;filter222|4;** - only **Option** and **Call** softkeys appear on the All, Placed, Received, and Missed calls list because strings **psk** and **filter222** are invalid values. **Edit call** and **Filter** appears in the **Option** menu of calls list.
- **Programmable Softkey Enable = Yes**, and **Broadsoft Call History Key List = blank** - The softkeys appears as default setting **option|1;call|2;editcall|3**. **Option**, **Call**, **Edit call** softkeys appear on the All, Placed, Received, and Missed calls list. **Filter** appears in the **Option** menu of calls list.

**Note** In the phone configuration file with XML(cfg.xml), enter a string in this format:

```
<Broadsoft_Call_History_Key_List
ua="na">option|1;call|2;editcall|3</Broadsoft_Call_History_Key_List>
```





**Step 6** Click **Submit All Changes**.

## Spam Indication for Incoming Calls

New technology standard Secure Telephony Identity Revisited (STIR) and Signature-based Handling of Asserted information using toKENS (SHAKEN). These standards define procedures to authenticate and verify caller identification for calls carried over the IP network. The STIR-SHAKEN framework is developed to provide the end user with a great degree of identification and control over the type of calls they receive. These sets of standards are intended to provide a basis for verifying calls, classifying calls, and facilitating the ability to trust caller identity end to end. Illegitimate callers can easily be identified.

When STIR/SKAKEN support is implemented on the server, the phone displays an extra icon next to the caller ID based on the caller's STIR/SKAKEN verification result. Based on the verification result, the phone displays three types of icons. This helps reduce wasted time from answering calls from robocallers, and the security risk from callers with spoofed or tampered Caller ID.

**Note**

- Validated call - When the caller carries `verstat=TN-Validation-Passed` in the SIP Header PAID or FROM, an extra icon  next to the caller id is displayed on the phone with a color screen indicating a validated caller. For a phone with grayscale screen, an extra icon  next to the caller id is displayed.
- Spam call - When the caller carries `verstat=TN-Validation-Failed` in the SIP Header PAID or FROM, an extra icon  next to the caller id is displayed on the phone indicating an illegitimate caller.
- Unverified call - When the caller carries `verstat=NO-TN-Validation` in the SIP Header PAID or FROM, an extra icon  next to the caller id is displayed on the phone indicating an unverified call.

For detailed spam notifications for calls in Webex environment, see [Spam Indication for Incoming Webex Calls, on page 39](#).

## Programmable Softkeys

| Keyword        | Key Label                | Definition                                                                                                                                                 | Available Phone Status     |
|----------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| acd_login      | Agt signin               | Logs user in to Automatic Call Distribution (ACD).                                                                                                         | Idle                       |
| acd_logout     | AgtSignOut               | Logs user out of ACD.                                                                                                                                      | Idle                       |
| answer         | Answer                   | Answers an incoming call.                                                                                                                                  | Ringing                    |
| astate         | Agt Status               | Checks the ACD status.                                                                                                                                     | Idle                       |
| avail          | Avail                    | Denotes that a user who is logged in to an ACD server has set his status as available.                                                                     | Idle                       |
| barge          | Barge                    | Allows another user to interrupt a shared call.                                                                                                            | Shared-Active, Shared-Held |
| bargesilent    | BargeSilent or BargeSlnt | Allows another user to interrupt a shared call with the mic disabled.                                                                                      | Shared-Active              |
| bxfer          | BlindXfer                | Performs a blind call transfer (transfers a call without speaking to the party to whom the call is transferred). Requires that Blind Xfer Serv is enabled. | Connected                  |
| call (or dial) | Call                     | Calls the selected item in a list.                                                                                                                         | Dialing Input              |
| call info      | Call Info                | Show call information                                                                                                                                      | Progressing                |

| Keyword                   | Key Label                   | Definition                                                                                                                            | Available Phone Status                                                                                                      |
|---------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| cancel                    | Cancel                      | Cancels a call (for example, when conferencing a call and the second party is not answering).                                         | Off-Hook                                                                                                                    |
| cfwd                      | Forward / Clr fwd           | Forwards all calls to a specified number.                                                                                             | Idle, Off-Hook, Shared-Active, Hold, Shared-Held                                                                            |
| crdpause                  | PauseRec                    | Pause recording                                                                                                                       | Connected, Conferencing                                                                                                     |
| crdresume                 | ResumeRec                   | Resume recording                                                                                                                      | Connected, Conferencing                                                                                                     |
| crdstart                  | Record                      | Start a recording                                                                                                                     | Connected, Conferencing                                                                                                     |
| crdstop                   | StopRec                     | Stop recording                                                                                                                        | Connected, Conferencing                                                                                                     |
| conf                      | Conference                  | Initiates a conference call. Requires that Conf Server is enabled and there are two or more calls that are active or on hold.         | Connected                                                                                                                   |
| confLx                    | Conf line                   | Conferences active lines on the phone. Requires that Conf Serv is enabled and there are two or more calls that are active or on hold. | Connected                                                                                                                   |
| delchar                   | delChar -<br>backspace Icon | Deletes a character when entering text.                                                                                               | Dialing Input                                                                                                               |
| dir                       | Dir                         | Provides access to phone directories.                                                                                                 | Idle, Miss, Off-Hook (no input), Connected, Start-Xfer, Start-Conf, Conferencing, Hold, Ringing, Shared-Active, Shared-Held |
| disp_code                 | DispCode                    | Enter Disposition Code                                                                                                                | Idle, Connected, Conferencing, Hold                                                                                         |
| dnd                       | DND / Clr Dnd               | Sets Do Not Disturb to prevent calls from ringing the phone.                                                                          | Idle, Off-Hook, Hold, Shared-Active, Shared-Held, Conferencing, Start-Conf, Start-Xfer                                      |
| emergency                 | Emergency                   | Enter emergency number                                                                                                                | Connected                                                                                                                   |
| em_login (or<br>signin)   | Sign in                     | Logs user in to Extension Mobility.                                                                                                   | Idle                                                                                                                        |
| em_logout (or<br>signout) | Sign out                    | Logs user out of Extension Mobility.                                                                                                  | Idle                                                                                                                        |



| Keyword      | Key Label       | Definition                                                                                                                                                               | Available Phone Status                                                                                                      |
|--------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| endcall      | End call        | Ends a call.                                                                                                                                                             | Connected, Start-Xfer, Start-Conf, Conferencing, Hold                                                                       |
| favorites    | Favorites       | Provides access to "Speed Dials".                                                                                                                                        | Idle, Miss, Off-Hook (no input), Connected, Start-Xfer, Start-Conf, Conferencing, Hold, Ringing, Shared-Active, Shared-Held |
| gpickup      | GrPickup        | Allows user to answer a call ringing on an extension by discovering the number of the ringing extension.                                                                 | Idle, Off-Hook                                                                                                              |
| hold         | Hold            | Put a call on Hold.                                                                                                                                                      | Connected, Start-Xfer, Start-Conf, Conferencing                                                                             |
| ignore       | Decline         | Ignores an incoming call.                                                                                                                                                | Ringing                                                                                                                     |
| ignoresilent | Ignore          | Silences an incoming call                                                                                                                                                | Ringing                                                                                                                     |
| join         | Join            | Connects a conference call. If the conference host is user A and users B & C are participants, when A presses "Join", A will drop off and users B & C will be connected. | Conferencing                                                                                                                |
| lcr          | Call Rtn/lcr    | Returns the last missed call.                                                                                                                                            | Idle, Missed-Call, Off-Hook (no input)                                                                                      |
| left         | Left arrow icon | Moves the cursor to the left.                                                                                                                                            | Dialing Input                                                                                                               |
| messages     | Messages        | Provides access to voicemail.                                                                                                                                            | Idle, Miss, Off-Hook (no input), Connected, Start-Xfer, Start-Conf, Conferencing, Hold, Ringing, Shared-Active, Shared-Held |
| miss         | Miss            | Displays the list of missed calls.                                                                                                                                       | Missed-Call                                                                                                                 |
| newcall      | New Call        | Begins a new call.                                                                                                                                                       | Idle, Hold, Shared-Active, Shared-Held                                                                                      |
| option       | Option          | Opens a menu of input options.                                                                                                                                           | Off-Hook                                                                                                                    |
| park         | Park            | Puts a call on hold at a designated "park" number.                                                                                                                       | Connected                                                                                                                   |
| phold        | PrivHold        | Puts a call on hold on an active shared line.                                                                                                                            | Connected                                                                                                                   |

| Keyword  | Key Label             | Definition                                                                                                                                                    | Available Phone Status                                             |
|----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| pickup   | PickUp                | Allows a user to answer a call ringing on another extension by entering the extension number.                                                                 | Idle, Off-Hook                                                     |
| recents  | Recents               | Displays the All calls list from call history.                                                                                                                | Idle, Off-Hook, Shared-Active, Shared-Held                         |
| redial   | Redial                | Displays the redial list.                                                                                                                                     | Idle, Connected, Start-Conf, Start-Xfer, Off-Hook (no input), Hold |
| resume   | Resume                | Resumes a call that is on hold.                                                                                                                               | Hold, Shared-Held                                                  |
| right    | Right arrow icon      | Moves the cursor to the right.                                                                                                                                | Dialing (input)                                                    |
| settings | Settings              | Provides access to "Information and Settings".                                                                                                                | All                                                                |
| starcode | Input Star Code/*code | Displays a list of star codes that can be selected.                                                                                                           | Off-Hook, Dialing (input)                                          |
| trace    | Trace                 | Trigger trace                                                                                                                                                 | Idle, Connected, Conferencing, Hold                                |
| unavail  | Unavail               | Denotes that a user who is logged in to an ACD server has set his status as unavailable.                                                                      | Idle                                                               |
| unpark   | Unpark                | Resumes a parked call.                                                                                                                                        | Idle, Off-Hook, Connected, Shared-Active                           |
| xfer     | Transfer              | Performs a call transfer. Requires that Attn Xfer Serv is enabled and there is at least one connected call and one idle call.                                 | Connected, Start-Xfer, Start-Conf                                  |
| xferlx   | Xfer line             | Transfers an active line on the phone to a called number. Requires that Attn Xfer Serv is enabled and there are two or more calls that are active or on hold. | Connected                                                          |

### Programmable Softkeys for Executives and Assistants



**Note** Only the Cisco IP Phone 6871 Multiplatform Phones support the executive and assistant programmable softkeys.

| Keyword      | Key Label  | Definition                                                                                                                                                                                                  | Available Phone Status                                                                                                                                                                                  |
|--------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| bridgein     | Bridge in  | Only available to executives who have assistants. Joins the user (executive) to an ongoing call with an assistant.                                                                                          | Idle, Shared-Active                                                                                                                                                                                     |
| callpush     | Call push  | Only available to executive assistants. Transfers an ongoing call from the user (assistant) to the executive.                                                                                               | Hold, Shared-Active                                                                                                                                                                                     |
| callretrieve | Retrieve   | Only available to executives who have assistants. Transfers an ongoing call from the assistant to the user (executive).                                                                                     | Idle, Shared-Active                                                                                                                                                                                     |
| divert       | Clr divert | Only available to executive assistants. Deactivates call diversion for the user (assistant).                                                                                                                | Available only when call diversion is active and you navigate to the menu <b>Settings &gt; Assistant</b> .<br>It is also available when you press the line key that is configured as <b>Assistant</b> . |
| divert       | Divert     | Only available to executive assistants. Activates call diversion for the user (assistant). All incoming calls to the user, for executives that the user handles, are diverted to the specified destination. | Available when you navigate the menu <b>Settings &gt; Assistant</b> .<br>It is also available when you press the line key that is configured as <b>Assistant</b> .                                      |
| proxycall    | Proxy call | Only available to executive assistants. Initiates a call on behalf of the selected executive.                                                                                                               | Available when you navigate the menu <b>Settings &gt; Assistant</b> .<br>It is also available when you press the line key that is configured as <b>Assistant</b> .                                      |

