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Revision History

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Introduction

This manual describes how to install, configure and use Zebra Workforce Connect Voice Client (WFC Voice) on a Mitel network.

NOTE: Screens and windows pictured in this guide are samples and can differ from actual screens.

Chapter Descriptions

Topics covered in this guide are as follows:

- Configuring the PBX, describes the steps you need to take to configure the PBX.
- Configuring the Client, describes the steps you need to take prior to beginning to configure the device.
- Dynamic Configuration, describes the procedures to dynamically configure WFC Voice using an XML variable file.
- Settings, provides detailed information on configuring settings.
- Logging, describes the process used to capture and collect WFC Voice log files and Fusion log files.
- Headless Mode and WFCVoice Service, describes the procedures to configure WFC Voice as a background service.
- External Requests, explains how to make external requests to WFC Voice from third party apps.
- Using the Client, explains how to use the functions and features of WFC Voice.
- Button Actions, includes a table listing the XML tags used to define a button action.
- XML Tags, includes a table listing all XML tags used in the WFC Voice configuration file and where they are valid.
- XML Example - Profile, provides an XML example for the Profile section.
- XML Example - Footer, provides an XML example for the Footer section.
- XML Example - Dashboard, provides an XML example for the Dashboard section.
- XML Example - Call Buttons, provides an XML example for the In-Call Buttons section.
- Configuring a Proxy Server, explains how to access a license source using a proxy server.
- Network Ports and Protocols, provides an overview of the ports and protocols WFC Voice uses on supported Zebra devices.
Notational Conventions

The following conventions are used in this document:

- **Bold** text is used to highlight the following:
  - Dialog box, window and screen names
  - Drop-down list and list box names
  - Check box and radio button names
  - Icons on a screen
  - Key names on a keypad
  - Button names on a screen.

- Bullets (•) indicate:
  - Action items
  - Lists of alternatives
  - Lists of required steps that are not necessarily sequential.

- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.

Related Documents and Software

The following documents provide more information about WFC Voice.

- Best Practices Guide: Deploying VoWLAN Over WiNG5 Wireless Networks, p/n MN001150Axx

For the latest version of this guide and all guides, go to: [www.zebra.com/support](http://www.zebra.com/support).

Service Information

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: [www.zebra.com/support](http://www.zebra.com/support).

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number.

Zebra responds to calls by email, telephone or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.
Configuring the PBX

Introduction
This chapter describes how to configure the PBX.

Collect Necessary Information
Assemble the following information before you begin to configure the Mitel PBX and the mobile device:

- User ID (extension #) and Password
- Extension Number
- Server Address

Create Users
To create a user:

1. Log into System Manager web admin.

Figure 1  Login Screen
2. Click **Log In** button.

**Figure 2**  Select System Administration Tool

3. Click **System Administrator Tool** button.

**Figure 3**  User and Services Configuration

4. In the left pane, click **Users and Devices > User and Services Configuration**.

5. Click **Add** button.
6. Click **User Profile** tab.
7. Enter the user’s First Name and Last Name.
8. Click **Service Profile** tab.

9. In the **Device Type** drop-down menu, select **Generic SIP Phone**.
Configuring the PBX

10. Click **Service Details** tab and enter any required service details.

11. Click **Keys** tab. Make any necessary changes and click the **Save Changes** button.
Figure 8  Keys Tab
**System Feature Settings**

In order to use the Call Park and Conferencing features, the administrator needs to configure Feature Access Codes (FAC) in the Mitel PBX.

To configure Feature Access Codes:

1. From the Mitel PBX, go to **System Properties > System Feature Settings > SIP Device Capabilities**.

![Figure 9 SIP Device Capabilities](image)

2. In the **Basic tab > Call Routing and Administration Options**, set **Replace System based with Device based In-Call Features** to **No**.

3. Go to **System Properties > System Feature Settings > Feature Access Codes**.

4. Set the FAC for the desired Call Park and Conference features.

- **NOTE:** Ensure that the FAC set in the Mitel PBX matches the FAC set in WFC Voice in **Settings > Connection Parameters > PBX#1 Configuration** (Mitel).
Figure 10  SIP Device Capabilities
Check Device Settings

In order to register WFC with Mitel gateway, the admin/user needs to configure the WFC Voice application with the UserID that has been set at the voice gateway.

At the device the administrator must set the User ID.

To set the User ID:

1. Touch Menu button.
2. Touch Settings.
3. Enter password and touch Enter.
4. Enter User ID, password and server address.

Figure 11  WFC Voice Settings

5. Touch the Back button to return to the WFC Voice home screen.
Configuring the PBX

Figure 12  Device Setup
Introduction

This chapter describes how to install, activate and configure the Zebra Workforce Connect Voice Client (WFC Voice).

Determine Deployment Readiness

Assess the suitability of your Wireless Local Area Network (WLAN) for voice traffic, using the Best Practices Guide: Deploying VoWLAN Over Aruba Wireless Networks, Deploying VoWLAN Over Cisco Wireless Networks or Deploying VoWLAN Over WiNG5 Wireless Networks.

WARNING: If your WLAN is not suitable for voice traffic, WFC Voice will perform on a best effort basis. Contact the Zebra Software Support Desk for more information: www.zebra.com/support.

Connect Android Wireless Device to Network

Zebra WFC Voice for Android includes support for the following device types:

- Enterprise Mobile devices
- Consumer Smartphone devices (evaluation only).

Connect the Android wireless device to the network. See device instructions for more information. If you need assistance, contact the Zebra Support at: www.zebra.com/support.
Configuring the Client

Install WFC Profile Client

NOTE: WFC Profile Client is only required when using WFC Profile Manager.

To use the WFC Profile Manager to configure a device, install the Device Fabric Service (WFC Profile Client) app on the device before installing WFC Voice. The WFC Profile Client app collects authentication, role information, and a list of contacts from WFC Voice and forwards it to the WFC Profile Manager. Settings configured in the WFC Profile Manager are forwarded back to WFC Voice through the WFC Profile Client app.

There are two ways to install the WFC Profile Client app:

- USB tether or web server - This section describes using a USB tether or web server to manually install the WFC Voice APK.
- Mobile Device Manager (MDM) - For information on installing the WFC Profile Client APK using an MDM, refer to the Workforce Connect Voice Client Configuration Guide for Mobile Device Managers.

Download and Install Android Application Packager (APK)

1. From a web browser, go to the Zebra Licensing End User Portal. To access the Zebra Licensing End User Portal, follow the instructions in the Software Entitlement email from Zebra. Portal access requires registration at Zebra.com and authorization as a portal user by Zebra Support.
2. From the Zebra Licensing End User Portal, download the latest WFC Profile Client APK file.
3. Save the APK file to the root directory using one of the following methods:
   - USB tether
   - Web server download (if your network supports this option).
4. On the Android device, go to the Apps list and open the file browser.
5. Navigate to the APK file.
6. Run and install the APK file.
7. Check that the WFC Profile Client app is available in the Apps Screen. The WFC Profile Client icon should be visible in the list of available applications.

Configure the WFC Profile Client App

To configure the WFC Profile Client app refer to the WFC Profile Client Installation Guide.
Install WFC Voice

☑️ **NOTE:** When upgrading from WFC Voice version 8.2.x to version 9.x, download and install the new APK as described below. During activation, make sure to use your WFC Voice version 9.x activation key(s).

There are two ways to install WFC Voice:

- **USB tether or web server** - This section describes using a USB tether or web server to manually install the WFC Voice APK.
- **Mobile Device Manager (MDM)** - For information on installing the WFC Voice Client APK using an MDM, refer to the Workforce Connect Voice Client Configuration Guide for Mobile Device Managers.

**Download and Install Board Support Package (BSP) Operating System**

For instructions please refer to [www.zebra.com/support](http://www.zebra.com/support) and login using your partner login for latest BSP and integration instructions. If you need assistance, contact Zebra Support at: [www.zebra.com/support](http://www.zebra.com/support).

**Download and Install Android Application Packager (APK) Client**

1. From a web browser, go to the Zebra Licensing End User Portal.
   To access the Zebra Licensing End User Portal, follow the instructions in the Software Entitlement email from Zebra. Portal access requires registration at Zebra.com and authorization as a portal user by Zebra Support.
2. From the Zebra Licensing End User Portal, download the latest WFC Voice APK file.

**Installing the APK Manually**

To install the APK manually:

1. Save the APK file to the root directory of the target device using one of the following methods:
   - USB tether
   - Web server download (if your network supports this option).
2. On the Android device, go to the Apps list and open the file browser.
3. Navigate to the APK file.
4. Run and install the APK file.
5. Check that WFC Voice is available in the Apps Screen.
   The WFC Voice icon 📞 should be visible in the list of available applications.

**Installing the APK Using ADB Commands**

To install the APK using an Android Debug Bridge (ADB) connection, open a command prompt and send the following ADB commands to the device:

```
adb install -g <apk_file_name>
adb shell dumpsys deviceidle whitelist +com.symbol.wfc.voice
adb shell appops set com.symbol.wfc.voice SYSTEM_ALERT_WINDOW allow
```

Where `<apk_file_name>` is the name of the WFC Voice APK file.
Create a Shortcut for WFC Voice

To create a shortcut:

1. In the Apps Screen, press and hold on the WF Connect icon.

   **Figure 13**  Apps Screen

   ![Apps Screen](image)

   Press and hold WF Connect icon

2. Drag the WF Connect Icon to the Home screen.

   **Figure 14**  Home Screen

   ![Home Screen](image)

   Drag icon to the Home screen

3. Drop icon on Home screen.

Open WFC Voice

To open WFC Voice, use one of the following methods:

- Touch the WF Connect icon on the Home screen.
Figure 15  Home Screen

- Touch on the WF Connect icon on the Apps screen.

Figure 16  App Screen

The App Activation screen displays.

Activate WFC Voice

When WFC Voice starts for the first time, the App Activation screen appears. A valid license is required for each PBX. WFC Voice is activated by using an activation key, Mobile Device Manager (MDM), or USB tether. The WFC Profile Manager cannot be used to activate WFC Voice.

NOTE: When activating a device that does not have direct access to the license source, use a proxy server. See Configuring a Proxy Server on page 161.

Activate Using an Activation Key

To activate WFC Voice:

1. Open WFC Voice.
2. Use one of the following activation methods:
   - **Keys or features** - Acquires licenses from the default licensing source.
     In the **keys or features** field, enter your activation code(s) separated by commas.
   
   3. To enter a **device alias**, touch the **toggle button** and, in the **device alias** field, enter a name to identify the device on the license source.
   
   4. Touch **Register App**.
      The Home screen appears.

### Activate Using an MDM

Configuring WFC Voice using an MDM requires a deployment package and the WFC Voice configuration file. The configuration file WFConnect.xml stores all WFC Voice configuration parameters, including licensing information, as key and value pairs. For detailed information on the XML configuration file, see **Settings on page 41**.

Define the licensing information using the following XML tags:

- **license_key** - Contains one or more WFC Voice activation keys separated by commas.
  Example: `<license_key>abcd-1234-ab12-cd34-efgh-ef56-gh78</license_key>`

- **license_source** - URL of a license source server (optional).
  When license_source is not defined, the WFC Voice Client uses the default license source. Do not change the license_source parameter unless instructed to by Zebra Support.

- **license_alias** - Identifies the device on the license source. (Optional)

### MDM Deployment

During runtime, WFC Voice listens for `wfc.voice.ACTION_UPDATE_CONFIG` intent. When WFC Voice receives the intent from an MDM, the configuration file uses WFConnect.xml to update the WFC Voice configuration parameters. Use a single intent to update multiple configuration parameters by including multiple element and value pairs.

For detailed information on MDM deployment, refer to the Workforce Connect Voice Client 8.x Configuration Guide for Mobile Device Managers.
Activate Using a USB Tether

Send the \texttt{WFConnect.xml} configuration file to the device using a USB tether, use an Android Debug Bridge (ADB) connection.

\textbf{NOTE:} It is not recommended to install the WFConnect.xml file using a USB tether because it can cause permission issues on the device.

1. Install the WFC Voice APK. See Download and Install Android Application Packager (APK) Client on page 23.
2. Copy the \texttt{WFConnect.xml} file to the WFConnect directory.
3. Open a command prompt and send the following adb command to the device:
   \begin{verbatim}
   adb shell am start -a "wfc.voice.ACTION_NEW_CONFIG" --es "profile_uri" 
   
   /WFConnect/WFConnect.xml"
   \end{verbatim}

Update License

To update all WFC Voice licenses, refer to the Workforce Connect Voice Client Administration Guide for Licensing.

Configure WFC Voice

WFC Voice is configured using the Graphical User Interface (GUI), an MDM, a USB Tether, or WFC Profile Manager.

\textbf{NOTE:} It is not recommended to install the WFConnect.xml file using a USB tether because it can cause permission issues on the device.

Configure Using WFC Voice GUI

To configure WFC Voice:

1. Touch \texttt{\textemdash > Settings}. 
2. Enter the settings password. The default password is: \texttt{zamboni}. 
3. Touch \texttt{Connection Parameters}. 
4. Select a PBX configuration. The default configuration is: \texttt{PBX#1 Configuration}. 
   For information on configuring additional PBX types, see Configuring Multiple PBX Types on page 44. 
5. Touch the \texttt{PBX Type} field and select Mitel. 
6. Enter the \texttt{User ID}. 
7. Enter the \texttt{Password}. 
8. Enter the PBX \texttt{Server Address}. 

\textbf{NOTE:} It is not recommended to install the WFConnect.xml file using a USB tether because it can cause permission issues on the device.
Configure Using an MDM

Configuring WFC Voice using an MDM requires a deployment package and the WFC Voice configuration file. The configuration file WFConnect.xml stores all WFC Voice configuration parameters, including licensing information, as key and value pairs. For detailed information on the XML configuration file, see Settings on page 41.

Define the licensing information using the following XML tags:

- **license_key** - Contains one or more WFC Voice activation keys separated by commas.
  
  Example: `<license_key>abcd-1234-ab12-5678-efgh-ef56-gh78</license_key>`

- **license_source** - URL of a license source server (optional).
  
  When license_source is not defined, the WFC Voice Client uses the default license source. Do not change the license_source parameter unless instructed to by Zebra Support.

- **license_alias** - Identifies the device on the license source. (Optional)

MDM Deployment

During runtime, WFC Voice listens for wfc.voice.ACTION_UPDATE_CONFIG intent. When WFC Voice receives the intent from an MDM, the configuration file uses WFConnect.xml to update the WFC Voice configuration parameters. Use a single intent to update multiple configuration parameters by including multiple element and value pairs.

For detailed information on MDM deployment, refer to the Workforce Connect Voice Client 8.x Configuration Guide for Mobile Device Managers.

NOTE: For information on optional configuration settings, see XML Tags on page 138.
Configure Using a USB Tether

To send the `WFConnect.xml` configuration file to the device using a USB tether, use an Android Debug Bridge (ADB) connection.

**NOTE:** It is not recommended to install the WFConnect.xml file using a USB tether because it can cause permission issues on the device.

1. Install the WFC Voice APK. See Download and Install Android Application Packager (APK) Client on page 23.
2. Copy the `WFConnect.xml` file to the WFConnect directory.
3. Open a command prompt and send the following adb command to the device:
   ```
   adb shell am start -a "wfc.voice.ACTION_NEW_CONFIG" --es "profile_uri" 
   
   "WFConnect/WFConnect.xml"
   ```

   To update a specific parameter in the `WFConnect.xml` configuration file using ADB, open a command prompt and send an ADB command to the device in the following format:
   ```
   $ adb shell am start -a wfc.voice.ACTION_UPDATE_CONFIG --es element value
   ```

   For a list of possible elements and values, see XML Tags.

Configure Using WFC Profile Manager

When configuring WFC Voice using the WFC Profile Manager:

- The WFC Profile Manager can set or overwrite all settings in the `WFConnect.xml` configuration file.
- Some WFC Voice settings are grayed out.
- The `layout_location` setting can be used to set an XML button configuration file.

To configure WFC Voice using WFC Profile Manager, log in to the WFC Profile Manager and navigate to WFC Voice settings. Settings available in the WFC Profile Manager match the parameters in the WFConnect.xml configuration file. For a list of parameters and values, see XML Tags on page 138.
Dynamic Configuration

Introduction

The WFC Voice configuration file defines the operational environment of the SIP client running on Zebra mobile android devices. It has various elements that define the network location of the PBX and, for each device, unique defining operational aspects affecting the user experience. Creating this file manually and distributing this file for each device on an enterprise-wide scale introduces significant administrative overhead.

Dynamic configuration:

- Reduces the administrative effort preparing WFC Voice for enterprise operation
- Provides a flexible delivery environment for the customized configuration
- Provides a method for shared device use without manually reloading the configuration
- Provides backward compatibility for existing customers.

Rather than manually creating a unique configuration for each device, this approach dynamically configures WFC Voice using an XML variable file. File delivery can be manual, by an MDM, or automatic through existing network services.

Overview

The chapter includes:

- Providing a new XML tag that triggers dynamic configuration
- Building a multi-user variable file to build user specific configurations for WFC Voice
- Re-synchronizing WFC Voice with the variable file on a regular basis
- Using DHCP resources to provide auto installation for the file.

Properly configuring these elements allows WFC Voice to register to the PBX.

General Device Use Cases

- A unique user is typically a supervisor or manager with a device with a more advanced feature set that is not shared with any other user. This extension may be shared with that person’s desk phone.
- A shared device is typically for line workers or department staff that use a phone representing a functional area, as opposed to a specific person. The device has a basic feature and may also be uniform, sharing common elements (e.g.; button configurations) across all shared devices.
Device Start-Up

There are three stages of device life-cycle in the customer environment that affect how WFC Voice obtains the suitable runtime configuration:

- Initialized out of the box configuration (no configuration)
- A rebooted device previously configured
- A device reassigned to a new extension / user

Device Identification

The system identifies each mobile device by a unique user ID and password. The user’s credentials are mapped to a specific feature set in the PBX. This requires that the user credentials are loaded into the WFC Voice XML and passed to the PBX at registration time.
Profile Configuration

For WFC Voice to connect to a PBX, the Profile section of the WFConnect.xml file must contain XML tags which the device uses to:

- Establish a link to the PBX
- Identify itself to the PBX
- Retrieve the correct privileges and settings.

✓ **NOTE:** Any element in the WFC Voice configuration file can be replaced with a variable.

Connection Attributes

The **sip_userid** and **sip_userpass** provide access to the PBX as shown in the following example:

```xml
<Profile>
  ...
  <profile_type>Mitel</profile_type>
  <display>true</display>
  <profname>Mitel</profname>
  <prof_password></prof_password>
  <sip_userid>2808</sip_userid>
  <sip_userpass>123456</sip_userpass>
  <prof_description>Test-2808</prof_description>
  <sip_mac></sip_mac>
  <sip_remhost>10.80.212.44</sip_remhost>
  ...
</Profile>
```

The profile section requires:

- An IP address in the **sip_remhost** field to target the appropriate PBX.
- A user ID (**sip_userid**) and password (**sip_pass**) to identify the client to the PBX.
Dynamic Configuration

Enabling Dynamic Configuration

The `var_location` tag enables dynamic configuration, and reduces the entire profile section of the `WFConnect.xml` file to one line.

```xml
<WFConnect>
    <Profile>
        <var_location>file:///wfconnect/wfcvariable.xml</var_location>
    </Profile>
</WFConnect>
```

\[\checkmark\]  **NOTE:** File location is for demonstration purposes. The actual file location may vary.

When WFC Voice initializes and parses the XML file, this tag instructs the device to retrieve the `wfcvariable.xml` file from the stated location. The location can be:

- A local file on the mobile device
- Provisioned by an MDM
- Side loaded manually
- A URL

Wcfvariable.xml File

This file collects and organizes XML tags to populate the run-time `WFConnect.xml` file. Tags that are not declared use default values. The `Users` tag supports and organizes multiple users. The `users` section is displayed as a list on the WFC Voice sign-in screen. When the `display` tag for an entry is set to true, users can select a profile from the list.

When the `display` tag is set to false, the `profname` and `prof_password` tags are used. These tags are used for user authentication when selecting a hidden profile for a dedicated user. For a shared extension, these tags are rarely used.

`Users` can each be a complete and unique configuration, or they can re-use components, such as the following buttons example.

```xml
<!-- Mitel Users -->
<Entry>
    <profile_type>Mitel</profile_type>
    <display>true</display>
    <profname>Mitel-2797</profname>
    <prof_password></prof_password>
    <sip_userid>2797</sip_userid>
    <sip_userpass>123456</sip_userpass>
    <prof_description>MC40.1</prof_description>
    <sip_mac></sip_mac>
    <sip_remhost>10.80.212.44</sip_remhost>
</Entry>
```

\[\text{NOTE:}\] File location is for demonstration purposes. The actual file location may vary.
<Entry>
  <profile_type>Mitel</profile_type>
  <display>true</display>
  <profname>Mitel-2799</profname>
  <prof_password></prof_password>
  <sip_userid>2799</sip_userid>
  <sip_userpass>123456</sip_userpass>
  <prof_description>MC40.2</prof_description>
  <sip_mac></sip_mac>
  <sip_remhost>10.80.212.44</sip_remhost>
</Entry>

<Entry>
  <profile_type>Mitel</profile_type>
  <display>true</display>
  <profname>Mitel-2800</profname>
  <prof_password></prof_password>
  <sip_userid>2800</sip_userid>
  <sip_userpass>123456</sip_userpass>
  <prof_description>MC40.3</prof_description>
  <sip_mac></sip_mac>
  <sip_remhost>10.80.212.44</sip_remhost>
</Entry>

<Entry>
  <profile_type>Mitel</profile_type>
  <display>true</display>
  <profname>Mitel-2801</profname>
  <prof_password></prof_password>
  <sip_userid>2801</sip_userid>
  <sip_userpass>123456</sip_userpass>
  <prof_description>MC40.4</prof_description>
  <sip_mac></sip_mac>
  <sip_remhost>10.80.212.44</sip_remhost>
</Entry>

**XML File Location**

The previous example shows the `wfcvariable.xml` variable file resident on the device. The variable file can also reside on a centrally accessible server that the client can access. This provides service to all devices in the enterprise and central administrative control.

The `var_location` element specifies whether WFC Voice looks for the XML file on the device (a local file) or at a network location, for example:

- Local: file:///WFConnect/wfcvariable.xml
Dynamic Configuration

- HTTP: http://10.5.90.10/wfcvariable.xml
- HTTPS: https://10.5.90.10/wfcvariable.xml
- TFTP: tftp://10.5.90.10/wfcvariable.xml

This provides options for deploying the configuration files. For example, an enterprise using an MDM may supply both the Profile section and the variable file to the device and also have a central location for the variable file.

DHCP Option 150

WFC Voice also supports DHCP Option 150 for retrieving the wfcvariable.xml file. If the var_location tag is not specified in the WFConnect.xml configuration, the client attempts to download the wfcvariable.xml file from the TFTP server specified in the Option 150 string.

Configuration Resynchronization

Synchronizing dynamic configuration ensures that devices always have the most current configuration available from the network server or MDM. For example, when a user logs in to an extension, the configuration files may change. The new configuration files are available when the user logs off from the current session and the WFC service re-processes the variable files.

✅ **NOTE:** The system administrator must ensure that updates are posted to the correct location available to WFC Voice.
Dynamic Configuration Start-Up - Server Side

The following diagram describes the steps WFC Voice follows on the server side to download dynamic configuration during initialization.

**Figure 19** Dynamic Configuration Start-Up Process

Dynamic Mode

```xml
<WFConnect>
  <Profile>
    <var_location>http://192.168.10.10/WFConnect/wfcvariable.xml</var_location>
  </Profile>
</WFConnect>
```

Network Services – Option 60 Support in Sunrise products

MDM or Side loaded config file

No Dynamic Config process. End.

Var file downloaded for later processing once extension is selected.

Start Up WFC for Manual Config
Dynamic Configuration Start-Up - Client Side

The following diagram describes the steps WFC Voice follows on the client side to download dynamic configuration during initialization.

Figure 20  Dynamic Configuration Start-Up Process - Continued
XML File Examples

The following example displays the standard profile and different ways WFC Voice is able to retrieve a Dynamic Workforce Configuration XML file. Options include local XML and TFTP downloaded XML configuration.

**Figure 21  XML Files Example**

**Standard Config**  (Legacy Mode)

```
<WFConnect>
  <Profile>
    <profile_type>PBX</profile_type>
    <sip_mac>aaaabbbbccci</sip_mac>
    <sip_remhost>192.168.10.50</sip_remhost>
  </Profile>
</WFConnect>
```

**Variable File**  
_Wfcvariable.xml_

```
<User>
  <Entry>
    <display>false</display>
    <profname>1001</profname>
    <password>abc123</password>
    <prof_description>boss</prof_description>
    <sip_mac>aaaabbbbcccc1</sip_mac>
    <sip_remhost>192.168.10.50</sip_remhost>
    <layout_location>http://192.168.10.10/WFConnect/buttons_1001.xml</layout_location>
  </Entry>
</User>
```

**Dynamic Mode**  
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```
<WFConnect>
  <Profile>
    <var_location>http://192.168.10.10/WFConnect/wfcvariable.xml</var_location>
  </Profile>
</WFConnect>
```

**WFC Service Start-up:**
- Request Var File

Var File sent to device.
At WFC UI Activation user prompted for Prof Names
User scrolls through Profile Names and makes selection.

```
<Button>
  <title>History</title>
  <action>HISTORY</action>
  <value /></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description></description>
  <fg_color>#FFFFFF</fg_color>
  <icon></icon>
</Button>
```

**Buttons_1001.xml**

```
<User>
  <Entry>
    <display>false</display>
    <profname>1001</profname>
    <password>abc123</password>
    <prof_description>boss</prof_description>
    <sip_mac>aaaabbbbcccc1</sip_mac>
    <sip_remhost>192.168.10.50</sip_remhost>
    <layout_location>http://192.168.10.10/WFConnect/buttons_1001.xml</layout_location>
  </Entry>
</User>
```
Testing Remote Dynamic Configuration

A test environment can use any remote server supporting web services.

To set up a lab system:

1. Ensure the server is running IIS to support Web services.
2. Establish a WFC Voice website.
3. Create the website and add a virtual folder.
4. Open the Default Documents properties.

Figure 22  Server Manager

5. Set the folder for the WFC Voice configuration file repository.
6. Test the settings to verify the system and default user can access the files.

   **NOTE:** To test accessibility of the files, point your browser to the web site.

7. After determining access to the files, modify the XML files accordingly:
   - An example of remote access in `WFConnect.xml` is:
     ```xml
     <Profile>
     <var_location>http://192.168.10.45/var/wfcvariable.xml</var_location>
     </Profile>
     ```
   - An example of remote access in the `wfcvariable.xml` is:
     ```xml
     <layout_location>http://192.168.10.45/var/buttons_5002.xml</layout_location>
     ```

A remote server allows consistency of delivery to the remote device. Logging on and off the device synchronizes changes to the device. Each login retrieves the existing XML file targeted for that device.
Introduction

This chapter contains information on settings used to configure and customize WFC Voice.

The following sections provide detailed information on:

- **Profile Settings** - creating, editing, loading and saving a settings profile.
- **Connection Parameters** - configuring up to four PBX types.
- **Audio Settings** - configuring advanced audio settings.
- **UI Settings** - controlling the appearance and functionality of WFC Voice.
- **Call Settings** - configuring advanced call settings.
- **Ringtones** - configuring WFC Voice ringtones.
- **Miscellaneous Settings** - locating help files and editing the settings password.

Accessing Settings

1. Launch **WFC Voice**.
2. Touch ☰ > **Settings**. The password dialog box appears.
3. Enter password (default: **zamboni**).
4. Touch **Enter**. The password is preserved until the app quits.

Exiting WFC Voice:

1. Go to **Settings**.
2. Touch **Stop Service > Yes**.

This action can also be initiated using ADB, an MDM, or a third party app. For example, in ADB you can use the following command:

$ adb shell am broadcast -a wfc.voice.STOP_APP

Reloading the WFC Voice:

1. Go to **Settings**.
2. Touch 🔄.

For more ways to reload WFC Voice, see **Reload on page 133**.
Profile Settings

The WFC Voice profile is an XML file that contains all the settings for the current WFC Voice session.

Create Profile

Create a new profile. A new XML file is created in the WFConnect folder.

To create a new profile:
1. Go to Settings.
2. Touch the menu button, then Create new profile.
3. Touch Save current profile.
4. Enter a file name for the new profile.
5. Touch Save. The file is saved in the WFConnect folder.
6. Touch the Back button to return to the WFC Voice home screen.

Change Profile Name

To change the name of the current profile:
1. Go to Settings.
2. Touch Profile name.
3. Enter a file name for the new profile.
4. Touch OK. The file name in the WFConnect folder is updated.
5. Touch the Back button to return to the WFC Voice home screen.

Shared Profiles URI

Set the URI of shared profile located on a remote or local server.

To set the URI of a shared profile:
1. Copy the profile from the WFConnect folder using a USB tether.
2. Move the profile to a remote or local server.
   Supported protocols are file, http, https, and tftp.
3. From WFC Voice, go to Settings.
4. Touch Shared Profiles URI.
5. Enter the URI of the shared profile.
6. Touch OK.
7. Touch the Back button to return to the WFC Voice home screen.
Load New Profile

Load profiles previously saved to the:

- WFConnect folder
- SD Card

Loading a New Profile Using the GUI

1. Go to Settings.
2. Touch Load new profile. The Select Profile File dialog box appears.
3. Select a profile file name.
4. Touch the Back button or Refresh button to load new profile.

Loading a New Profile Using XML

<WFConnect>
<Profile>
   <profname>WFConnect.xml</profname>
</Profile>
</WFConnect>

Installing the APK Using ADB Commands

To install the APK using an Android Debug Bridge (ADB) connection, open a command prompt and send the following ADB command to the device:

$ adb shell am start -a wfc.voice.ACTION_NEW_CONFIG --es profile_uri <configuration_file>

Where <configuration_file> is the URI of the new XML configuration file.

Save Current Profile

Using the same file name, save the current profile to replace an existing XML file.

To save an existing profile:

1. Go to Settings.
2. Touch Save current profile. The current profile name appears.
3. Touch Save. The file is saved in the WFConnect folder.
4. Touch the Back button to return to the WFC Voice home screen.

Edit a Profile Using XML

To edit a saved profile using XML, copy the new profile from the WFConnect folder using a USB tether.
Connection Parameters

Users can make and receive a call using any configured PBX type. This section describes how to configure up to three additional PBX types using the WFC Voice GUI or WFConnect.xml file.

To configure the default PBX (PBX#1 Configuration) see Configure WFC Voice on page 27.

Configuring Multiple PBX Types

Set the configuration parameters for additional PBX types:

**IMPORTANT:** When configuring multiple PBXs, ensure the server IP address and credentials are pointing to the correct PBX call server as indicated by the profile type. For example, the MITEL profile must be configured with the IP address and credentials of a MITEL call manager.

Using the GUI

1. Go to **Settings**.
2. Touch **Connection Parameters**.
3. Touch **PBX#2 Configuration**.
4. Touch **PBX#2 Type**.
5. Select the PBX type that is the same as the target PBX call server.
6. Enter the configuration information.
   Refer to the Getting Started chapter of the WFC Voice Client Administrator Guide for the desired PBX type.
7. Touch the **Back** button to return to the Connection Parameters screen.
8. Repeat steps 5 through 7 for up to two more PBX types (optional).
9. Touch the **Back** button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <profile_type>Licensed PBX One</profile_type>
    <sip_userid>1001</sip_userid>
    <sip_userpass>1234</sip_userpass>
    <sip_localport>5060</sip_localport>
    <sip_remhost>10.5.97.99</sip_remhost>
    <sip_remport>5060</sip_remport>
    <sip_transport>UDP</sip_transport>
    <sip_realm>10.16.2.111</sip_realm>
    <profile2_type>Licensed PBX Two</profile2_type>
    <sip2_userid>1002</sip2_userid>
    <sip2_userpass>1234</sip2_userpass>
    <sip2_device_type>8865</sip2_device_type>
    <sip2_mac>00-11-22-33-44-55</sip2_mac>
    <sip2_localport>5060</sip2_localport>
    <sip2_remhost>10.5.97.99</sip2_remhost>
    <sip2_remport>5060</sip2_remport>
    <sip2_transport>UDP</sip2_transport>
    <sip2_realm>10.16.2.111</sip2_realm>
  </Profile>
  ...
</WFConnect>
```
Audio Settings

**CAUTION:** Changing the default audio settings may have adverse results. Do not modify these settings unless directed to so by Zebra Technical Support.

This section provides detailed information on configuring advanced audio settings. Use the WFC Voice GUI or WFConnect.xml file to customize the Profile section. Both methods are discussed with each Function description.

**Accessing Audio Settings**

To configure audio settings:

1. Go to **Settings**.
2. Touch **Advanced Settings > Audio Settings**.

**Audio Codecs Priorities**

Set the audio Codecs preferences.

NOTE: Only select audio Codecs available in the PBX.

Using the GUI

1. In **Audio Settings**, select **Audio Codecs Priorities**.
2. Select the Codec preference (default order preferred). See Table 1 for descriptions.
3. Touch **Back** button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <codec_ulaw_priority>1</codec_ulaw_priority>
  </Profile>
... 
</WFConnect>
```

<table>
<thead>
<tr>
<th>Field Type</th>
<th>Description</th>
<th>XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.711 u-Law</td>
<td>When selected, assigns preference priority for G.711 u-LAW Voice codec negotiations between PBX and WFC Voice.</td>
<td><code>&lt;codec_ulaw_priority&gt;1&lt;/codec_ulaw_priority&gt;</code></td>
</tr>
<tr>
<td>G.711 A-Law</td>
<td>When selected, assigns preference priority for G.711 A-Law Voice codec negotiations between PBX and WFC Voice.</td>
<td><code>&lt;codec_alaw_priority&gt;2&lt;/codec_alaw_priority&gt;</code></td>
</tr>
<tr>
<td>G.729</td>
<td>When selected assigns preference priority for G.729 Voice codec negotiations between PBX and WFC Voice.</td>
<td><code>&lt;codec_g729_priority&gt;3&lt;/codec_g729_priority&gt;</code></td>
</tr>
</tbody>
</table>
### Jitter Buffer

#### Jitter Initial Delay

Set the Jitter Buffer initial delay settings.

Using the GUI

1. In **Audio Settings**, slide the **Jitter Initial Delay** slider (default 60 msec).
2. Touch **Back** button to return to the WFC Voice home screen.

Using XML

```
<WFConnect>
  <Profile>
    <jitter_min>60</jitter_min>
  </Profile>
  ...
</WFConnect>
```

#### Jitter Buffer Max Buffer Size

Set the maximum Jitter Buffer size.

Using the GUI

1. In **Audio Settings**, slide the **Jitter Buffer Size** slider (default 250 msec).
2. Touch **Back** button to return to the WFC Voice home screen.

Using XML

```
<WFConnect>
  <Profile>
    <jitter_max>250</jitter_max>
  </Profile>
  ...
</WFConnect>
```
RTP Parameters

Real-Time Transport Protocol (RTP) Parameters - Payload Size

Set the RTP Payload size.

Using the GUI
1. In Audio Settings, select RTP payload size.
2. Select the RTP payload size from the dialog box (default 20 ms).
3. Touch the Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
<Profile>
  <sip_rtp_ptime>20</sip_rtp_ptime>
</Profile>
...</WFConnect>

First Real-Time Transport Protocol (RTP) Port

Set the First RTP Port.

Using the GUI
1. In Audio Settings, select First RTP port.
2. Enter the First RTP port number (default 50000).
3. Select OK.
4. Touch the Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
<Profile>
  <sip_rtp_port1>50000</sip_rtp_port1>
</Profile>
...</WFConnect>

Last Real-Time Transport Protocol (RTP) Port

Select the Last RTP Port.

Using the GUI
1. In Audio Settings, select Last RTP Port.
2. Enter the Last RTP port number (default 50025).
3. Select OK.
4. Touch the Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
<Profile>
  <sip_rtp_port2>50025</sip_rtp_port2>
</Profile>
...</WFConnect>
Audio Enhancements

This section describes how to enable and disable audio enhancements.

Configuring Audio Enhancements

Set the following audio enhancements:

- Echo Cancellation
- Noise Reduction
- AGC on speaker
- AGC on earpiece

Using the GUI

1. In Audio Settings, scroll down to Audio Enhancements.
2. Tap the check boxes next to the items to enable (default: disabled).
3. Touch the Back button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <use_aec>false</use_aec>
    <use_noise>false</use_noise>
    <use_agc_speaker>false</use_agc_speaker>
    <use_agc_ear>false</use_agc_ear>
  </Profile>
  ...
</WFConnect>
```

Input / Output Audio

Set the input / output volume.

Using the GUI

1. In Audio Settings, scroll down to Audio Enhancements.
2. Use the slider to select the volume levels for Input Audio Volume and Output Audio Volume (default 1).
3. Touch the Back button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <audio_gain_in>1</audio_gain_in>
    <audio_gain_out>1</audio_gain_out>
  </Profile>
  ...
</WFConnect>
```

Audio Debugging Tools

Set the following debugging tools:

- Show jitter stats
- Save incoming voice
- Native Sample Rate

Using XML

```xml
<WFConnect>
  <Profile>
    <audio_gain_in>1</audio_gain_in>
    <audio_gain_out>1</audio_gain_out>
  </Profile>
  ...
</WFConnect>
```
### Using the GUI

1. In **Audio Settings**, scroll down to **Audio Debugging Tools**.
2. Tap the check boxes next to the items to enable (default: disabled).
3. Touch the **Back** button to return to the WFC Voice home screen.

### Using XML

```xml
<WFConnect>
  <Profile>
    <show_jitter_stats>false</show_jitter_stats>
    <save_incoming_voice_to_file>false</save_incoming_voice_to_file>
    <use_native_sample_rate>false</use_native_sample_rate>
  </Profile>
  ...
</WFConnect>
```
UI Settings

Use the GUI to configure the User Interface. Settings made in the GUI are saved to the XML file. The GUI settings and the XML file drives the WFC Voice look and functionality. Alternatively edit the XML file, \texttt{WFConnect.xml}, to make the same GUI settings. The saved \texttt{WFConnect.xml} file can be modified and use to configure other devices.

The \texttt{WFConnect.xml} file must be stored on the device in the \texttt{WFCconnect} folder. If this file does not exist, the application uses the default parameter values. The WFC Voice XML configuration file has the following sections which must be present in the file and in the following order:

- Profile section
- Dashboard section
- Call buttons section.

\textbf{IMPORTANT:} All these sections must be present in the XML file and they must be in the order listed above.

Accessing UI Settings

1. Go to \texttt{Settings}.
2. Touch \texttt{Advanced Settings > UI Settings}.

Configuration File Sections

\textbf{Profile Section}

The Profile section contains all the global settings and only requires one item to begin using the WFC Voice on a PBX.

- SIP Remote Host (PBX Server Address) \texttt{<sip_remhost>}

Unless specified, the Profile section of WFC Voice uses the default settings for Audio Settings, Call Settings, Miscellaneous Settings, Logging and Optional Services (This is a suggested best practice). Use the WFC Voice GUI or WFConnect.xml file to customize the Profile section. Both methods are discussed with each Function description.

See XML Example - Profile for a profile section example.

\textbf{Dashboard Section}

The Home Screen Dashboard section defines the buttons in the dashboard area of the screen and their layout on the WFC Voice screen. The Dashboard displays functions and features specific to the end user. A maximum of 12 buttons can be displayed on the screen; additional buttons are accessed by scrolling up and down. Use the WFC Voice GUI or WFConnect.xml file to customize the Dashboard. Both methods are discussed with each Function description.

See XML Example - Dashboard for a dashboard section example.

\textbf{Call Buttons Section}

The Call Buttons section defines the buttons in the call buttons area of the screen and their layout on the WFC Voice screen. In-Call displays the available function and action of call buttons that can be accessed during a call. While on a call the user may wish to perform one of the following:
• Add Call
• Home
• Hold
• Resume
• Park
• Transfer
• Conference
• Complete
• End Call.

See XML Example - Call Buttons for a call button section example.

**Headless Mode**

For detailed information on Headless Mode see Headless Mode and WFCVoice Service.
Background Logo

Icon Library

To choose a background from the icon library:

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Background Logo</strong>.</td>
<td>2. From the <strong>LIBRARY</strong> tab, select the new background. A yellow box appears around the selected background.</td>
</tr>
<tr>
<td>2. From the <strong>LIBRARY</strong> tab, select the new background. A yellow box appears around the selected background.</td>
<td>3. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
</tr>
<tr>
<td>3. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>Using XML</td>
</tr>
<tr>
<td>Using XML</td>
<td></td>
</tr>
<tr>
<td><code>&lt;WFConnect&gt;</code></td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td><code>&lt;Profile&gt;</code></td>
<td><code>&lt;background_logo&gt;logo&lt;/background_logo&gt;</code></td>
</tr>
<tr>
<td><code>&lt;/Profile&gt;</code></td>
<td><code>&lt;/WFConnect&gt;</code></td>
</tr>
</tbody>
</table>

Custom Background Configuration

The user can create a custom background. To select a custom background:

1. Connect the device to a host computer using a USB cable.
2. **From the host computer**, copy the icon file to the **WFConnect** folder on device.

Custom Background Configuration

Using the GUI

1. In **UI Settings**, select **Background Logo**.
2. From the **SDCARD** tab, select the new background. A yellow box appears around the selected background.
3. Touch the **Back** button to return to the WFC Voice home screen.

Using XML

1. Using XML

```
<WFConnect>
  <Profile>
    <background_logo>custom_logo.png</background_logo>
  </Profile>
</WFConnect>
```
Graphical User Interface Design Tool

Use the GUI Design Tool to customize the Dashboard and In-Call screen from within WFC Voice. Configure each to fit the specific needs of the customer. The appearance of WFC Voice is configured using the GUI or by directly modifying the *WFConnect.xml* file. Details on specific XML settings and the construct of the XML configuration file are discussed in more detail later in this guide.

Accessing the GUI Design Tool

1. Go to Settings.
2. Touch Advanced Settings > UI Settings.
3. Select Edit Dashboard or Edit In-Call Button.

Using the UI Settings GUI Design Tool

The following diagram describes the buttons available for each area.

**Figure 24** GUI Design Tool - Dashboard
Home Screen Dashboard

Figure 25  Home Screen Dashboard

In-Call Dashboard

Figure 26  In-Call Dashboard
Buttons Settings

The following sections describes each button that can be placed on the UI. Each section lists the Designer Tool procedure and corresponding XML configuration.

Call

Call is the ability to make a telephone call to a specific number or location using a prefix. The administrator identifies a target by its extension (phone number) and enters this into the Value field along with the prefix. The user can then use this function to initiate a call to the preset destination.

Configuring the Call Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In UI Settings, select Edit Dashboard or Edit In-Call &gt; Add.</td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch Edit.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to Confirm On Click to enable this (the default is Disabled).</td>
<td></td>
</tr>
<tr>
<td>5. Touch Action and select CALL from the Select Action menu.</td>
<td>&lt;action&gt;CALL&lt;/action&gt;</td>
</tr>
<tr>
<td>6. If the dialed number has a prefix, in the Value field, enter the prefix number.</td>
<td>&lt;value&gt;9&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the Title field, enter Call.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. In the Description field, enter a short description of the button function.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.</td>
<td>&lt;description&gt;Make a call&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch BG to set the background color. See Button Background Color on page 87.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td>11. Touch FG to set the foreground text color. See Button Text Color on page 88.</td>
<td>&lt;fg_color&gt;#FFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td>12. Touch the Back button to return to the WFC Voice home screen.</td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Dashboard&gt; or &lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
Dial

Dial is the ability to dial a specified extension or number to initiate a telephone call. A caller identifies a target by its extension (phone number) and originates the call.

Configuring the Dial Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select DIAL from the Select Action menu.
6. In the Title field, enter Dial.
7. In the Description field, enter a short description of the button function.
8. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.
9. Touch BG to set the background color. See Button Background Color on page 87.
10. Touch FG to set the foreground text color. See Button Text Color on page 88.
11. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...

<Button>
	<title>Dial</title>
	<action>DIAL</action>
	<value></value>
	<enabled>true</enabled>
	<confirm>false</confirm>
	<description>Dial a number or extension</description>
	<bg_color>#FF001425</bg_color>
	<fg_color>#FFFFFFFF</fg_color>
	<icon>Default</icon>
</Button>
...
</Dashboard> or </CallButtons>
**Start App**

Start Application defines a button to launch another application on the device. When the button is pressed WFC Voice minimizes to run in the background and the defined application launches. For example, a button can be placed in the Dashboard to open an email application.

**Configuring the Start App**

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td>Opening the music application example is shown in the following XML.</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>...</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>START_APP</strong>.</td>
<td>&lt;action&gt;START_APP&lt;/action&gt;</td>
</tr>
<tr>
<td>6. Touch <strong>Select App Package</strong> and select the application from the <strong>Select App Package</strong> menu.</td>
<td>&lt;value&gt;com.android.email&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Title</strong> field, enter the application name.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td>&lt;description&gt;Open email application&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td>&lt;icon&gt;email.png&lt;/icon&gt;</td>
</tr>
<tr>
<td>11. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td>12. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;Dashboard&gt; or &lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
Log Marker

Log Marker creates a time stamp in the logs. If you experience any issues with WFC Voice functionality, the time stamp focuses troubleshooting of the device to the time the issue occurred for more rapid resolution.

Configuring the Log Marker

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>&lt;title&gt;Log Marker&lt;/title&gt;</td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>LOG_MARKER</strong> from the <strong>Select Action</strong> menu.</td>
<td>&lt;action&gt;LOG_MARKER&lt;/action&gt;</td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Log Marker</strong>.</td>
<td>&lt;value/&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color</strong> on page 87.</td>
<td>&lt;description&gt;Create time stamp&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color</strong> on page 88.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/Dashboard&gt; or &lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
**Speed Dial 0-9**

Speed Dial places a telephone call to a preset number/extension. Set up to 10 speed dial buttons on the dashboard through the GUI interface.

**Configuring the Speed Dial Button**

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td><code>&lt;Dashboard&gt; or &lt;CallButtons&gt;</code></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><code>&lt;Button&gt;</code></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>SPEED_DIALx</strong> from the <strong>Select Action</strong> menu.</td>
<td></td>
</tr>
<tr>
<td>6. In the <strong>Value</strong> field, enter the extension.</td>
<td><code>&lt;title&gt;Speed Dial #1&lt;/title&gt;</code></td>
</tr>
<tr>
<td>7. In the <strong>Title</strong> field, enter <strong>Speed Dial (#)</strong>.</td>
<td><code>&lt;action&gt;SPEED_DIAL1&lt;/action&gt;</code></td>
</tr>
<tr>
<td>8. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><code>&lt;value&gt;5133&lt;/value&gt;</code></td>
</tr>
<tr>
<td>9. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td><code>&lt;enabled&gt;true&lt;/enabled&gt;</code></td>
</tr>
<tr>
<td>10. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td><code>&lt;confirm&gt;false&lt;/confirm&gt;</code></td>
</tr>
<tr>
<td>11. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td><code>&lt;description&gt;Speed dial #1&lt;/description&gt;</code></td>
</tr>
<tr>
<td>12. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><code>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</code></td>
</tr>
</tbody>
</table>

...
Redial

Redial places a telephone call to the most recently call location.

Configuring the Redial Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td><strong>&lt;Dashboard&gt;</strong> or <strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td><strong>2.</strong> Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td><strong>3.</strong> Touch <strong>Edit</strong>.</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td><strong>4.</strong> Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;title&gt;Redial&lt;/title&gt;</strong></td>
</tr>
<tr>
<td><strong>5.</strong> Touch <strong>Action</strong> and select <strong>REDIAL</strong>.</td>
<td><strong>&lt;action&gt;REDIAL&lt;/action&gt;</strong></td>
</tr>
<tr>
<td><strong>6.</strong> In the <strong>Title</strong> field, enter <strong>Redial</strong>.</td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td><strong>7.</strong> In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><strong>&lt;enabled&gt;true&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td><strong>8.</strong> Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td><strong>9.</strong> Touch <strong>BG</strong> to set the background color.</td>
<td><strong>&lt;description&gt;Dial the last number called&lt;/description&gt;</strong></td>
</tr>
<tr>
<td><strong>10.</strong> Touch <strong>FG</strong> to set the foreground text color.</td>
<td><strong>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</strong></td>
</tr>
<tr>
<td><strong>11.</strong> Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;icon&gt;Default&lt;/icon&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Button&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Dashboard&gt;</strong> or <strong>&lt;/CallButtons&gt;</strong></td>
</tr>
</tbody>
</table>
## Suspend Mode

Suspend Mode blocks all incoming or outgoing calls.

### Configuring the Suspend Mode Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In UI Settings, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>&lt;title&gt;Suspend Mode&lt;/title&gt;</td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>SUSPEND_MODE</strong>.</td>
<td>&lt;action&gt;SUSPEND_MODE&lt;/action&gt;</td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Suspend Mode</strong>.</td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td>&lt;description&gt;Block all incoming calls&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
</tbody>
</table>
History lists recently called numbers and incoming calls, including missed calls.

Configuring the History Button

Using the GUI

1. In **UI Settings**, select **Edit Dashboard** or **Edit In-Call > Add**.
2. Select the new button. A yellow box appears around the selected button.
3. Touch **Edit**.
4. Select the check box next to **Confirm On Click** to enable this (the default is Disabled).
5. Touch **Action** and select **HISTORY**.
6. In the **Title** field, enter **History**.
7. In the **Description** field, enter a short description of the button function.
8. Touch **Icon** and select an icon from the **Select Icon** menu. See **Icons on page 84**.
9. Touch **BG** to set the background color. See **Button Background Color on page 87**.
10. Touch **FG** to set the foreground text color. See **Button Text Color on page 88**.
11. Touch the **Back** button to return to the WFC Voice home screen.

Using XML

```
<Dashboard> or <CallButtons>
...
<Button>
	<title>History</title>
	<action>HISTORY</action>
	<value></value>
	<enabled>true</enabled>
	<confirm>false</confirm>
	<description>Display recently called numbers and incoming calls</description>
	<bg_color>#FF001425</bg_color>
	<fg_color>#FFFFFFFF</fg_color>
	<icon>Default</icon>
</Button>
...
</Dashboard> or </CallButtons>
```
Contacts

The Contacts button dials a new number by selecting an existing contact. Add and store contacts locally on the device.

Configuring the Contacts Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select CONTACTS.
6. In the Title field, enter Contacts.
7. In the Description field, enter a short description of the button function.
8. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.
9. Touch BG to set the background color. See Button Background Color on page 87.
10. Touch FG to set the foreground text color. See Button Text Color on page 88.
11. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...
  <Button>
    <title>Contacts</title>
    <action>CONTACTS</action>
    <value></value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description>Display contacts</description>
    <bg_color>#FF001425</bg_color>
    <fg_color>#FFFFFFFF</fg_color>
    <icon>Default</icon>
  </Button>
...
</Dashboard> or </CallButtons>
Favorites

The Favorites button dials a new number by selecting a contact that is set as a favorite. Set contacts as favorites locally on the device.

Configuring the Favorites Button

Using the GUI
1. In **UI Settings**, select **Edit Dashboard** or **Edit In-Call > Add**.
2. Select the new button. A yellow box appears around the selected button.
3. Touch **Edit**.
4. Select the check box next to **Confirm On Click** to enable this (the default is Disabled).
5. Touch **Action** and select **FAVORITES**.
6. In the **Title** field, enter **Favorites**.
7. In the **Description** field, enter a short description of the button function.
8. Touch **Icon** and select an icon from the **Select Icon** menu. See Icons on page 84.
9. Touch **BG** to set the background color. See Button Background Color on page 87.
10. Touch **FG** to set the foreground text color. See Button Text Color on page 88.
11. Touch the **Back** button to return to the WFC Voice home screen.

Using XML
<Dashboard> or <CallButtons>
...
<Button>
  <title>Favorites</title>
  <action>FAVORITES</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description>Display favorites</description>
  <bg_color>#FF001425</bg_color>
  <fg_color>#FFFFFFFF</fg_color>
  <icon>Default</icon>
</Button>
...
</Dashboard> or </CallButtons>
Voicemail

The Voicemail button dials a number configured on the PBX to access Voicemail messages.

Configuring the Voicemail Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select VOICEMAIL.
6. In the Value field, enter the Voicemail Pilot number.
7. In the Title field, enter Voicemail.
8. In the Description field, enter a short description of the button function.
9. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.
10. Touch BG to set the background color. See Button Background Color on page 87.
11. Touch FG to set the foreground text color. See Button Text Color on page 88.
12. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...
<Button>
    <title>Voicemail</title>
    <action>VOICEMAIL</action>
    <value>9999</value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description>Voicemail messages</description>
    <bg_color>#FF001425</bg_color>
    <fg_color>#FFFFFF</fg_color>
    <icon>Default</icon>
</Button>
...
</Dashboard> or </CallButtons>
Do Not Disturb

Access the Do Not Disturb (DND) feature directly on the phone. Use a Feature Access Code (FAC) to enable or disable this feature. Enabling DND suspends all personal calls targeted to the extension, and sends the call immediately to the defined Coverage Path. DND also removes the extension from consideration during any Coverage Answer Group, Simultaneous Ringing, and Hunt Group call. This feature is the PBX-based implementation of an endpoint device Call Ignore feature.

Configuring the DND Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select DO_NOT_DISTURB.
6. In the Value field, enter the FAC for the Do Not Disturb feature.
7. In the Title field, enter DND.
8. In the Description field, enter a short description of the button function.
9. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.
10. Touch BG to set the background color. See Button Background Color on page 87.
11. Touch FG to set the foreground text color. See Button Text Color on page 88.
12. Touch the Back button to return to the WFC Voice home screen.

Note: DND is enabled/disabled using Feature Access Code (FAC).

Using XML

```xml
<Dashboard> or <CallButtons>
...
<Button>
    <title>DND</title>
    <action>DO_NOT_DISTURB</action>
    <value></value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description>Ignore incoming calls</description>
    <bg_color>#FF001425</bg_color>
    <fg_color>#FFFFFF</fg_color>
    <icon>Default</icon>
</Button>
...
</Dashboard> or </CallButtons>
```
**Add Call**

During an active call the Add Call button can dial a preset number. If there is no number in the Value field, it opens the dialer. The current call is placed on hold while the new call is initiated. When the new call connects, you can Transfer, Conference, or End the second call and resume the first call.

**IMPORTANT:** Only available on the In-Call screen only.

### Configuring the Add Call Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add</strong>.</td>
<td>&lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>ADD_CALL</strong>.</td>
<td>&lt;title&gt;Add Call&lt;/title&gt;</td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Add Call</strong>.</td>
<td>&lt;action&gt;ADD_CALL&lt;/action&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td>&lt;description&gt;Add a call by opening the dialer &lt;/description&gt;</td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
**Home**
During an active call the Home button invokes the Dashboard to provide access to Dashboard functions.

**IMPORTANT:** Only available on the In-Call screen.

### Configuring the Home Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add</strong>.</td>
<td><strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td></td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>...</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>HOME</strong>.</td>
<td><strong>&lt;title&gt;Home&lt;/title&gt;</strong></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Home</strong>.</td>
<td><strong>&lt;action&gt;HOME&lt;/action&gt;</strong></td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the Select Icon menu. See Icons on page 84.</td>
<td><strong>&lt;enabled&gt;true&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See Button Background Color on page 87.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See Button Text Color on page 88.</td>
<td><strong>&lt;description&gt;Return to the Home Dashboard&lt;/description&gt;</strong></td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;icon&gt;Default&lt;/icon&gt;</strong></td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
Hold

Call Hold politely suspends an active call while you tend to other business or place an additional call using an additional Call Appearance. During call hold, you can switch between the active and held calls at any time.

⚠️ IMPORTANT: Only available on the In-Call screen.

Configuring the Hold Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add</strong>.</td>
<td><strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td><strong>2.</strong> Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td><strong>3.</strong> Touch <strong>Edit</strong>.</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td><strong>4.</strong> Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;title&gt;Hold&lt;/title&gt;</strong></td>
</tr>
<tr>
<td><strong>5.</strong> Touch <strong>Action</strong> and select <strong>HOLD</strong>.</td>
<td><strong>&lt;action&gt;HOLD&lt;/action&gt;</strong></td>
</tr>
<tr>
<td><strong>6.</strong> In the <strong>Title</strong> field, enter Hold.</td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td><strong>7.</strong> In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><strong>&lt;enabled&gt;false&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td><strong>8.</strong> Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td><strong>9.</strong> Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td><strong>&lt;description&gt;Place call on hold&lt;/description&gt;</strong></td>
</tr>
<tr>
<td><strong>10.</strong> Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td><strong>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</strong></td>
</tr>
<tr>
<td><strong>11.</strong> Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</strong></td>
</tr>
</tbody>
</table>

```xml
<CallButtons>
... 

<Button>
<title>Hold</title>
<action>HOLD</action>
<value></value>
<enabled>false</enabled>
<confirm>false</confirm>
<description>Place call on hold</description>
<bg_color>#FF001425</bg_color>
<fg_color>#FFFFFFFF</fg_color>
<icon>Default</icon>
</Button>

... 
</CallButtons>
```
Resume

During an active call touch the Resume button ➤ to access the current call on hold.

**IMPORTANT:** Only available on the In-Call screen.

Configuring the Resume Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>In UI Settings</strong>, select Edit In-Call &gt; Add.</td>
<td>&lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>&lt;title&gt;Resume&lt;/title&gt;</td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>RESUME</strong>.</td>
<td>&lt;action&gt;RESUME&lt;/action&gt;</td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Resume</strong>.</td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;enabled&gt;false&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the Select Icon menu. See Icons on page 84.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See Button Background Color on page 87.</td>
<td>&lt;description&gt;Resume an active call&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See Button Text Color on page 88.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
Transfer

Transfer transfers an active call to a third party. While Call Forwarding must be preconfigured, Call Transfer allows making such call exchanges in real-time with an active call.

**IMPORTANT:** Only available on the In-Call screen.

Configuring the Transfer Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add</strong>.</td>
<td></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td></td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>TRANSFER</strong>.</td>
<td><code>&lt;Button&gt;</code></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Transfer</strong>.</td>
<td><code>&lt;title&gt;Transfer&lt;/title&gt;</code></td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><code>&lt;action&gt;TRANSFER&lt;/action&gt;</code></td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td><code>&lt;value&gt;&lt;/value&gt;</code></td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td><code>&lt;enabled&gt;false&lt;/enabled&gt;</code></td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td><code>&lt;confirm&gt;false&lt;/confirm&gt;</code></td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><code>&lt;description&gt;Transfer a call&lt;/description&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;icon&gt;Default&lt;/icon&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Button&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/CallButtons&gt;</code></td>
</tr>
</tbody>
</table>
**Conference**

Conference joins two separate calls for collaboration between each party on the line at the same time. Use a Feature Access Code (FAC) to enable or disable this feature. See System Feature Settings on page 17.

**IMPORTANT:** Only available on the In-Call screen.

**Configuring the Conference Button**

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add.</strong></td>
<td><strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit.</strong></td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;title&gt;Conf&lt;/title&gt;</strong></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>CONFERENCE.</strong></td>
<td><strong>&lt;action&gt;CONFERENCE&lt;/action&gt;</strong></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, select <strong>Conference.</strong></td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><strong>&lt;enabled&gt;false&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See Icons on page 84.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See Button Background Color on page 87.</td>
<td><strong>&lt;description&gt;Start a conference call&lt;/description&gt;</strong></td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See Button Text Color on page 88.</td>
<td><strong>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</strong></td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;icon&gt;Default&lt;/icon&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Button&gt;</strong></td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/CallButtons&gt;</strong></td>
</tr>
</tbody>
</table>
Complete

This internal type is used for call transfer or conference scenarios.

**IMPORTANT:** Only available on the In-Call screen.

Configuring the Complete Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In UI Settings, select Edit In-Call &gt; Add.</td>
<td>&lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch Edit.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to Confirm On Click to enable this (the default is Disabled).</td>
<td>&lt;title&gt;Complete&lt;/title&gt;</td>
</tr>
<tr>
<td>5. Touch Action and select COMPLETE.</td>
<td>&lt;action&gt;COMPLETE&lt;/action&gt;</td>
</tr>
<tr>
<td>6. In the Title field, enter Complete.</td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the Description field, enter a short description of the button function.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. Touch Icon and select an icon from the Select Icon menu. See Icons on page 84.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>9. Touch BG to set the background color. See Button Background Color on page 87.</td>
<td>&lt;description&gt;End a call transfer or conference call&lt;/description&gt;</td>
</tr>
<tr>
<td>10. Touch FG to set the foreground text color. See Button Text Color on page 88.</td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td>11. Touch the Back button to return to the WFC Voice home screen.</td>
<td>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
End Call

This function ends a call in any state. It is pushed back from WFC Voice to the PBX.

![Important: Only available on the In-Call screen.]

**NOTE:** Placing the End Call button on the in-call dashboard replaces the default End Call button.

Configuring the End Call Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit In-Call &gt; Add</strong>.</td>
<td>&lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>END_CALL</strong>.</td>
<td></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>End Call</strong>.</td>
<td>&lt;title&gt;End Call&lt;/title&gt;</td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td>&lt;action&gt;END_CALL&lt;/action&gt;</td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;description&gt;End a call&lt;/description&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;fg_color&gt;#FFFFFF&lt;/fg_color&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;Default&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/CallButtons&gt;</td>
</tr>
</tbody>
</table>
List

By default, List displays the speed dial list 0-9. Alternatively, configure the List button to open a menu built from other WFC Voice buttons.

![Important: Only available on the In-Call screen.]

Configuring the Default List Button

**NOTE:** This only creates a button. Edit XML file to customize the list.

The List button description appears at the top of the List popup dialog.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> &gt; <strong>Add</strong>.</td>
<td><strong>&lt;Dashboard&gt;</strong></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;title&gt;List&lt;/title&gt;</strong></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>LIST</strong>.</td>
<td><strong>&lt;action&gt;LIST&lt;/action&gt;</strong></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter List.</td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td>7. In the <strong>Description</strong> field, enter a short description of the button function.</td>
<td><strong>&lt;enabled&gt;true&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td>8. Touch <strong>Icon</strong> and select an icon from the <strong>Select Icon</strong> menu. See <strong>Icons on page 84</strong>.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td>9. Touch <strong>BG</strong> to set the background color. See <strong>Button Background Color on page 87</strong>.</td>
<td><strong>&lt;description&gt;Department extensions &lt;/description&gt;</strong></td>
</tr>
<tr>
<td>10. Touch <strong>FG</strong> to set the foreground text color. See <strong>Button Text Color on page 88</strong>.</td>
<td><strong>&lt;bg_color&gt;#FF001425&lt;/bg_color&gt;</strong></td>
</tr>
<tr>
<td>11. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;fg_color&gt;#FFFFFFFF&lt;/fg_color&gt;</strong></td>
</tr>
</tbody>
</table>

### Configuring List Buttons Using XML

List buttons are configured using XML. The List button contains each sub button before the closing </Button> element. The List button description appears at the top of the List popup dialog. The sub button description appears as a comment under the button title, identifying which action is performed.

For example, to create a list with three custom buttons (Bedding, Electronics and Toys):
Figure 27  List Button Example

<Dashboard> or <CallButtons>
...

<Button>
  <title>List</title>
  <action>LIST</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description>Department Extensions</description>
  <bg_color>#FF001425</bg_color>
  <fg_color>#FFFFFFFF</fg_color>
  <icon>Default</icon>
</Button>

<Button>
  <title>Bedding</title>
  <action>CALL</action>
  <value>1111</value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description>Bedding Department</description>
  <bg_color>#FF001425</bg_color>
  <fg_color>#FFFFFFFF</fg_color>
  <icon></icon>
</Button>

<Button>
  <title>Electronics</title>
  <action>CALL</action>
  <value>1122</value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description>Electronics Department</description>
  <bg_color>#FF001425</bg_color>
  <fg_color>#FFFFFFFF</fg_color>
  <icon></icon>
</Button>
<Dashboard> or </CallButtons>
**Blank**

Blank provides an empty space between buttons for a more customized look and feel. If touched, the Blank button does not perform an action.

**Configuring the Blank Button**

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td><strong>&lt;Dashboard&gt;</strong> or <strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td></td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td>4. Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td><strong>&lt;title&gt;Blank&lt;/title&gt;</strong></td>
</tr>
<tr>
<td>5. Touch <strong>Action</strong> and select <strong>BLANK</strong>.</td>
<td><strong>&lt;action&gt;BLANK&lt;/action&gt;</strong></td>
</tr>
<tr>
<td>6. In the <strong>Title</strong> field, enter <strong>Blank</strong>.</td>
<td><strong>&lt;value&gt;&lt;/value&gt;</strong></td>
</tr>
<tr>
<td>7. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;enabled&gt;true&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;description&gt;Empty space&lt;/description&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;icon&gt;&lt;/icon&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Button&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Dashboard&gt;</strong> or <strong>&lt;/CallButtons&gt;</strong></td>
</tr>
</tbody>
</table>
Reload

Reload allows a user to sign out and then automatically sign back in to WFC Voice.

Configuring the Reload Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call &gt; Add</strong>.</td>
<td><strong>&lt;Dashboard&gt;</strong> or <strong>&lt;CallButtons&gt;</strong></td>
</tr>
<tr>
<td><strong>2.</strong> Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td><strong>3.</strong> Touch <strong>Edit</strong>.</td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td><strong>4.</strong> Select the check box next to <strong>Confirm On Click</strong> to enable this (the default is Disabled).</td>
<td>**&lt;title&gt;<strong>Sign Out</strong>&lt;/title&gt;</td>
</tr>
<tr>
<td><strong>5.</strong> Touch <strong>Action</strong> and select <strong>SIGNOUT_CHANGE</strong>.</td>
<td>**&lt;action&gt;<strong>SIGNOUT_CHANGE</strong>&lt;/action&gt;</td>
</tr>
<tr>
<td><strong>6.</strong> Ensure the <strong>Value</strong> field is empty.</td>
<td><strong>&lt;value&gt;</strong></td>
</tr>
<tr>
<td><strong>7.</strong> In the <strong>Title</strong> field, enter <strong>Sign Out</strong>.</td>
<td><strong>&lt;enabled&gt;true&lt;/enabled&gt;</strong></td>
</tr>
<tr>
<td><strong>8.</strong> Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;confirm&gt;false&lt;/confirm&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;description&gt;&lt;/description&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;icon&gt;&lt;/icon&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;scale&gt;CENTER_INSIDE&lt;/scale&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Button&gt;</strong></td>
</tr>
<tr>
<td></td>
<td><strong>&lt;/Dashboard&gt;</strong> or <strong>&lt;/CallButtons&gt;</strong></td>
</tr>
</tbody>
</table>

This action can also be initiated using ADB, an MDM, or a third party app. For example, in ADB you can use the following command:

```bash
$ adb shell am broadcast -a wfc.voice.SIGN_OUT
```
Sign Out

Sign Out allows a user to sign out of WFC Voice.

Configuring the Sign Out Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select SIGNOUT_CHANGE.
6. In the Value field, enter 0.
7. In the Title field, enter Sign Out.
8. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>

...<Button>
    <title>Sign Out</title>
    <action>SIGNOUT_CHANGE</action>
    <value>0</value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description></description>
    <icon></icon>
    <scale>CENTER_INSIDE</scale>
</Button>

...</Dashboard> or </CallButtons>

This action can also be initiated using ADB, an MDM, or a third party app. For example, in ADB you can use the following command:

$ adb shell am broadcast -a wfc.voice.SIGN_OUT --es change 0
Ringtone

Ringtone allows a user set the default WFC Voice ringtone.

Configuring the Ringtone Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select RINGTONE.
6. In the Title field, enter Ringtone.
7. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...
<Button>
   <title>Ringtone</title>
   <action>RINGTONE</action>
   <value/>
   <enabled>true</enabled>
   <confirm>false</confirm>
   <description/>
   <icon/>
   <scale>CENTER_INSIDE</scale>
</Button>
...
</Dashboard> or </CallButtons>
Add Department

NOTE: This feature requires Profile Manager.

Add Department reloads WFC Voice and then displays a list of all available department extensions. If an extension was previously configured using a URI it is automatically selected. Users can register with multiple extensions.

Configuring the Add Department Button

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. Touch Action and select SIGNOUT_CHANGE.
6. In the Value field, enter 3.
7. In the Title field, enter Add Department.
8. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...
</Dashboard> or </CallButtons>

<Button>
<title>Add Department</title>
<action>SIGNOUT_CHANGE</action>
<value>3</value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon></icon>
<scale>CENTER_INSIDE</scale>
</Button>
...

This action can also be initiated using ADB, an MDM, or a third party app. For example, in ADB you can use the following command:

$ adb shell am broadcast -a wfc.voice.SIGN_OUT --es change 3
Change Department

NOTE: This feature requires Profile Manager.

Change Department reloads WFC Voice and then displays a list of all available extensions. Previously configured extensions are automatically selected.

Configuring the Change Department Button

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In UI Settings, select Edit Dashboard or Edit In-Call &gt; Add.</td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select the new button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch Edit.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. Select the check box next to Confirm On Click to enable this (the default is Disabled).</td>
<td>&lt;title&gt;Change Department&lt;/title&gt;</td>
</tr>
<tr>
<td>5. Touch Action and select SIGNOUT_CHANGE.</td>
<td>&lt;action&gt;SIGNOUT_CHANGE&lt;/action&gt;</td>
</tr>
<tr>
<td>6. In the Value field, enter 1.</td>
<td>&lt;value&gt;1&lt;/value&gt;</td>
</tr>
<tr>
<td>7. In the Title field, enter Change Department.</td>
<td>&lt;enabled&gt;true&lt;/enabled&gt;</td>
</tr>
<tr>
<td>8. Touch the Back button to return to the WFC Voice home screen.</td>
<td>&lt;confirm&gt;false&lt;/confirm&gt;</td>
</tr>
</tbody>
</table>

This action can also be initiated using ADB, an MDM, or a third party app. For example, in ADB you can use the following command:

$ adb shell am broadcast -a wfc.voice.SIGN_OUT --es change 1

Using XML

&lt;Dashboard&gt; or &lt;CallButtons&gt;
...
&lt;Button&gt;
   &lt;title&gt;Change Department&lt;/title&gt;
   &lt;action&gt;SIGNOUT_CHANGE&lt;/action&gt;
   &lt;value&gt;1&lt;/value&gt;
   &lt;enabled&gt;true&lt;/enabled&gt;
   &lt;confirm&gt;false&lt;/confirm&gt;
   &lt;description&gt;&lt;/description&gt;
   &lt;icon&gt;&lt;/icon&gt;
   &lt;scale&gt;CENTER_INSIDE&lt;/scale&gt;
&lt;/Button&gt;
...&lt;/Dashboard&gt; or &lt;/CallButtons&gt;
Icons

Icon Library

To choose a button from the icon library:

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. In the Description field, enter a short description of the button function.
6. Touch Icon. The Select Icon menu is displayed.
7. From the Library tab, select an icon.
8. Touch BG to set the background color. See Button Background Color on page 87.
9. Touch FG to set the foreground text color. See Button Text Color on page 88.
10. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...<Button>
<title>Dial</title>
<action>DIAL</action>
:value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description>Dial button from library</description>
<bg_color>#FF001425</bg_color>
<fg_color>#FFFFFFFF</fg_color>
<icon>ic_dialpad</icon>
</Button>

</Dashboard> or <CallButtons>

Custom Icon Configuration

✓ NOTE: Icons must be 128 pixels by 128 pixels and in PNG format.

The user can create custom icons. To select a custom icon:

1. Connect the device to a host computer using a USB cable.
2. From the host computer, copy the icon file to the WFCConnect folder on device.
Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call > Add.
2. Select the new button. A yellow box appears around the selected button.
3. Touch Edit.
4. Select the check box next to Confirm On Click to enable this (the default is Disabled).
5. In the Description field, enter a short description of the button function.
6. Touch Icon. The Select Icon menu displays.
7. From the SDCARD tab, select an icon.
8. Touch BG to set the background color. See Button Background Color on page 87.
9. Touch FG to set the foreground text color. See Button Text Color on page 88.
10. Touch the Back button to return to the WFC Voice home screen.

Using XML

<Dashboard> or <CallButtons>
...
<Button>
  <title>Dial</title>
  <action>DIAL</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description>Dial button from SD card</description>
  <bg_color>#FF001425</bg_color>
  <fg_color>#FFFFFF</fg_color>
  <icon>dialbtn.png</icon>
</Button>
...
<Dashboard> or <CallButtons>

Icon Scale Type

- CENTER_INSIDE
  Position image in the center area above title. Size of the image will be equal to or less than the size of the button. This is the default scale type.

- SCALE_CENTER
  Scale image in the center to fill area above title. Maintain aspect ratio of the image.

- FILL_CENTER
  Scale in the center to fill button size (no padding) and maintain the aspect ratio. The title is on top of the image in the center.

- FILL_XY
  Scale to fill button size (no padding) in both directions. Does not maintain aspect ratio. The title is on top of the image in the center.

To set the scale type for an icon:
<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call</strong></td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
<tr>
<td>2. Select a button. A yellow box appears around the selected button.</td>
<td>...</td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td>&lt;Button&gt;</td>
</tr>
<tr>
<td>4. In the <strong>Scale</strong> field, select a <strong>Scale Type</strong>.</td>
<td>&lt;action&gt;DIAL&lt;/action&gt;</td>
</tr>
<tr>
<td>5. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;title&gt;Title&lt;/title&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;value&gt;&lt;/value&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;icon&gt;conference&lt;/icon&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;scale&gt;SCALE_CENTER&lt;/scale&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Button&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;Dashboard&gt; or &lt;CallButtons&gt;</td>
</tr>
</tbody>
</table>
Button Color

Button Background Color

Use Button Background Color to set the color of individual buttons. Setting a background color overrides the Global Button Background Color. The default background color is white (#FFFFFF).

Setting Button Background Color

Using the GUI

1. In UI Settings, select Edit Dashboard or Edit In-Call
2. Select a button. A yellow box appears around the selected button.
3. Touch Edit.
4. Touch the BG button.
5. Select a color and touch Set.
6. Touch the Back button to return to the WFC Voice home screen.

Using XML

```xml
<Button>
  <bg_color>#FFFFFF</bg_color>
</Button>
```
**Button Text Color**

Use Button Text Color to set the color of individual buttons. Setting a text color overrides the Global Button Text Color. The default text color is dark gray(#FF4A4A4A).

**Setting Button Text Color**

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Edit Dashboard</strong> or <strong>Edit In-Call</strong></td>
<td><strong>&lt;Button&gt;</strong></td>
</tr>
<tr>
<td>2. Select a button. A yellow box appears around the selected button.</td>
<td><strong>&lt;fg_color&gt;#FF4A4A4A&lt;/fg_color&gt;</strong></td>
</tr>
<tr>
<td>3. Touch <strong>Edit</strong>.</td>
<td><strong>&lt;/Button&gt;</strong></td>
</tr>
<tr>
<td>4. Touch the <strong>FG</strong> button.</td>
<td></td>
</tr>
<tr>
<td>5. Select a color and touch <strong>Set</strong>.</td>
<td></td>
</tr>
<tr>
<td>6. Touch the <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td></td>
</tr>
</tbody>
</table>
Global Button Color Settings

Global Button Background Color

Use Global Button Background Color to set the color of all buttons on the dashboard. The button color can be overridden by the individual Button Background Color. The default background color is white (#FFFFFF).

Setting Button Background Color

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Buttons Background color</strong>.</td>
<td>Using XML</td>
</tr>
<tr>
<td>2. Select a color from the color wheel for the button background or enter RGB color in hex format.</td>
<td>&lt;WFConnect&gt;</td>
</tr>
<tr>
<td>3. Touch <strong>Set</strong>.</td>
<td>&lt;Profile&gt;</td>
</tr>
<tr>
<td>4. Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Global Button Text Color

Use Global Button Text Color to set the color of all buttons on the dashboard. The button color can be overridden by the individual Button Text Color. The default text color is dark gray (#FF4A4A4A).

Setting Button Text Color

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>UI Settings</strong>, select <strong>Buttons text color</strong>.</td>
<td>Using XML</td>
</tr>
<tr>
<td>2. Select a color from the color wheel for the button text or enter RGB color in hex format.</td>
<td><code>&lt;WFConnect&gt;</code></td>
</tr>
<tr>
<td>3. Touch <strong>Set</strong>.</td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td>4. Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><code>&lt;/Profile&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>...</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/WFConnect&gt;</code></td>
</tr>
</tbody>
</table>
Reset Colors to Default

To reapply the factory default button colors:

1. In UI Settings, select Reset colors to default.
2. Touch the Back button to return to the WFC Voice home screen.

Restore Buttons

To reapply the factory default buttons and their layout:

1. In UI Settings, select Restore buttons.
2. Touch the Back button to return to the WFC Voice home screen.
## Call Settings

This section provides detailed information on configuring advanced call settings.

### Accessing Call Settings

1. Go to **Settings**.
2. Touch **Advanced Settings > Call Settings**.

### Call Waiting Volume

Set the Call Waiting Volume setting.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>Call Settings</strong>, slide the <strong>Call Waiting Volume</strong> slider (default 80).</td>
<td><code>&lt;WFConnect&gt;</code>&lt;br&gt;<code>&lt;Profile&gt;</code>&lt;br&gt;    <code>&lt;callwaiting_volume&gt;80&lt;/callwaiting_volume&gt;</code>&lt;br&gt;<code>&lt;/Profile&gt;</code>&lt;br&gt;<code>...</code>&lt;br&gt;<code>&lt;/WFConnect&gt;</code></td>
</tr>
<tr>
<td>2. Touch <strong>Back</strong> to return to the WFC Voice home screen.</td>
<td></td>
</tr>
</tbody>
</table>
## Call Waiting Interval

Set the Call Waiting Interval setting.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
</table>
| 1. In Call Settings, slide the Call Waiting Interval slider (default 2000).  
2. Touch Back to return to the WFC Voice home screen. | <WFConnect>  
<Profile>  
  <callwaiting_interval>2000</callwaiting_interval>  
</Profile>  
...  
</WFConnect> |

## Ringer OFF In Charger

Enable Ringer OFF in Charger to disable the ringer while the device is charging.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
</table>
| 1. In Call Settings, select the check box next to Ringer OFF in Charger to enable this (the default is Disabled).  
2. Touch Back to return to the WFC Voice home screen. | <WFConnect>  
<Profile>  
  <ringer_off_in_charger>false</ringer_off_in_charger>  
</Profile>  
...  
</WFConnect> |

## Disable Speaker mode

Enable Speaker Mode to answer all incoming calls in speaker mode when the device is placed on a horizontal surface, such as a desk.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
</table>
| 1. In Call Settings, select the check box next to Disable Speaker Mode to enable this (the default is Disabled).  
2. Touch Back to return to the WFC Voice home screen. | <WFConnect>  
<Profile>  
  <disable_speaker>false</disable_speaker>  
</Profile>  
...  
</WFConnect> |
Speaker on table

Enable Speaker Mode to answer all incoming calls in speaker mode when the device is placed on a horizontal surface, such as a desk.

Using the GUI

1. In Call Settings, select the check box next to **Speaker on table** to enable this (the default is Disabled).
2. Touch **Back** to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <speaker_on_horizontal>false</speaker_on_horizontal>
  </Profile>
  ...
</WFConnect>
```
Call Accept Style

There are various call accept styles on the incoming call screen, such as simple accept and reject buttons, a slider (Gingerbread Android), and Glow Pad buttons (JellyBean Android).

- Accept-Reject - The operator touches one of two buttons to accept or reject an incoming call.
- Slider - The operator swipes one of two buttons across the screen to accept or reject an incoming call.
- Glow Pad - The operator touches a handset symbol to accept or reject an incoming call.

**Figure 28** Call Accept Buttons
## Configure the Glow Pad Buttons

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. In Call Settings, select Call Accept Style.</strong></td>
<td><strong>Sliding Tab (GB)</strong></td>
</tr>
<tr>
<td><strong>2. Select Sliding Tab (GB), Accept/Reject Buttons, or Glow Pad (JB).</strong></td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td><strong>3. Touch Back button to return to the WFC Voice home screen.</strong></td>
<td><code>   &lt;incall_widget&gt;incall_gb&lt;/incall_widget&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Profile&gt;</code></td>
</tr>
<tr>
<td></td>
<td><strong>Accept-Reject Buttons</strong></td>
</tr>
<tr>
<td></td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>   &lt;incall_widget&gt;incall_buttons&lt;/incall_widget&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Profile&gt;</code></td>
</tr>
<tr>
<td></td>
<td><strong>Glow Pad Buttons (JB)</strong></td>
</tr>
<tr>
<td></td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>   &lt;incall_widget&gt;incall_buttons&lt;/incall_widget&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Profile&gt;</code></td>
</tr>
</tbody>
</table>
### Auto Answer Mode

Enable Auto Answer Mode to auto-answer all incoming calls.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>Call Settings</strong>, select the check box next to <strong>Auto Answer Mode</strong> to enable (Default: disabled).&lt;br&gt;&lt;br&gt;<strong>2.</strong> Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;WFConnect&gt;</strong>&lt;br&gt;&lt;br&gt;&lt;Profile&gt;&lt;br&gt;&lt;br&gt;&lt;sip_auto_answer&gt;true&lt;/sip_auto_answer&gt;&lt;br&gt;&lt;/Profile&gt;&lt;br&gt;&lt;br&gt;...&lt;br&gt;&lt;br&gt;&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>

### Incoming Call Voice Announcer

Enable Incoming Call Voice Announcer to announce the number or user name of an incoming call.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>Call Settings</strong>, select the check box next to <strong>Incoming Call Voice Announcer</strong> to enable this (Default: disabled).&lt;br&gt;&lt;br&gt;<strong>2.</strong> Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;WFConnect&gt;</strong>&lt;br&gt;&lt;br&gt;&lt;Profile&gt;&lt;br&gt;&lt;br&gt;&lt;voice_announcer_check&gt;true&lt;/voice_announcer_check&gt;&lt;br&gt;&lt;/Profile&gt;&lt;br&gt;&lt;br&gt;...&lt;br&gt;&lt;br&gt;&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>

### Voice Command

Use Voice Command to call contacts and dial numbers using voice commands. Press the Push to Talk (PTT) button to initiate a call using voice commands.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> In <strong>Call Settings</strong>, select the check box next to <strong>Voice Command</strong> to enable this (Default: disabled).&lt;br&gt;&lt;br&gt;<strong>2.</strong> Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td><strong>&lt;WFConnect&gt;</strong>&lt;br&gt;&lt;br&gt;&lt;Profile&gt;&lt;br&gt;&lt;br&gt;&lt;voice_command_check&gt;true&lt;/voice_command_check&gt;&lt;br&gt;&lt;/Profile&gt;&lt;br&gt;&lt;br&gt;...&lt;br&gt;&lt;br&gt;&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>
Settings

Voice Command Confirmation

Enable Voice Command Confirmation to confirm all voice commands before calling contacts or dialing numbers. This option requires that Voice Command is enabled.

Using the GUI
1. In Call Settings, select the check box next to Voice Command Confirmation to enable this (Default: disabled).
2. Touch Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
  <Profile>
    <voice_command_interrogative>true</voice_command_interrogative>
  </Profile>
  ...
</WFConnect>

No Audio Cutoff

Use No Audio Cutoff to disconnect a call when no audio is detected for a set interval.

Using the GUI
1. In Call Settings, select No Audio Cutoff.
2. Select a time interval (Default: 30 seconds).
3. Touch Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
  <Profile>
    <no_audio_cutoff>30</no_audio_cutoff>
  </Profile>
  ...
</WFConnect>

Audio Prompt File

Use Audio Prompt File to select a custom WAV audio file to play when an incoming call is accepted. To select a custom WAV audio file:

1. Save a custom WAV audio file using the following settings: 8 kHz sample rate, Mono, 16-bit, PCM format.
2. Connect the device to a host computer using a USB cable.
3. From the host computer, copy the WAV file to the WFConnect folder on device.

Using the GUI
1. In Call Settings, select Audio Prompt File.
2. Select an audio file.
3. Touch Back button to return to the WFC Voice home screen.

Using XML
<WFConnect>
  <Profile>
    <prompt_file>chewy_roar.wav</prompt_file>
  </Profile>
  ...
</WFConnect>
# MOH Enabled

Music on Hold (MOH) Enabled plays a WAV audio file when a user is placed on hold.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>Call Settings</strong>, select the check box next to <strong>MOH Enabled</strong> to enable this (Default: disabled).</td>
<td>&lt;WFConnect&gt;</td>
</tr>
<tr>
<td>2. Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;Profile&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;moh_enabled&gt;true&lt;/moh_enabled&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Profile&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>

## MOH File

Use Music on Hold (MOH) File to select a custom WAV audio file to play when a user is placed on hold. Before selecting a custom WAV audio file, save the file to the device.

1. Connect the device to a host computer using a USB cable.
2. **From the host computer**, copy the WAV file to the **WFConnect** folder on device.

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>Call Settings</strong>, select <strong>MOH File</strong> (requires MOH Enabled).</td>
<td>&lt;WFConnect&gt;</td>
</tr>
<tr>
<td>2. Select an audio file.</td>
<td>&lt;Profile&gt;</td>
</tr>
<tr>
<td>3. Touch <strong>Back</strong> button to return to the WFC Voice home screen.</td>
<td>&lt;moh_file&gt;opusno1.wav&lt;/moh_file&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/Profile&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>
Ringtones

This section provides detailed information on configuring advanced ringtone settings.

Accessing Ringtone Settings

1. Go to Settings.
2. Touch Advanced Settings > Ringtones.

Line Ringtones

Line Ringtones configures a unique ring tone per line. Custom ring tones are available if preloaded on the device. Supported audio formats for custom ring tones are OGG, MP3, and WAV.

Using the GUI

1. In Ringtones, select Line Ringtones.
2. Select a line for which to configure the ringtone.
3. To select the default ringtone, touch Default.
4. To select an Android ringtone:
   a. Touch Android.
   b. Select a ringtone.
   c. Touch OK.
5. To select a ringtone from Library:
   a. Touch Library.
   b. Select a ringtone.
6. To select a ringtone on the SD card:
   a. Touch SDCARD.
   b. Select a ringtone.
7. Touch Back to return to the WFC Voice home screen.

Using XML

<WFConnect>
  <Profile>
    <ringtone_line1>-1</ringtone_line1>
    <ringtone_line2>UK_Phone</ringtone_line2>
    <ringtone_line3>michelle_ringtone.ogg</ringtone_line3>
  </Profile>
</WFConnect>
Miscellaneous Settings

This section provides information on the location of help files, flexible TLS, and editing the settings password.

Accessing Ringtone Settings

1. Go to Settings.
2. Touch Advanced Settings > Miscellaneous Settings.

Sign OUT in Charger

By default, WFC Voice remains signed in when using a cable or cradle to charge the device. Enable this option to automatically sign out of WFC Voice when the device begins charging.

Setting Sign OUT in Charger

Using the GUI

1. In Miscellaneous Settings, select the check box next to Sign OUT in Charger to enable this (Default: disable).
2. Touch Back button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <sign_out_in_charger>true</sign_out_in_charger>
  </Profile>
... 
</WFConnect>
```

Flexible TLS

By default, all remote hosts are trusted for SIP connections. Disable this option to use Android certificates for TLS/SSL connections.

Setting Flexible TLS

Using the GUI

1. In Miscellaneous Settings, select the check box next to Flexible TLS to disable this (Default: enable).
2. Touch Back button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
  <Profile>
    <flex_tls>false</flex_tls>
  </Profile>
... 
</WFConnect>
```

WiFi Preferred

By default, WFC Voice connects to an available WiFi network. This setting only applies after network state changes or when the client is restarted. Disable this option to use the device’s default network.
Setting WiFi Preferred

Using the GUI
1. In **Miscellaneous Settings**, select the checkbox next to **WiFi Preferred** to disable this (Default: enable).
2. Touch **Back** button to return to the WFC Voice home screen.

Using XML
```
<WFConnect>
  <Profile>
    <wifi_preferred>true</wifi_preferred>
  </Profile>
</WFConnect>
```

Help URL

The location of the on-device help file.

Setting Help URL

Using the GUI
1. In **Miscellaneous Settings**, select **Help URL**.
2. Set HELP URL location.
3. Touch **OK**.
4. Touch **Back** button to get back to WFC Voice home screen.

Using XML
```
<WFConnect>
  <Profile>
    <help_url>file:///wfconnect/help.htm</help_url>
  </Profile>
</WFConnect>
```

Settings Password

WFC Voice uses a password to access the settings.

**NOTE:** Once the password is changed if it is forgotten the only recovery method is to reload a new client with a new xml file. The password cannot be set in the XML file.

To change the settings password:
1. In **Miscellaneous Settings**, select **Settings password**.
2. Enter Current Password.
3. Enter New Password and Confirm.
4. Touch **Enter**.

Touch **Back** button to get back to the WFC Voice home screen.

Additional Profile URI

Set the URI of a buttons layout file saved as an XML file on a remote or local server.
**Setting Additional Profile URI**

Using the GUI

1. In **Miscellaneous Settings**, select **Additional Profile URI**.
2. Set Additional Profile URI location.
3. Touch **OK**.
4. Touch **Back** button to get back to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
    <Profile>
        <layout_location>file:///wfconnect/buttons-layout.xml</layout_location>
    </Profile>
    ...
</WFConnect>
```

**Show Extension Name**

![✓] **NOTE:** Requires Profile Manager.

By default, extensions display in WFC Voice dashboard header line and extensions list as just the extension number. Use Show Extension Name to display extensions using the both the extension number and the description set in the PBX.

**Setting Show Extension Name**

Using the GUI

1. In **Miscellaneous Settings**, select the check box next to **Show Extension Name** to enable this (Default: disable).
2. Touch **Back** button to return to the WFC Voice home screen.

Using XML

```xml
<WFConnect>
    <Profile>
        <show_extension_name>true</show_extension_name>
    </Profile>
    ...
</WFConnect>
```
Contacts URL

The URL of a contacts list saved as a CSV file on a remote or local server. For information on creating a contacts list see Creating a Contacts List on page 104.

Setting Contacts URL

Using the GUI

1. In Miscellaneous Settings, select Contacts URL.
2. Set CONTACTS URL location.
3. Touch OK.
4. Touch Back button to get back to the WFC Voice home screen.

Using XML

<WFConnect>
  <Profile>
    <contacts_url>
      file:///wfconnect/contacts.csv
    </contacts_url>
  </Profile>
  ...
</WFConnect>

Sync Contacts

Use Sync Contacts to import a contacts list saved as a CSV file.

Creating a Contacts List

1. From the host computer, use a spreadsheet program to create a list of contacts where the first row contains the following fields:

<table>
<thead>
<tr>
<th>contactId</th>
<th>group</th>
<th>firstName</th>
<th>lastName</th>
<th>cellNumber</th>
<th>officeNumber</th>
<th>homeNumber</th>
<th>photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kitchen</td>
<td>John</td>
<td>Smith</td>
<td>516-555-1234</td>
<td>2001</td>
<td>516-555-1235</td>
<td>file:///wfconnect/john.jpg</td>
</tr>
<tr>
<td>2</td>
<td>hardware</td>
<td>Jane</td>
<td>Doe</td>
<td>516-555-1236</td>
<td>2002</td>
<td>516-555-1237</td>
<td>file:///wfconnect/jane.jpg</td>
</tr>
</tbody>
</table>

2. Enter contact information as needed. For example:

<table>
<thead>
<tr>
<th>contactId</th>
<th>group</th>
<th>firstName</th>
<th>lastName</th>
<th>cellNumber</th>
<th>officeNumber</th>
<th>homeNumber</th>
<th>photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kitchen</td>
<td>John</td>
<td>Smith</td>
<td>516-555-1234</td>
<td>2001</td>
<td>516-555-1235</td>
<td>file:///wfconnect/john.jpg</td>
</tr>
<tr>
<td>2</td>
<td>hardware</td>
<td>Jane</td>
<td>Doe</td>
<td>516-555-1236</td>
<td>2002</td>
<td>516-555-1237</td>
<td>file:///wfconnect/jane.jpg</td>
</tr>
</tbody>
</table>

3. Save the spreadsheet as a CSV file.

Syncing Contacts

1. From the host computer, copy the CSV file to the WFConnect folder on device.
2. From WFC Voice, select Settings > Advanced Setting > Miscellaneous Settings.
3. Select Sync Contacts. A confirmation that the contacts are updated displays.
Logging

Introduction

This chapter describes the process used to capture and collect WFC Voice log files and Fusion log files. The Log Marker feature records the date and time of an event into a log file. Log files are used to assist in troubleshooting the WFC Voice environment during run-time operations.

NOTE: For accurate logging, check that the device date and time are set correctly.

Accessing Logging Settings

1. Launch WFC Voice.
2. Touch > Settings. The password dialog box appears.
3. Enter password (default: zamboni).
4. Touch Enter. The password is preserved until the app quits.
5. Select Advanced Settings > Logging.

Logging Level

- **LogCat disabled** - Logging is disabled.
- **Error** - Low level application error - not critical
- **Warning** - Feedback from application operation and function
- **Info** - High level / user interaction and call information
- **Debug** - Captures information for developer troubleshooting
- **Verbose** - Captures all information for developer troubleshooting.
## Setting Logging Level

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In <strong>Logging</strong>, select <strong>Logging level</strong>.</td>
<td><strong>Using XML</strong></td>
</tr>
<tr>
<td>2. Choose a level for Logging. Default level</td>
<td>&lt;WFConnect&gt;</td>
</tr>
<tr>
<td>“Error” is suggested.</td>
<td>&lt;Profile&gt;</td>
</tr>
<tr>
<td>3. Touch <strong>Back</strong> button to get back to the WFC</td>
<td>&lt;log_level&gt;Error&lt;/log_level&gt;</td>
</tr>
<tr>
<td>Voice home screen.</td>
<td>&lt;/Profile&gt;</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>&lt;/WFConnect&gt;</td>
</tr>
</tbody>
</table>
# Logging Types

There are several types of logging within WFC Voice as well as the native Android OS.

## Logging to File

Log information is written to a file on the device.

- **Using the GUI**
  1. In **Logging**, select **Logging to File**.
  2. Touch the box to enable Logging to File. The file is saved in the WFConnect folder.
  3. Touch **Back** button to get back to the WFC Voice home screen.

- **Using XML**
  ```xml
  <WFConnect>
  <Profile>
    <log_console>false</log_console>
  </Profile>
  ... 
  </WFConnect>
  ```

## SIPCLF Logging

Log information is written to a file in Session Initiation Protocol Common Log Format (SIPCLF).

- **Using the GUI**
  1. In **Logging**, select **SIPCLF Logging**.
  2. Touch the box to enable SIPCLF Logging. The file is saved in the WFConnect folder.
  3. Touch **Back** button to get back to the WFC Voice home screen.

- **Using XML**
  ```xml
  <WFConnect>
  <Profile>
    <log_sipclf>false</log_sipclf>
  </Profile>
  ... 
  </WFConnect>
  ```
Log Files

Two types of log files can be collected:

- Workforce Connect Logs
- Fusion Logs

Workforce Connect Logs

WFC Voice has the following logging methods:

- **Android LogCat** - LogCat provides a mechanism for collecting and viewing system and applications messages. By default, WFC Voice automatically logs all messages into LogCat at the VERBOSE level. When **Logging to File** is enabled, WFC Voice logs all messages in the WFConnect folder.

- **Session Initiation Protocol Common Log Format (SIPCLF)** - All received and sent SIP messages are contained in CLF format as single text line. Special software is required to read this file format. This logging method is disabled by default.
  
  SIPCLF files can be found in the following location:
  
  /WFConnect/WFConnect_<device_id>_<timestamp>.clf

Fusion Logs

The native Android operating system provides an advanced logging feature. Fusion Logs collect unencrypted data, including Real-time Transport Protocol data. The data is imported to third party software for network troubleshooting and protocol analysis. The captured data is output to a .pcap file and an event log.

Collecting LogCat with RxLogger

The RxLogger tool integrates into the operating system and collects WFC Voice log files. There is no need to set the log level inside WFC Voice. When Rxlogger logging starts, WFC Voice is notified via plugin to enable VERBOSE LogCat and SIPCLF logging. By default, SIPCLF is disabled.

Enabling RXLogger

From the RxLogger main screen:

- Touch Start to enable logging
- Touch Stop to disable logging.

WFC Voice logging is automatically enabled when RxLogger logging is enabled. The LogCat file is saved to the location specified in the RXLogger configuration.

Users can customize WFC Voice logging in the RxLogger configurations.

**NOTE:** LogCat sets the VERBOSE level in WFC Voice.

When RxLogger starts, it overwrites the setting level to VERBOSE.

When using RxLogger, WFC Voice logging is disable and all logging is posted through RxLogger.
Log Marker

Log markers are used to mark specific locations in the LogCat file, identifying when an event occurs. The Log Marker feature can be used as many times as necessary. The following example displays a Log Marker entry in LogCat.

08-24 16:59:09.953: E/UI(4587): <<<MARKER>>>

Adding a Log Marker

From the WFC Voice main screen:

1. Touch ☰ > Add Log Marker.
2. Enter an optional description.
3. Click SET.

Configuring Log Marker

The Log Marker feature is accessed only by the WFC Voice main screen by default. To provide access elsewhere in the client, create a customized button. For example, when troubleshooting in-call errors, a Log Marker button is added to the In-Call buttons.

To configure a custom Log Marker button, see Log Marker on page 58.

✓ NOTE: When a custom Log Marker button is used, the optional description is not available.

Fusion Logs

Fusion Logs are enabled in Wi-Fi settings.

In Android 6.1 or 7.1.2:

1. From the Android Home screen, touch All Apps > Settings > Wi-Fi.
2. Touch the menu button.
3. Touch Advanced.
4. In the Logging section touch Advanced Logging.
5. Ensure the Enable Logging check box is selected. The user can only change the log file location when Advanced Logging is disabled.

In Android 8.1:

1. From the Android Home screen, swipe up and touch > Settings > Network & Internet > Wi-Fi.
2. Touch Wi-Fi preferences > Advanced > Additional Settings.
3. In the Logging section touch Advanced Logging.
4. Ensure the **Enable Logging** check box is selected. The user can only change the log file location when Advanced Logging is disabled.

Fusion Logs are now set. Run WFC Voice. When events occur they are captured in the location set in Advanced Logging.

✓ **NOTE:** Powering off the device will delete the collected fusion logs.

---

**Capturing the Logs**

1. Connect the device to the host computer using a USB cable.
2. Copy log files to the computer.
3. Ensure log files were set up correctly and captured relevant data.
4. Identify Log Marker events by date and time stamps.

Accurate logging is necessary for effective troubleshooting. Check that the device date and time are set correctly.

✓ **NOTE:** It is recommended to delete and recapture inaccurate log files.
Headless Mode and WFCVoice Service

Introduction

WFC Voice is configurable as a background service allowing third party applications to manage voice calls via remote service or plug-in. In Headless Mode, WFC Voice runs without showing the main dashboard screen, and launches the dialer instead. Touching the header section launches the settings screen of the third party application. All other screens and functions are the same as default mode.

The WFCVoice Service is a plug-in allowing another application to remotely manage voice calls using WFC Voice Headless Mode. The plug-in is a small library (WFCVoiceConnector.jar) providing an interface between WFC Voice and another android client. Third party applications use custom UI screens to control voice calls, or existing WFC Voice In-Call screens for advanced features.

The figure below illustrates WFC Voice communicating with third party applications using the WFCVoice Service plug-in.

Figure 29  WFCVoice Service
Integrating WFCVoice Service Plug-in

**NOTE:** To obtain the JAR file for the WFCVoice Service plugin, contact your Zebra account representative.

1. Add `WFCVoiceConnector.jar` file as a library in the project
2. Declare a `WFCVoiceConnector` object in the activity
3. Initialize it inside `onStart()` method

When the `WFCVoiceConnector` object is created, it automatically registers with WFCVoice Service. To unregister, call `WFCVoiceConnector.disconnect()` method inside `onStop()` in your activity.

WFCVoice Service plug-in allows applications to send commands to WFC Voice, and receive notifications about service or call state changes. See `WFCVoiceConnector` class for a list of all available commands. The `ConnectorCallback` sends voice and call status notifications from WFC Voice. Third party applications implement `ConnectorCallback` and pass it to a `WFCVoiceConnector` object during initialization.

For more information, refer to the *Java Documentation for Service Plugin* provided with the source code bundle.

Enabling Headless Mode

<table>
<thead>
<tr>
<th>Using the GUI</th>
<th>Using XML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Launch <strong>WFC Voice</strong>.</td>
<td><strong>Using XML</strong></td>
</tr>
<tr>
<td><strong>2.</strong> Touch 📡 &gt; <strong>Settings</strong>. The password dialog box appears.</td>
<td><code>&lt;WFConnect&gt;</code></td>
</tr>
<tr>
<td><strong>3.</strong> Enter password (default: <code>zamboni</code>).</td>
<td><code>&lt;Profile&gt;</code></td>
</tr>
<tr>
<td><strong>4.</strong> Touch <strong>Enter</strong>. The password is preserved until the app quits.</td>
<td><code>&lt;headless_mode&gt;true&lt;/headless_mode&gt;</code></td>
</tr>
<tr>
<td><strong>5.</strong> Select <strong>Advanced Settings</strong> &gt; <strong>UI Settings</strong></td>
<td><code>&lt;/Profile&gt;</code></td>
</tr>
<tr>
<td><strong>6.</strong> Select <strong>Headless Mode</strong></td>
<td><code>...</code></td>
</tr>
<tr>
<td><strong>7.</strong> Select <strong>Back</strong> to return to the WFC Voice home screen.</td>
<td><code>&lt;/WFConnect&gt;</code></td>
</tr>
</tbody>
</table>
WFCDemo Android Project

WFCDemo is a sample android application for demonstrating WFCVoice Service integration. It allows user to initiate and control a new voice call remotely in WFC Voice.

The following figures illustrate accepting and controlling an incoming call in the WFCDemo application.

Figure 30  WFCDemo Idle State

In Figure 30, WFCDemo is in an idle state displaying WFC Voice status in the blue box.

Figure 31  Incoming Call

In Figure 31, the application plays a custom ring tone and the user selects:
• Accept
• Reject
• More, to display the WFCVoice incoming screen.

**Figure 32** Active Call

In **Figure 32**, the WFCDemo screen controlling a call (end, speaker, mute). Selecting **More** accesses advanced controls by displaying the WFCVoice In-Call screen, shown in **Figure 33**.

**Figure 33** WFCVoice In-Call Screen
External Requests

Introduction

This section provides information on:

• Initiating a call with a third party app.
• Broadcasting the WFC Voice app status to a third party app.

Initiating a Call

To initiate a call, third party applications can use the following intents with a tel, sip, or csip data scheme:

• android.intent.action.CALL
• android.intent.action.DIAL
• android.intent.action.VIEWS

For example, to initiate a call to extension 2001 using ADB:

$ adb shell am start -a android.intent.action.CALL -d sip:2001
$ adb shell am start -a android.intent.action.VIEW -d csip:2001

Reporting App State

WFC Voice broadcasts its status to a third party app using the following intent:

Action: wfc.voice.PHONE_STATE

Extras:

registration_state: ACTIVE|ACTIVE_DND|CONNECTING|INACTIVE
state: IDLE|CALLING|RINGING|ACTIVE
number: the phone number for the current session (optional, reported when voice call state changes)
line_id: the line number (optional, reported when one of the line registers)
line_extension: the line extension (optional, reported when one of the line registers)
line_registered: true/false (optional, reported when one of the line registers)
Where: **registration_state** is PBX registration state, and **state** is a voice call state

The following code example calls wfc.voice.PHONE_STATE from a third party app.

```java
// create broadcast receiver
BroadcastReceiver mMessageReceiver = new BroadcastReceiver() {
    @Override
    public void onReceive(Context context, Intent intent) {
        Log.i(TAG,
            "Received PHONE_STATE from WFCVoice "
            + " registration_state=" + intent.getStringExtra("registration_state")
            + " call state=" + intent.getStringExtra("state")
            + " number=" + intent.getStringExtra("number")
            + " line_id=" + intent.getStringExtra("line_id")
            + " line_extension=" + intent.getStringExtra("line_extension")
            + " line_registered=" + intent.getBooleanExtra("line_registered", false)
        );
    }
};

// register broadcast receiver in the Activity
IntentFilter mMessageReceiver = new IntentFilter();
requestFilter.addAction("wfc.voice.PHONE_STATE");
registerReceiver(mMessageReceiver, requestFilter);
```
Using the Client

Introduction

WFC Voice improves the effectiveness of communications within an organization, providing enterprise voice communications across multiple media types on unified mobile devices.

With WFC Voice you can:

• Use a rich selection of features on configured wireless devices
• Seamlessly communicate with co-workers or take an outside call from a customer or vendor
• Use the device most appropriate and convenient for each situation.

NOTE: This guide covers default button icons, which the system administrator can modify.

This chapter explains how to use the following functions and features:

• Home Screen Dashboard on page 119
• In-Call Dashboard on page 120
• Signal Quality on page 121
• Calling on page 121
  • Using Voice Commands on page 122
  • Call Hold and Resume on page 124
• Voicemail on page 126
  • Message Waiting on page 126
  • Message Retrieval on page 126
• Contacts on page 127
• Call History on page 130
• Advanced Calling Features on page 131
  • Multiple Lines on page 131
    • Multiple Line Appearances on page 131
    • Busy Indicator on page 131
  • Transfer (attended, semi-attended) on page 131
Using the Client

- Miscellaneous Features on page 133
  - Speed Dial Numbers on page 133
  - List on page 133
  - Home on page 133
  - Adjusting the Ring Volume on page 133
  - Unique Ringtone per Line Appearance on page 134
  - Unique Ringtone per Contact on page 134
  - Distinctive Ringing on page 134
  - Vibrate/Ring Tone on page 134
  - Start Application on page 134
  - Log Marker on page 134
  - Caller ID on page 134
  - Hold Recall on page 134
  - On-hook Dialing on page 134
- Profile Manager Features, see page 1-135
  - Add Department, see page 1-135
  - Change Department, see page 1-135
  - Load Contacts, see page 1-135
Home Screen Dashboard

Figure 34  Home Screen Dashboard

Single Line
Dashboard Header Line Status
Dashboard Extensions List
Dashboard Buttons
Dashboard Footer Buttons

Multiple Lines
Dashboard Header Line Status
Dashboard Extensions List
Dashboard Buttons
Dashboard Footer Buttons

Figure 35  EC30 Home Screen Dashboard

Single Line
Dashboard Header Line Status
Dashboard Extensions List
Dashboard Buttons
Dashboard Footer Buttons

Multiple Lines
Dashboard Header Line Status
Dashboard Extensions List
Dashboard Buttons
Dashboard Footer Buttons

NOTE: If multiple PBXs are configured, the PBX type for each appears on the right.
In-Call Dashboard

**Figure 36** In-Call Dashboard

- **In-Call Header Line Status**
- **In-Call Action Buttons**
- **In-Call Dashboard Buttons**
- **In-Call Footer Buttons**

**NOTE:** Touching the **Back** button from the Home Screen Dashboard or In-Call Dashboard minimizes WFC Voice and switches to the Android home screen.
Signal Quality

During an active call, the signal quality indicator appears in the upper right portion of the screen, indicating voice traffic errors on the network.

- excellent
- good
- acceptable
- bad

Figure 37  Signal Quality Indicator

Calling

There are various ways to initiate a telephone call:

- Touch ☻ to enter a specified extension or phone number, and then touch ☑ to initiate a call.
- Touch ☐ to display a list of previous calls. See Call History on page 130 for more information.
- Touch ☐ to display a list of saved contacts. See Contacts on page 127 for more information.
- Touch ⭐ to display a list of favorite contacts. See Contacts on page 127 for more information.
- Touch ☑ to initiate a call to the most recently dialed location.
- Touch ☑ to initiate a call to a number preset by the system administrator
- Press the PTT button to initiate a call using voice commands. See Using Voice Commands on page 122.

For information on initiating a call using a third party app, see Headless Mode and WFCVoice Service.
Using Voice Commands

To call a specified extension, phone number, or contact using voice commands:

1. Press and release the (Push to Talk) PTT button to initiate a call.
2. Upon hearing the grant tone, say Call or Dial and the specified extension, phone number, or contact name. When calling a contact you can also say the phone type (mobile, work, or home).

If multiple entries are found, the system prompts you to make a choice. Only the first 10 entries are made available when using voice commands.

Receiving a Call

The incoming screen offers various call accept styles, such as accept and reject buttons or sliders.

✓ NOTE: Available ring tones vary. Use the device system settings to set tones and vibration notification.

Popup Window

During an active call, a popup window appears when an incoming call is received. Touch one of two buttons to accept or reject an incoming call.

The popup window also appears when a WFC Voice call is received while using another Android app. When the call ends, the Home Screen Dashboard displays.

✓ NOTE: When an incoming call is through a wide area network (WAN), the WFC Voice call is placed on hold. If the WAN call is accepted, the WFC Voice call remains on hold.

To resume the WFC Voice call, open WFC Voice and touch ►.

Figure 38  Popup Window

End Call

The End Call feature ends a call in any state.
Touch or the red **End Call** icon to end any call.

**Add Call**

During an active call use the dialer to place the current call on hold and initiate a new call. When the new call connects, you can Transfer, Conference, or End the second call and resume the first call.

Touch to display the dial pad.

Enter the new number and touch .

The first call is on hold with the option to resume and the new number becomes the active call. To resume the first call, touch the extension.
Call Hold and Resume

Use the Hold feature to temporarily disconnect a call, use the telephone for another call, and then use Resume to return to the original call. For information on setting up the Hold and Resume buttons, see Hold on page 69 and Resume on page 70.

Touch \( \text{Hold} \) to display the Hold screen.

**Figure 41  Hold Screen**

Touch \( \text{Resume} \) to resume the call or touch \( \text{New Call} \) to place another call.

Use the Home button or \( \text{Home} \) to display the home screen dashboard. From the home screen dashboard, touch an extension to resume a call.

**Figure 42  Dashboard Hold Screen**
Call Park and Unpark

Call Park

Use the Call Park/Unpark feature to put a call on hold and then retrieve that call from any other telephone within the system.

Figure 43  Park Button

Touch  to display the Parksreen.
Touch OK to park the call. The home screen dashboard appears.

Call Unpark

Unpark a call so anyone capable of retrieving the parked call can continue speaking with the caller on any phone.
To unpark a call touch  and dial the parked extension.
Voicemail

Use the Message Retrieval feature to retrieve voice messages from the voice mail server. For information on configuring the Voicemail button, see Voicemail on page 65.

NOTE: To configure Voicemail go to Settings>Advanced Settings>Connection Parameters>HTTPS Server Address and enter the utility server IP address. For more information, see Setting the Utility Server IP Address on page 22.

Voicemail messages appear for each line/extension next to the extension number.

Message Waiting

The Message Waiting feature provides notifications of messages waiting. The extension and associated voice messages appear in a bar on the main screen.

Message Retrieval

Use the Message Retrieval feature to retrieve voice messages from the voice mail server. Voice messages can also be retrieved by pressing the Message Waiting bar or the Voicemail button.
Contacts

Use the Contacts feature to store and dial frequently used numbers. See Contacts on page 63 for information on how to create a Contacts button.

✓ **NOTE:** Add and edit contacts from the native Android operating system. Refer to the Android guide for more information.

Contacts synced with a Gmail account cannot be sorted within a group.

Touch the **Contacts** button 📷 to display a list of saved contacts.

**Figure 45** Contact List

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📞</td>
<td>Contact is not assigned an extension.</td>
</tr>
<tr>
<td>🟢</td>
<td>Contact is available.</td>
</tr>
<tr>
<td>🟥</td>
<td>Contact in on a call.</td>
</tr>
<tr>
<td>🟥</td>
<td>Contact is in Do Not Disturb (DnD) mode.</td>
</tr>
<tr>
<td>🟧</td>
<td>Contact’s device missed the last check-in to Profile Manager.</td>
</tr>
</tbody>
</table>
Table 2  Contact Presence Indicators

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🅿️</td>
<td>Contact’s device has passed the check-in threshold.</td>
</tr>
<tr>
<td>🟠</td>
<td>Contact is assigned an extension but the contact’s device is not registered.</td>
</tr>
</tbody>
</table>
Favorites

Use the Favorites feature to store and dial contacts that are set as favorites. See Favorites on page 64 for information on how to create the Favorites button.

Touch the default Contacts button, and select the Favorites tab to display a list of favorite contacts.

To set contacts as favorites, touch next to a contact name in either the All or Favorites tabs.

Figure 46  Favorites List

Touch a contact number to call that contact.
Call History

View Recent Calls

This feature records missed, answered, and outgoing calls in the call history log. Use this log to initiate a call, delete an entry, or view details of an entry.

For information on configuring the Call History button, see History on page 62.

Touch the History button to view the call history screen.

Figure 47  Call History

Touch a call history button to see the call detail, which includes the caller ID, extension, call type, time, date and duration.

Dialing from Call History

Touch a recent call to display the Call button.

Deleting Call History

Touch the Menu button, then Delete.
## Advanced Calling Features

### Multiple Lines

WFC Voice supports and displays a presence icon displayed to the left of each line. The shape, color, and animation of the icon indicates its type and status. Table 3 lists presence icon combinations.

**Table 3**  Presence Icon Description

<table>
<thead>
<tr>
<th>Icon Status</th>
<th>Dedicated Line</th>
<th>Shared Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idle (Solid Icon)</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Active (Solid Icon)</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Call on Hold (Blinking Icon)</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Busy / Registering</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Status text appears next to the extension (Solid Icon)</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Busy in a call (Blinking Icon)</td>
<td>![Icon]</td>
<td>![Icon]</td>
</tr>
</tbody>
</table>

### Multiple Line Appearances

Use the Multiple Line Appearances feature to associate and use multiple lines with a device. Configure multiple lines in the PBX.

### Busy Indicator

WFC Voice supports Busy indicators for multiple extension configurations. An icon is associated with each extension indicating if the line is idle, active, on hold, or busy. See Presence Icon Description on page 131.

### Transfer (attended, semi-attended)

The Transfer feature transfers an active call to a third party. While Call Forwarding must be pre-configured, use Call Transfer to make call exchanges in real-time with an active call. To set up the Transfer button, see Transfer on page 71.

There are two types of transfer:

- **Call Transfer Attended** - The transferring party does not complete the transfer (i.e. remains on the call) until the transferred-to party answers.
- **Call Transfer Blind** - The transferring party completes the transfer (i.e. drops the call) while the transferred-to party is still ringing.

1. Touch ✆ to display the dial screen.
2. Dial the number and touch ✆.
3. Touch **Complete Transfer** to complete the call transfer.
Ad hoc Conference

Use this feature to create a conference without the assistance of an attendant and with up to six participants. The Conference feature joins two separate calls for collaboration between each party on the line at the same time. To set up the Conference button, see Conference on page 72.

1. During an active call, touch the default Conference button to dial the conference number.
2. Enter a number and touch .
3. Touch the Conference Complete button to join the completed conference call.
Miscellaneous Features

Ringtone

By default, WFC Voice uses the ringtone configured in the native Android settings.
Touch \text{\textasciitilde} > \text{Ringtone} to change the default ringtone for WFC Voice.

Reload

Touch \text{\textasciitilde} > \text{Reload} to sign out and then automatically sign back in to WFC Voice.

Sign Out

Touch \text{\textasciitilde} > \text{Sign Out} to sign out of WFC Voice. To sign back in to WFC Voice, touch \text{SIGN IN}.
To exit WFC Voice, sign out then touch \text{\textasciitilde} > \text{Quit}.

Speed Dial Numbers

Speed Dial places a call to a preset number or extension. Up to 10 speed dial buttons are available. The system administrator configures speed dial numbers.
Touch the \text{Speed Dial} button \ding{119} to make a call using the preset destination.

Suspend Mode

Suspend Mode blocks all incoming or outgoing calls.
Touch the \text{Suspend Mode} button \ding{128} to enable or disable \text{Suspend Mode}.

List

List displays a speed dial list by default.

\text{\textbullet{\textcolor{red}{\textbullet}}} \text{IMPORTANT}: List is configured by the system administrator.
Touch the default \text{List} button \ding{130} to display the speed dial list.

Home

During an active call touch \text{Home} to display the Dashboard and access to Dashboard functions.

1.

Adjusting the Ring Volume

Configure using the device’s sound settings. Refer to the MC40, TC70 or TC75 User Guide at \url{www.zebra.com/support} for more information.
Unique Ringtone per Line Appearance

To configure ringtones per line, see Line Ringtones on page 100.

Unique Ringtone per Contact

Configure using the device’s sound settings. Refer to the device User Guide at www.zebra.com/support for more information.

Distinctive Ringing

Use the Distinctive Ringing feature to distinguish between incoming call types based on the ringing pattern of the call. For example, internal versus external calls.

Vibrate/Ring Tone

Configure using the device’s sound settings. Refer to the MC40, TC70 or TC75 User Guide at www.zebra.com/support for more information.

Start Application

WFC Voice can be configured by a system administrator to launch another application on the device. When the button is pressed WFC Voice minimizes to run in the background and the application launches.

Touch the application button to launch another application.

Log Marker

Log Marker creates a time stamp in the logs. If you experience any issues with WFC Voice functionality, the time stamp focuses troubleshooting of the device to the time the issue occurred for more rapid resolution.

1. Touch > Add Log Marker.
2. Enter a description (optional).
3. Touch SET.

Caller ID

The Caller ID feature displays calling party information on your display telephone that is signaled over ISDN or H.323 trunks. Refer to the WFC Voice Quick Start Guide for more information on setting up and using this feature.

Hold Recall

Use Hold Recall to be notified when a call is on hold too long, based on the Hold Recall Timer. Visual and audible warnings are sent to the telephone when a call has been on hold past a specified period of time. Both visual and audible warnings are used if the telephone is on-hook. If the telephone is off-hook, a “priority ring” is used.

On-hook Dialing

On-hook dialing enables the user to pre-dial digits before going off-hook, or pressing the send key. WFC Voice provides this capability automatically and does not go off-hook until the send key is pressed.
Profile Manager Features

NOTE: These features require Profile Manager.

Add Department

Use Add Department to select from list of all available department extensions. If an extension was previously configured on the device it is automatically selected. Users can add multiple extensions.

1. Touch Add Department. WFC Voice reloads and displays the Add Department list.
2. Touch one or more extensions to select them. Check marks appear next to selected extensions.
3. Touch Apply. The selected extensions and any previously configured extensions are added to the Dashboard.

Change Department

Use Change Department to select from a list of all available department extensions. Previously configured extensions are automatically selected.

1. Touch Change Department. WFC Voice reloads and displays the Change Department list.
2. Touch one or more extensions to select them. Check marks appear next to selected extensions.
3. Touch Apply. The selected extensions and any previously configured extensions are added to the Dashboard.

Load Contacts

WFC Voice automatically imports contacts each time it registers or signs in with Profile Manager. Contacts imported from Profile Manager are saved to the device as WFConnect contacts.
## Button Actions

### Table 4  Button Actions

<table>
<thead>
<tr>
<th>Action Type</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_CALL</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer. Allowed on the in-call screen only.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>BLANK</td>
<td>No action. Creates a gap or space between other buttons.</td>
<td>N/A</td>
</tr>
<tr>
<td>CALL</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>COMPLETE</td>
<td>This is internal type used for call transfer or conference scenarios. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>CONTACTS</td>
<td>Displays the contacts list.</td>
<td>N/A</td>
</tr>
<tr>
<td>DIAL</td>
<td>Opens the dialer.</td>
<td>Prefix to dialed number. The prefix is not displayed to the user.</td>
</tr>
<tr>
<td>END_CALL</td>
<td>This is internal type used for END call button on in-call screen. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Shows a list of recently called numbers.</td>
<td>N/A</td>
</tr>
<tr>
<td>HOLD</td>
<td>Puts the call on hold. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>HOME</td>
<td>Jumps to the Home screen. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>LIST</td>
<td>Shows buttons as a pop-up list. This feature can only be set in an XML configuration.</td>
<td>N/A</td>
</tr>
<tr>
<td>LOG_MARKER</td>
<td>Creates a time stamp in the logs.</td>
<td>N/A</td>
</tr>
<tr>
<td>REDIAL</td>
<td>Redials the last number.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Table 4  Button Actions (Continued)

<table>
<thead>
<tr>
<th>Action Type</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESUME</td>
<td>Resumes a call that is on hold. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>SPEED_DIAL0</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL1</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL2</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL3</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL4</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL5</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL6</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL7</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL8</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>SPEED_DIAL9</td>
<td>Calls the number in Value tag. If there is no number in Value tag, opens the dialer.</td>
<td>Phone number.</td>
</tr>
<tr>
<td>START_APP</td>
<td>Starts an application. Path and filename of the application.</td>
<td>Path and filename of the application.</td>
</tr>
<tr>
<td>SUSPEND_MODE</td>
<td>Blocks all incoming or outgoing calls.</td>
<td>N/A</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>Transfers the call. Only allowed on the in-call screen.</td>
<td>N/A</td>
</tr>
<tr>
<td>VOICEMAIL</td>
<td>Opens voicemail. Dials voice mail number configured on the PBX.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Table 5  WFConnect Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call Buttons</td>
<td>Defines the buttons available in the in-call area.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>Dashboard section.</td>
</tr>
<tr>
<td>Profile</td>
<td>Profile section.</td>
</tr>
</tbody>
</table>

### Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>audio_gain_in</td>
<td>Input Audio Volume (Optional). Number between 1 and 8 Default: 1</td>
<td>Number between 1 and 8 Default: 1</td>
</tr>
<tr>
<td>audio_gain_out</td>
<td>Output Audio Volume (Optional). Number between 1 and 8 Default: 1</td>
<td>Number between 1 and 8 Default: 1</td>
</tr>
<tr>
<td>background_logo</td>
<td>Set a background image for the WFC Voice home screen dashboard (Optional).</td>
<td>Default: None (Disabled)</td>
</tr>
<tr>
<td>callwaiting_interval</td>
<td>Interval of call waiting tone. 500ms to 8000ms Default: 2000ms</td>
<td>500ms to 8000ms Default: 2000ms</td>
</tr>
<tr>
<td>callwaiting_volume</td>
<td>Call waiting volume. Percentage between 10% and 100% Default: 80%</td>
<td>Percentage between 10% and 100% Default: 80%</td>
</tr>
<tr>
<td>codec_alaw_priority</td>
<td>Assigns preference priority for G.711 A-Law Voice codec negotiations between PBX and WFC Voice.</td>
<td>Number between -5 and 5 Negative numbers disable the codec. Default: 2</td>
</tr>
<tr>
<td>codec_g722_priority</td>
<td>Assigns preference priority for G.722 Voice codec negotiations between PBX and WFC Voice.</td>
<td>Number between -5 and 5 Negative numbers disable the codec. Default: 4</td>
</tr>
<tr>
<td>codec_g729_priority</td>
<td>Assigns preference priority for G.729 Voice codec negotiations between PBX and WFC Voice.</td>
<td>Number between -5 and 5 Negative numbers disable the codec. Default: 3</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>codec_gsm_priority</td>
<td>Assigns preference priority for GSM Voice codec negotiations between PBX and WFC Voice.</td>
<td>Number between -5 and 5 Negative numbers disable the codec. Default: 2</td>
</tr>
<tr>
<td>codec_ulaw_priority</td>
<td>Assigns preference priority for G.711 u-LAW Voice codec negotiations between PBX and WFC Voice.</td>
<td>Number between -5 and 5 Negative numbers disable the codec. Default: 1</td>
</tr>
<tr>
<td>contacts_url</td>
<td>The URL of contacts list located on a remote or local server (Optional).</td>
<td>File type: CVS. Protocols: file, http, https, tftp. Default: none</td>
</tr>
<tr>
<td>disable_speaker</td>
<td>Do not answer incoming calls in speaker mode when the device is placed on a horizontal surface (Optional).</td>
<td>true: Disable speaker mode. false: Enable speaker mode. Default: false</td>
</tr>
<tr>
<td>flex_tls</td>
<td>Set security for SIP connections (Optional).</td>
<td>true: Trust all remote hosts. false: Use Android certificates for TLS/SSL connections. Default: true</td>
</tr>
</tbody>
</table>
| gbg_color             | Background color used on all buttons, if not customized in the button element <bg_color> (Optional). | The color is one of the following: red, blue, green, black, white, gray, cyan, magenta, yellow, lightgray, darkgray, grey, lightgrey, darkgrey, aqua, fuchsia, lime, maroon, navy, olive, purple, silver, teal, or, it is an RGB value in one of the following formats expressed as a decimal, or a hexadecimal, number:  
  • #RRGGBB  
  • #AARRGGBB  
  Default: 0xFF001425 |
| gfg_color             | Text color used on all buttons, if not customized in the button element <fg_color> (Optional). | The color is one of the following: red, blue, green, black, white, gray, cyan, magenta, yellow, lightgray, darkgray, grey, lightgrey, darkgrey, aqua, fuchsia, lime, maroon, navy, olive, purple, silver, teal, or, it is an RGB value in one of the following formats expressed as a decimal, or a hexadecimal, number:  
  • #RRGGBB  
  • #AARRGGBB  
  Default: 0xFFFFFFFF |
### Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>headless_mode</td>
<td>Headless mode (Optional). See Headless Mode and WFCVoice Service.</td>
<td>true: Headless mode enabled. false: Headless mode disabled. Default: false</td>
</tr>
<tr>
<td>help_url</td>
<td>The URL of the entry point for the on-device online help (Optional).</td>
<td>Default: file:///WFConnect/help.html</td>
</tr>
<tr>
<td>incall_widget</td>
<td>Call accept style on the incoming call screen (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• incall_buttons: Simple buttons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• incall_gb: Slider.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• incall_jb: Glow pad.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: incall_gb</td>
</tr>
<tr>
<td>jitter_max</td>
<td>Maximum jitter buffer in milliseconds.</td>
<td>250 msec to 1500 msec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: 250 msec</td>
</tr>
<tr>
<td>jitter_min</td>
<td>Initial jitter delay in milliseconds.</td>
<td>30 msec to 100 msec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: 60 msec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: none</td>
</tr>
<tr>
<td>license_alias</td>
<td>Identify the device on the license source. (Optional)</td>
<td>Device alias</td>
</tr>
<tr>
<td>license_key</td>
<td>One or more WFC Voice activation keys. When using license_source element, license_key can be used to list one or more PBX types.</td>
<td>Comma separated list of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Activation keys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• PBX types</td>
</tr>
<tr>
<td>license_source</td>
<td>The URL of a license source running on the cloud or a local network.</td>
<td>Default: Flexera server</td>
</tr>
<tr>
<td></td>
<td>Use license_key element to define PBX types. If license_key value is not set, the client requests the PBX type set in the WFC Voice profile.</td>
<td></td>
</tr>
<tr>
<td>log_file</td>
<td>Enable logging for WFC Voice (Optional). Log files are saved to the WFConnect folder on the device.</td>
<td>true: Logging enabled. false: Logging disabled. Default: false</td>
</tr>
</tbody>
</table>
## Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>log_level</td>
<td>The log level for all log messages produced by Workforce Connect (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Error</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Warning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Info</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Debug</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verbose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For debugging use Verbose. Default: Error</td>
</tr>
<tr>
<td>log_sipclf</td>
<td>Enable logging of SIP messages. Logs are stored as a CLF file on the device in SIP Common Log Format (Optional).</td>
<td>true: Log to a file on the device. false: Do not log to file. Default: false</td>
</tr>
<tr>
<td>moh_enabled</td>
<td>Enable music on hold to play a WAV audio file when a user is placed on hold (optional).</td>
<td>Default: false</td>
</tr>
<tr>
<td>moh_file</td>
<td>Select a custom WAV audio file to play when a user is placed on hold (optional).</td>
<td>WAV file stored in the WFConnect folder Default: None</td>
</tr>
<tr>
<td>no_audio_cutoff</td>
<td>Disconnect a call when no audio is detected for a set interval.</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: 30</td>
</tr>
<tr>
<td>process_cell_call</td>
<td>Ignore all call requests from Android dialer. Required on device with call service.</td>
<td>true: Process Android calls false: Do not process android calls Default: false</td>
</tr>
<tr>
<td>profile_type</td>
<td>Primary PBX type.</td>
<td>Contents: Text Default: None</td>
</tr>
<tr>
<td>profile2_type</td>
<td>Second PBX type (Optional).</td>
<td>Contents: Text Default: None</td>
</tr>
<tr>
<td>profile3_type</td>
<td>Third PBX type (Optional).</td>
<td>Contents: Text Default: None</td>
</tr>
<tr>
<td>profile4_type</td>
<td>Fourth PBX type (Optional).</td>
<td>Contents: Text Default: None</td>
</tr>
<tr>
<td>profname</td>
<td>Profile name (Optional). For information only.</td>
<td>Contents: Text Default: None</td>
</tr>
</tbody>
</table>
### Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>prompt_file</td>
<td>Name of the audio prompt file. (Optional).</td>
<td>WAV file stored in the WFConnect folder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>ringer_off_in_charger</td>
<td>Disable ringer while device is charging.</td>
<td>true: Disable ringer while charging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Enable ringer while charging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>ringtone_callback</td>
<td>Call back ringtone (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the wfconnect folder in OGG format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: UK_Phone</td>
</tr>
<tr>
<td>ringtone_external</td>
<td>Ringtone for external calls (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the wfconnect folder in OGG format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: HI_UK_Phone</td>
</tr>
<tr>
<td>ringtone_intercome</td>
<td>Rington for intercome calls (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the WFConnect folder in OGG format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: French_Phone</td>
</tr>
<tr>
<td>ringtone_line1</td>
<td>The ringtone for line #1 (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the WFConnect folder in OGG format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None (The default Android ringtone is used.)</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| ringtone_line2   | The ringtone for line #2 (Optional). | One of the following:  
• A number indicating a ringtone in Android.  
• The name of an audio file stored in the WFConnect folder in OGG format.  
Default: None (The default Android ringtone is used.) |
| ringtone_line3   | The ringtone for line #3 (Optional). | One of the following:  
• A number indicating a ringtone in Android.  
• The name of an audio file stored in the WFConnect folder in OGG format.  
Default: None (The default Android ringtone is used.) |
| ringtone_line4   | The ringtone for line #4 (Optional). | One of the following:  
• A number indicating a ringtone in Android.  
• The name of an audio file stored in the WFConnect folder in OGG format.  
Default: None (The default Android ringtone is used.) |
| ringtone_line5   | The ringtone for line #5 (Optional). | One of the following:  
• A number indicating a ringtone in Android.  
• The name of an audio file stored in the WFConnect folder in OGG format.  
Default: None (The default Android ringtone is used.) |
| ringtone_line6   | The ringtone for line #6 (Optional). | One of the following:  
• A number indicating a ringtone in Android.  
• The name of an audio file stored in the WFConnect folder in OGG format.  
Default: None (The default Android ringtone is used.) |
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ringtone_park</td>
<td>The ringtone for park (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the wfconnect folder in OGG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None (The default Android ringtone is used.)</td>
</tr>
<tr>
<td>ringtone_priority</td>
<td>Priority call ringtone (Optional).</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A number indicating a ringtone in Android.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The name of an audio file stored in the wfconnect folder in OGG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>format.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None (The default Android ringtone is used.)</td>
</tr>
<tr>
<td>rtp_stats</td>
<td>Show Real Time Transport Protocol (RTP) Statistics on in-call screen (Optional).</td>
<td>true: RTP statistics are shown.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: RTP statistics are not shown.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>sample_rate</td>
<td>Audio sample rate. Selecting an audio codec overrides this setting (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 8000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 16000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 32000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 48000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: 8000</td>
</tr>
<tr>
<td>save_incoming_voice_to_file</td>
<td>Save incoming voice to a file in the wfconnect folder. The file name is a</td>
<td>true: File is saved.</td>
</tr>
<tr>
<td></td>
<td>time-stamp plus PCM extension (Optional).</td>
<td>false: File is not saved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>show_department_name</td>
<td>Display the department name associated with an extension (Optional).</td>
<td>true: Department names are shown.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Department names are not shown.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>show_extension_name</td>
<td>Display extensions using the both the extension number and the description</td>
<td>true: Extension names are shown.</td>
</tr>
<tr>
<td></td>
<td>set in the PBX (Optional).</td>
<td>false: Extension names are not shown.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Requires Profile Manager.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
</tbody>
</table>
### Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>show_jitter_stats</td>
<td>Show jitter statistics (Optional).</td>
<td>true: Jitter statistics are shown in audio debugging files.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Jitter statistics are not shown in audio debugging files.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>sign_out_in_charger</td>
<td>Automatically sign out of WFC Voice when the device begins charging (Optional).</td>
<td>true: Sign out when charging begins.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Stay signed in while charged.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>sip_auto_answer</td>
<td>Auto answer mode (Optional).</td>
<td>true: WFC Voice auto-answers all incoming calls.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: The user must use Workforce Connect to answer the call.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>sip_http_remhost</td>
<td>HTTP server address (Optional).</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>sip_localport</td>
<td>The primary local listening port for SIP connections.</td>
<td>Default: 5060</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td></td>
</tr>
<tr>
<td>sip_parknum</td>
<td>SIP default call park extension.</td>
<td>Default: None</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td></td>
</tr>
<tr>
<td>sip_pbx_logo</td>
<td>Identify the PBX type on the WFC Voice home screen dashboard.</td>
<td>Default: Displays the default text for the PBX type.</td>
</tr>
<tr>
<td></td>
<td>Enter text or set a logo (Optional).</td>
<td></td>
</tr>
<tr>
<td>sip_mac</td>
<td>Primary radio MAC address of this mobile device.</td>
<td>MAC address</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip.realm</td>
<td>SIP domain.</td>
<td>Default: None</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td></td>
</tr>
<tr>
<td>sip_remhost</td>
<td>Primary TFTP server address #1.</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td>Default: The server address provided by option 150 in the DHCP.</td>
</tr>
<tr>
<td>sip_remhost2</td>
<td>TFTP server address #2. This is a secondary address used if the primary</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td>address is not reachable.</td>
<td>Default: None</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td></td>
</tr>
<tr>
<td>sip_remhost3</td>
<td>TFTP server address #3. This is a secondary address used if the primary</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td>address is not reachable.</td>
<td>Default: None</td>
</tr>
<tr>
<td></td>
<td>Use with primary PBX type (Optional).</td>
<td></td>
</tr>
</tbody>
</table>
Table 6  Profile Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>sip_remport</td>
<td>TFTP server remote port. Use with primary PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip_rtp_port1</td>
<td>First RTP port.</td>
<td>Default: 51000</td>
</tr>
<tr>
<td>sip_rtp_port2</td>
<td>Last RTP port.</td>
<td>Default: 51025</td>
</tr>
<tr>
<td>sip_rtp_ptime</td>
<td>RTP payload size in milliseconds.</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 80</td>
</tr>
<tr>
<td></td>
<td>Default: 20</td>
<td></td>
</tr>
<tr>
<td>sip_transport</td>
<td>SIP transport type. Use with primary PBX type (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• UDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TSL</td>
</tr>
<tr>
<td></td>
<td>Default: TCP</td>
<td></td>
</tr>
<tr>
<td>sip_userid</td>
<td>SIP user or authentication ID. Use with primary PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip_userpass</td>
<td>SIP authentication password. Use with primary PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip_vmnum</td>
<td>SIP voice mail extension. Use with primary PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_confnum</td>
<td>SIP default conference number. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_localport</td>
<td>The local listening port for SIP connections. Use with second PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip2_mac</td>
<td>Radio MAC address of this mobile device. Use with second PBX type (Optional).</td>
<td>MAC address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_parknum</td>
<td>SIP default call park extension. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>sip2_realm</td>
<td>SIP domain. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_remhost</td>
<td>TFTP server address #1. Use with second PBX type (Optional).</td>
<td>Server address Default: The server address provided by option 150 in the DHCP.</td>
</tr>
<tr>
<td>sip2_remhost2</td>
<td>TFTP server address #2. This is a secondary address used if the primary address is not reachable. Use with second PBX type (Optional).</td>
<td>Server address Default: None</td>
</tr>
<tr>
<td>sip2_remhost3</td>
<td>TFTP server address #3. This is a secondary address used if the primary address is not reachable. Use with second PBX type (Optional).</td>
<td>Server address Default: None</td>
</tr>
<tr>
<td>sip2_remport</td>
<td>TFTP server remote port. Use with second PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip2_transport</td>
<td>SIP transport type. Use with second PBX type (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• UDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: TCP</td>
</tr>
<tr>
<td>sip2_userid</td>
<td>SIP user or authentication ID. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_userpass</td>
<td>SIP authentication password. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip2_vmnum</td>
<td>SIP voice mail extension. Use with second PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_confnum</td>
<td>SIP default conference number. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_localport</td>
<td>The local listening port for SIP connections. Use with third PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip3_mac</td>
<td>Radio MAC address of this mobile device. Use with third PBX type (Optional).</td>
<td>MAC address Default: None</td>
</tr>
<tr>
<td>sip3_parknum</td>
<td>SIP default call park extension. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>sip3_realm</td>
<td>SIP domain. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_remhost</td>
<td>TFTP server address #1. Use with third PBX type (Optional).</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: The server address provided by option 150 in the DHCP.</td>
</tr>
<tr>
<td>sip3_remhost2</td>
<td>TFTP server address #2. This is a secondary address used if the primary address is not reachable. Use with third PBX type (Optional).</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_remhost3</td>
<td>TFTP server address #3. This is a secondary address used if the primary address is not reachable. Use with third PBX type (Optional).</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_remport</td>
<td>TFTP server remote port. Use with third PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip3_transport</td>
<td>SIP transport type. Use with third PBX type (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• UDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: TCP</td>
</tr>
<tr>
<td>sip3_userid</td>
<td>SIP user or authentication ID. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_userpass</td>
<td>SIP authentication password. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip3_vmnum</td>
<td>SIP voice mail extension. Use with third PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_confnum</td>
<td>SIP default conference number. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_localport</td>
<td>The local listening port for SIP connections. Use with fourth PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip4_mac</td>
<td>Radio MAC address of this mobile device. Use with fourth PBX type (Optional).</td>
<td>MAC address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_parknum</td>
<td>SIP default call park extension. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>sip4_realm</td>
<td>SIP domain. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_remhost</td>
<td>TFTP server address #1. Use with fourth PBX type (Optional).</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: The server address provided by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>option 150 in the DHCP.</td>
</tr>
<tr>
<td>sip4_remhost2</td>
<td>TFTP server address #2. This is a secondary address used if the primary</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td>address is not reachable. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_remhost3</td>
<td>TFTP server address #3. This is a secondary address used if the primary</td>
<td>Server address</td>
</tr>
<tr>
<td></td>
<td>address is not reachable. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_remport</td>
<td>TFTP server remote port. Use with fourth PBX type (Optional).</td>
<td>Default: 5060</td>
</tr>
<tr>
<td>sip4_transport</td>
<td>SIP transport type. Use with fourth PBX type (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• UDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: TCP</td>
</tr>
<tr>
<td>sip4_userid</td>
<td>SIP user or authentication ID. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_userpass</td>
<td>SIP authentication password. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sip4_vmnnum</td>
<td>SIP voice mail extension. Use with fourth PBX type (Optional).</td>
<td>Default: None</td>
</tr>
<tr>
<td>sms_enabled</td>
<td>Short Message Service (SMS) (Optional).</td>
<td>true: Enable SMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Disable SMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>speaker_on_horizontal</td>
<td>Answer calls in speaker mode when the device is placed on a horizontal surface</td>
<td>true: Enable speaker mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Disable speaker mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>use_android_dialer</td>
<td>Use the native Android dialer to place calls.</td>
<td>true: Use Android dialer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Use Workforce Connect dialer</td>
</tr>
<tr>
<td>use_accelerometer</td>
<td>Use the native Android accelerometer (Optional).</td>
<td>true: Accelerometer is used.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>false: Accelerometer is not used.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: false</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>use_aec</td>
<td>Echo Cancellation (Optional).</td>
<td>true: Echo cancellation is used. false: Echo cancellation is not used. Default: false</td>
</tr>
<tr>
<td>use_agc_ear</td>
<td>Automatic Gain Control (AGC) on earpiece (Optional).</td>
<td>true: AGC is used. false: AGC is not used. Default: false</td>
</tr>
<tr>
<td>use_agcSpeaker</td>
<td>Automatic Gain Control (AGC) on speaker. (Optional).</td>
<td>true: AGC is used. false: AGC is not used. Default: false</td>
</tr>
<tr>
<td>use_native_sample_rate</td>
<td>Use the native sample rate set by Android (Optional).</td>
<td>true: Android native sample rate is used false: Sample rate is 8000 Default: false</td>
</tr>
<tr>
<td>use_noise</td>
<td>Noise Reduction (Optional).</td>
<td>true: Noise reduction is used. false: Noise reduction is not used. Use native sample rate set by Android.</td>
</tr>
<tr>
<td>use_prox_wake_lock</td>
<td>Use the Android platform default proximity WAKE LOCK (Optional).</td>
<td>true: Uses the Android platform default proximity WAKE LOCK. false: Uses a workaround solution. Default: true</td>
</tr>
<tr>
<td>var_location</td>
<td>The URI of shared profile located on a remote or local server (Optional).</td>
<td>Protocols: file, http, https, tftp. Default: none (Disabled)</td>
</tr>
<tr>
<td>vibrate_when_ringing</td>
<td>The device vibrates when a call is received (Optional).</td>
<td>true: The device vibrates when a call is received. false: The device does not vibrate when a call is received. Default: false</td>
</tr>
<tr>
<td>voice_announcer_check</td>
<td>Announces the number or user name of an incoming call (Optional).</td>
<td>true: Incoming calls are announced. false: Incoming calls are not announced. Default: false</td>
</tr>
<tr>
<td>wifi_preferred</td>
<td>Connect to an available WiFi network. This setting only applies after network state changes or when the client is restarted.</td>
<td>true: Connect to an available WiFi network. false: Only connect to the device’s default network. Default: true</td>
</tr>
</tbody>
</table>
### Table 7  Dashboard Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columns</td>
<td>Number of columns on the dashboard area.</td>
</tr>
<tr>
<td>Button</td>
<td>The definition of an on-screen button. See Table 9 for details.</td>
</tr>
</tbody>
</table>

### Table 8  Call Buttons Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Button</td>
<td>The definition of an on-screen button. See Table 9 for details.</td>
</tr>
</tbody>
</table>

### Table 9  Button Tags

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>action</td>
<td>The button action.</td>
<td>This must be one of the action types listed in Button Actions. If this string is not a valid action type the button is not created.</td>
</tr>
<tr>
<td>bg_color</td>
<td>Button background color (optional). If no color is defined then the profile element &lt;gfg_color&gt; is used.</td>
<td>The color is one of the following: red, blue, green, black, white, gray, cyan, magenta, yellow, lightgray, darkgray, grey, lightgrey, darkgrey, aqua, fuchsia, lime, maroon, navy, olive, purple, silver, teal, or, it is an RGB value in one of the following formats expressed as a decimal, or a hexadecimal, number: • #RRGGBB • #AARRGGBB Default: #FF001425</td>
</tr>
<tr>
<td>confirm</td>
<td>After touching the button, the operator is asked to confirm the action before it is executed (optional).</td>
<td>true: Confirm action false: Do not confirm action Default: false</td>
</tr>
<tr>
<td>description</td>
<td>Description is used by the LIST action type.</td>
<td>On the LIST action type button: • It is used as the title on the popup dialog • It appears as a comment for each LIST sub button, identifying which action is performed by the button. For all other buttons, the description is optional.</td>
</tr>
</tbody>
</table>
### Table 9  Button Tags (Continued)

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>enabled</td>
<td>Defines whether the button is available on the WFC Voice screen (optional).</td>
<td>true: Button is visible and active. false: Button is not visible. Default: true.</td>
</tr>
<tr>
<td>fg_color</td>
<td>Button text color (Optional). If no color is defined then the profile element &lt;gfg_color&gt; is used.</td>
<td>The color is one of the following: red, blue, green, black, white, gray, cyan, magenta, yellow, lightgray, darkgray, grey, lightgrey, darkgrey, aqua, fuchsia, lime, maroon, navy, olive, purple, silver, teal, or, it is an RGB value in one of the following formats expressed as a decimal, or a hexadecimal, number:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>•  #RRGGBB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>•  #AARRGGBB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: #FFFFFFFF</td>
</tr>
<tr>
<td>icon</td>
<td>The icon that appears on the button (Optional).</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>•  none: Only the title is displayed on the button.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>•  default: Displays the default icon for the associated action type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>•  &lt;filename&gt;: The filename of a PNG file, containing the icon, in the WFConnect folder. Include .png in the filename.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: default</td>
</tr>
<tr>
<td>title</td>
<td>Button title (Optional). This text is displayed on the on-screen button. If the string contains spaces, the text displays on 2 lines; otherwise, all the text displays on one line. The font size adjusts depending on text length.</td>
<td>Contents: Text</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: New</td>
</tr>
<tr>
<td>value</td>
<td>Additional information required by the &lt;action&gt; element (Optional).</td>
<td>For details on the values associated with each action type see Button Actions.</td>
</tr>
<tr>
<td>Button</td>
<td>The definition of an on-screen button.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
<WFConnect>
  <Profile>
    <use_android_dialer>true</use_android_dialer>
    <sip_rembhost2></sip_rembhost2>
    <ptt_userid>user</ptt_userid>
    <background_logo>company_logo.png</background_logo>
    <lux_threshold>0</lux_threshold>
    <sip_rembhost3></sip_rembhost3>
    <rtp_stats>false</rtp_stats>
    <prompt_file>greeting.wav</prompt_file>
    <codec_ulaw_priority>2</codec_ulaw_priority>
    <show_dialpad>true</show_dialpad>
    <sip_expires>36000</sip_expires>
    <use_noise>true</use_noise>
    <ptt_transport>UDP</ptt_transport>
    <use_native_sample_rate>false</use_native_sample_rate>
    <jitter_max>250</jitter_max>
    <post_log_url></post_log_url>
    <sip_device_type>8865</sip_device_type>
    <sip_rtp_ptime>20</sip_rtp_ptime>
    <sip_transport>TCP</sip_transport>
    <sip_rtp_port2>50025</sip_rtp_port2>
    <sip_rtp_port1>50000</sip_rtp_port1>
    <audio_gain_in>5</audio_gain_in>
    <use_prox_wake_lock>true</use_prox_wake_lock>
    <log_console>true</log_console>
    <use_agcSpeaker>true</use_agcSpeaker>
    <sip_realm>10.16.2.111</sip_realm>
    <jitter_min>60</jitter_min>
    <sip_subscribe>false</sip_subscribe>
    <help_url>file:///wfconnect/help.html</help_url>
  </Profile>
</WFConnect>
<codec_g722_priority>4</codec_g722_priority>
<save_incoming_voice_to_file>false</save_incoming_voice_to_file>
<profile_type>Licensed PBX</profile_type>
<gfg_color>#FFFFFF</gfg_color>
<codec_alaw_priority>3</codec_alaw_priority>
<codec_g729_priority>1</codec_g729_priority>
<sip_userid>1001</sip_userid>
<log_file>true</log_file>
<rssi_limit>-85</rssi_limit>
<incall_widget>incall_buttons</incall_widget>
<sip_mac></sip_mac>
<sip_auto_answer>false</sip_auto_answer>
<audio_gain_out>5</audio_gain_out>
<show_jitter_stats>false</show_jitter_stats>
<use_aec>true</use_aec>
<gbg_color>#FF001425</gbg_color>
<license_key>abcd-1234-ab12-cd34-5678-efgh-ef56-gh78</license_key>
<sip_remhost>10.5.97.99</sip_remhost>
<sip_userpass>1234</sip_userpass>
<sip_remport>5060</sip_remport>
<use_accelerometer>true</use_accelerometer>
<profname>WFConnect.xml</profname>
<use_agc_ear>true</use_agc_ear>
<codec_gsm_priority>5</codec_gsm_priority>
<srtp_type>1</srtp_type>
<log_level>Error</log_level>
</Profile>

...
...  
<Dashboard>  
    <Columns>4</Columns>  
    <Button>  
        <title>Dial</title>  
        <action>DIAL</action>  
        <value></value>  
        <enabled>true</enabled>  
        <confirm>false</confirm>  
        <description></description>  
        <icon></icon>  
    </Button>  
    <Button>  
        <title>SpeedDial#1</title>  
        <action>SPEED.Dial1</action>  
        <value></value>  
        <enabled>true</enabled>  
        <confirm>false</confirm>  
        <description></description>  
        <icon></icon>  
    </Button>  
    <Button>  
        <title>SpeedDial#2</title>  
        <action>SPEED.Dial2</action>  
        <value></value>  
        <enabled>true</enabled>  
        <confirm>false</confirm>  
        <description></description>  
        <icon></icon>  
    </Button>  
</Dashboard>
<title></title>
<action>LIST</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon></icon>
</Button>
<Button>
<title>SpeedDial#3</title>
<action>SPEED_DIAL3</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon></icon>
</Button>
<Button>
<title>SpeedDial#4</title>
<action>SPEED_DIAL4</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon></icon>
</Button>
<Button>
<title>SpeedDial#5</title>
<action>SPEED_DIAL5</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
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</Button>
<Button>
<title>SpeedDial#6</title>
<action>SPEED_DIAL6</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<Button>
  <title>SpeedDial#7</title>
  <action>SPEED_DIAL7</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description></description>
  <icon></icon>
</Button>

<Button>
  <title>SpeedDial#8</title>
  <action>SPEED_DIAL8</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description></description>
  <icon></icon>
</Button>

<Button>
  <title>SpeedDial#9</title>
  <action>SPEED_DIAL9</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description></description>
  <icon></icon>
</Button>

<Button>
  <title>Call</title>
  <action>CALL</action>
  <value></value>
  <enabled>true</enabled>
  <confirm>false</confirm>
  <description></description>
  <icon>Default</icon>
</Button>

<Button>
  <title>StartApp</title>
  <action>START_APP</action>
  <value>Camera</value>
</Button>
<enabled>true</enabled>
<confirm>false</confirm>
<description/></description>
<icon>Default</icon>
</Button>
<Button>
<title>LogMarker</title>
<action>LOG_MARKER</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon>Default</icon>
</Button>
<Button>
<title>Blank</title>
<action>BLANK</action>
<value></value>
<enabled>true</enabled>
<confirm>false</confirm>
<description></description>
<icon>Default</icon>
</Button>
</Dashboard>
...
...<CallButtons>
  <Button>
    <title>AddCall</title>
    <action>ADD_CALL</action>
    <value></value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description></description>
    <icon>Default</icon>
  </Button>
  <Button>
    <title>Home</title>
    <action>HOME</action>
    <value></value>
    <enabled>true</enabled>
    <confirm>false</confirm>
    <description></description>
    <icon>Default</icon>
  </Button>
  <Button>
    <title>Hold</title>
    <action>HOLD</action>
    <value></value>
    <enabled>false</enabled>
    <confirm>false</confirm>
    <description></description>
    <icon></icon>
  </Button>
  <Button>
    <title>Resume</title>
  </Button>
</CallButtons>
<action>RESUME</action>
<value></value>
<enabled>false</enabled>
<confirm>false</confirm>
<description></description>
<icon>Default</icon>

</Button>
</CallButtons>
</WFConnect>
Configuring a Proxy Server

To activate WFC Voice, one or more licenses must be retrieved from one of the following types of license sources:

- Local license server
- Cloud license server.

A proxy server is required when using a device that does not have direct access to the license source. For example, when a device is connected to a local network.

Figure 48  Proxy Server Configuration

To configure a proxy server:

1. Ensure the proxy server and DNS server are running.
2. Ensure the device running WFC Voice is connected to the DNS server.
3. In the DNS server, change the DNS information to resolve the licensing server domain to the proxy server.
   The default license server domain is: zebra-licensing.flexnetoperations.com.
4. In the proxy server, allow internet traffic on port 443.
This section provides an overview of the ports and protocols WFC Voice uses on supported Zebra devices. Zebra devices may contain applications that use the same ports and protocols for normal operation as WFC Voice. Refer to the application documentation for more information.

### Table 10  Ports for Advanced Features

<table>
<thead>
<tr>
<th>Port</th>
<th>Destination</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>443</td>
<td><a href="https://zebra-licensing.flexnetoperations.com">https://zebra-licensing.flexnetoperations.com</a></td>
<td>License registration and validation for WFC Voice.</td>
</tr>
<tr>
<td>5060</td>
<td>Call Manager server(s)</td>
<td>SIP messaging to Call Manager. To use a different port, change in both the device configuration and PBX Call Manager.</td>
</tr>
<tr>
<td>69</td>
<td>TFTP server(s)</td>
<td>TFTP services download.</td>
</tr>
<tr>
<td>51000 – 51025</td>
<td>RTP Traffic to other devices</td>
<td>To use a different port, change in the device configuration.</td>
</tr>
<tr>
<td>80</td>
<td>WebServer</td>
<td>HTTP, HTTPS, or TFTP file download of the WFC Voice Configuration file, and the contacts list CSV file, if available.</td>
</tr>
</tbody>
</table>