

PTT Pro for Android

Workcloud Communication



ZEBRA

Configuration Guide

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Introduction

The PTT Pro for Android client is a feature-rich push-to-talk client that supports advanced enterprise features. The client includes features supported through the Workcloud Communication PTT Pro Management Portal and advanced functionality supported through JSON configuration elements. The JSON configuration elements are the subject of this guide.

Processing the Configuration File

The PTT Pro for Android client provides features that are not controlled by the PTT Pro Management Portal. The client provides several methods to configure these parameters when a user signs in to a device.

When the user signs out, however, these parameters are reset. This creates a problem for customers using OAuth/ADFS, where users frequently sign out and in. The supported intents described in this guide provide a mechanism where the customer can specify default parameters for their environment, which are used by the client regardless of which user signs in.

A configuration is applied to the general profile on the device. This means the configuration is retained across different users until the parameters are reset to a default value through an intent or a new configuration is applied through an intent. After the JSON configuration is processed and loaded into private, secure storage of the PTT Pro client, the file is deleted.

- At boot-up, the client reads configurations from the private storage.
- At sign-in, the client reads configurations from the private storage.

Enable and Apply the Configuration to a Device

The configuration specified in the JSON file is applied to the general profile on the device. The configuration persists across users until the configuration is changed.

The intents and actions for applying a configuration to the PTT Pro for Android clients are described in the Workcloud Communication PTT Pro for Android Programmer Guide.

Setting the Configuration

Use an intent to process or reset a configuration applied through the `WFCPTTProDefault.json` file.

The intents below include two parameters:

- `configpath` is a string of the file path name and location of the JSON file.

- `resetconfig` will function without an existing file name.
- Send an intent to force PTT Pro for Android to read its configuration file.
 - For Android 10 and earlier use:

```
adb shell am start -a com.symbol.wfc.pttpro.ACTION_DEFAULT_CONFIG --es "configpath" "/sdcard/WFCPTTProDefault.json"
```

- For Android 11 and later use:

```
adb shell am start -a com.symbol.wfc.pttpro.ACTION_DEFAULT_CONFIG --es "configpath" "/enterprise/device/settings/pttpro/WFCPTTProDefault.json"
```

After the configuration is successfully processed and put into protected storage, the JSON file is deleted because it can include the OAuth Client ID and the OAuth Client secret. The configuration remains intact across device reboot and sign-out and sign-in.

- Send an intent to reset the configuration of PTT Pro for Android.
 - For Android 10 and earlier, use:

```
adb shell am start -a com.symbol.wfc.pttpro.ACTION_DEFAULT_CONFIG --es "configpath" "/sdcard/WFCPTTProDefault.json" --ez "resetconfig" true
```

- For Android 11 and later, use:

```
adb shell am start -a com.symbol.wfc.pttpro.ACTION_DEFAULT_CONFIG --es "configpath" "/enterprise/device/settings/pttpro/WFCPTTProDefault.json" --ez "resetconfig" true
```



NOTE: The `resetconfig` intent will function without the file name.

Configure Workcloud Communication PTT Pro with Workcloud Communication Provisioning Manager

Use Workcloud Communication Provisioning Manager to configure PTT Pro for Android on non-Zebra devices. See the Workcloud Communication Profile Manager Provisioning Guide for creating and using tokens to configure the PTT Pro client.

The `pvm-url` parameter allows the user to change the type of Provisioning Manager (Production or UAT).

Table 1 pvm-url Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>pvm-url</code>	Specify the provisioning server type to connect to for one time bootstrap (via ESN)	String	<code>wfctp</code>	<ul style="list-style-type: none"> • <code>wfctp-uat</code> (User Acceptance Testing server) • <code>wfctp</code> (Production server)



NOTE: PTT Pro for Android running on a third-party device cannot be configured with a Workcloud Communication Provisioning Manager token when used in a Workcloud Communication Profile Manager environment.

PTT Pro for Android JSON Configuration Elements

This guide describes the configuration elements available to customize operation. PTT Pro for Android These elements are added to the `WFCPTTProDefault.json` file on the `/sdcard` folder. The JSON file name is case sensitive.

The `/sdcard` is the default search path for the JSON file by the client. If the file is not found in that folder, the client searches the `/sdcard/WFCConnect` folder, commonly found in the client when the Workcloud Communication Enterprise Voice client is installed. If the client does not find the JSON file in either folder location, default values are used.



NOTE: Starting with Android 11, use the `/enterprise/device/settings/pttpro/` location for the configuration file on Zebra devices. For non-Zebra devices, use Workcloud Communication Provisioning Manager to configure Workcloud Communication PTT Pro.

Show Email Support

This parameter provides the user with the ability to send an email with logs to the PTT Pro support portal. By default, this option is off.

Table 2 showEmailSupport Parameters

Parameter	Description	Type	Default Value	Configurable Values
showEmailSupport	When enabled, this parameter enables the user to send an email with logs into the PTT Pro support portal.	Boolean	false	true or false

Figure 1 PTT Pro for Android Without Email Support Option

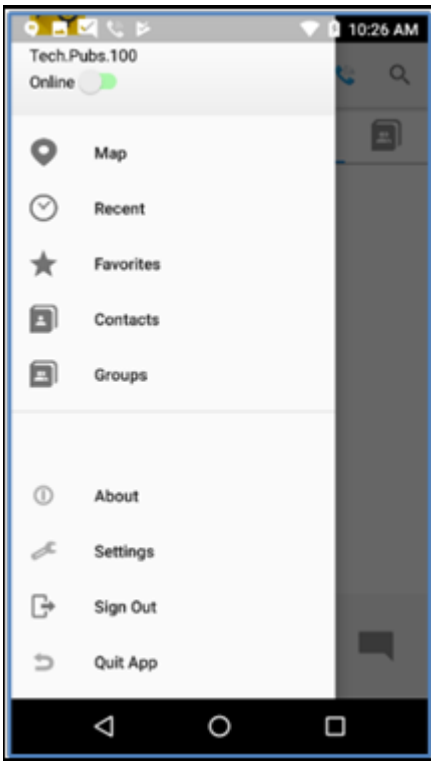
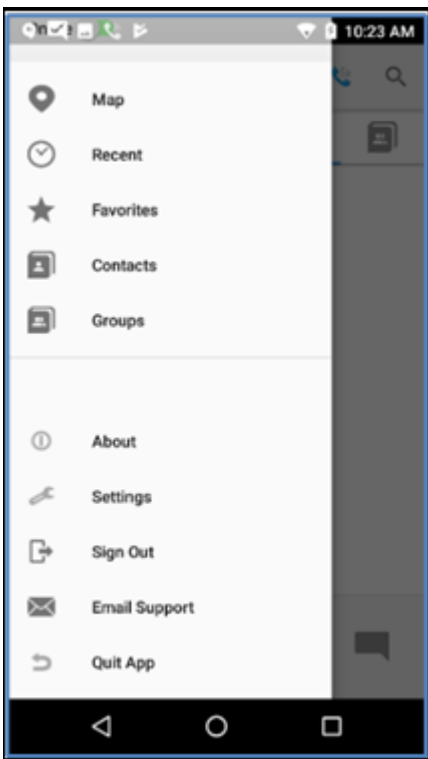


Figure 2 PTT Pro for Android with Email Support Option



Allow Browser

If the web browser is launched from a received message, for example, and `allowBrowser` is true, the browser displays and provides the ability to modify the URL. When `allowBrowser` is false, the browser is in Web View mode and the URL is not shown.

Table 3 allowBrowser Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>allowBrowser</code>	When true, the browser shows and provides the ability to modify the URL.	Boolean	true	true or false

Figure 3 PTT Pro for Android with allowBrowser False

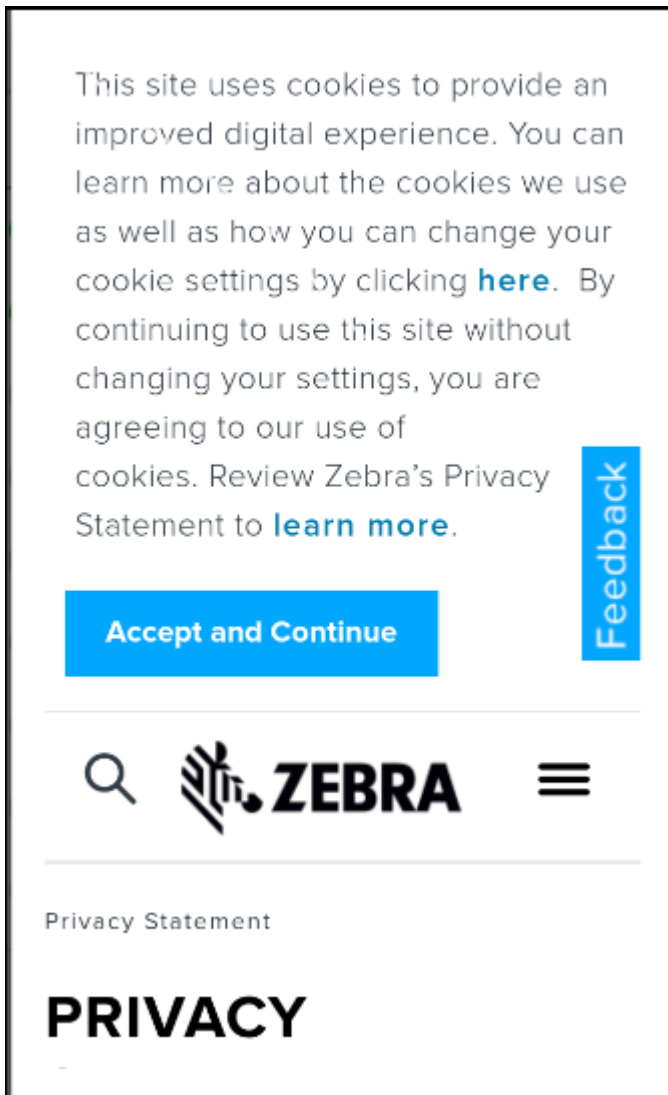
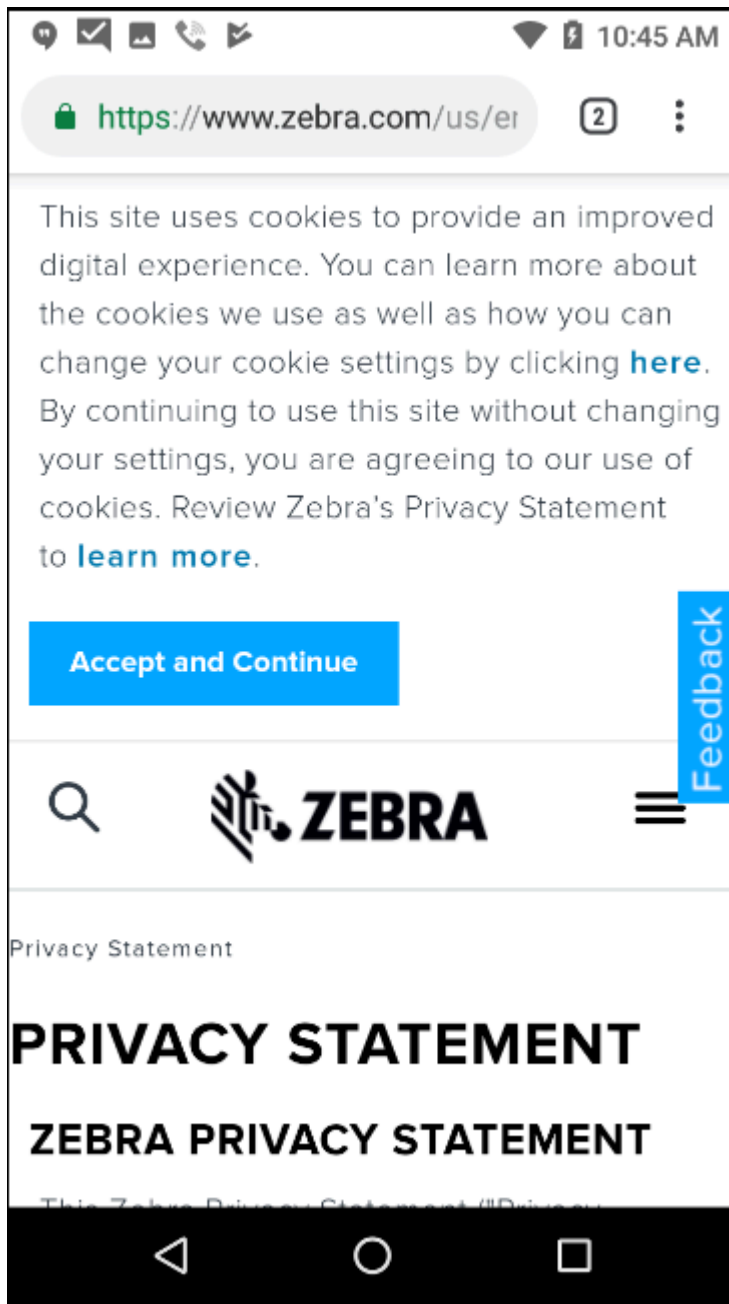


Figure 4 PTT Pro for Android with allowBrowser true

Keep Last Call Selection

This setting is convenient for a user that repeatedly makes PTT calls to the same recipients. This setting retains the call recipient list from the previous call. The user can call the same recipients for subsequent calls by pressing the soft or hard PTT button.



NOTE: Putting PTT Pro for Android in the background clears the selected list.

Table 4 Keep Last Call Selection Behavior

Default Callee	Keep Last Selection	App in Foreground	App in Background	Hard Button	Soft Button	Results
False	False	Yes		Yes		No PTT (no recipient selected)
		Yes			Yes	No PTT (no recipient selected)
			Yes	Yes		No PTT (no default callee)
			Yes		Yes	No PTT (soft button not available)
False	True	Yes		Yes		PTT to last called recipient
		Yes			Yes	PTT to last called recipient
			Yes	Yes		No PTT (app in background and no default callee)
			Yes		Yes	No PTT (soft button not available)
True	False	Yes		Yes		PTT to default callee (no selected user or group)
		Yes			Yes	PTT to default callee (no selected user or group)
			Yes	Yes		PTT to default callee
			Yes		Yes	No PTT (soft button not available)
True	True	Yes		Yes		PTT to last selected recipient
		Yes			Yes	PTT to last selected recipient
			Yes	Yes		PTT to default callee
			Yes		Yes	No PTT (soft button not available)

Table 5 keepLastSelectionAfterCall Parameters

Parameter	Description	Type	Default Value	Configurable Values
keepLastSelectionAfterCall	When enabled, the client retains the last used PTT recipient(s) for the next PTT call. The recipient can be a user, ad hoc group, or group.	Boolean	false	true or false

Show Group Members Headers

This parameter enables the user to view group members by Initiators and Receivers. When true, members are grouped, and all members are shown. When false, only Receivers are shown in the group list. This

parameter is useful for Dispatch Groups with many members and Initiators and Receivers are often defined.

Table 6 showGroupMemberHeaders Parameters

Parameter	Description	Type	Default Value	Configurable Values
showGroupMemberHeaders	This setting enables the user to view group members by Initiators and Receivers.	Boolean	false	true or false

Figure 5 showGroupMemberHeaders Set to True

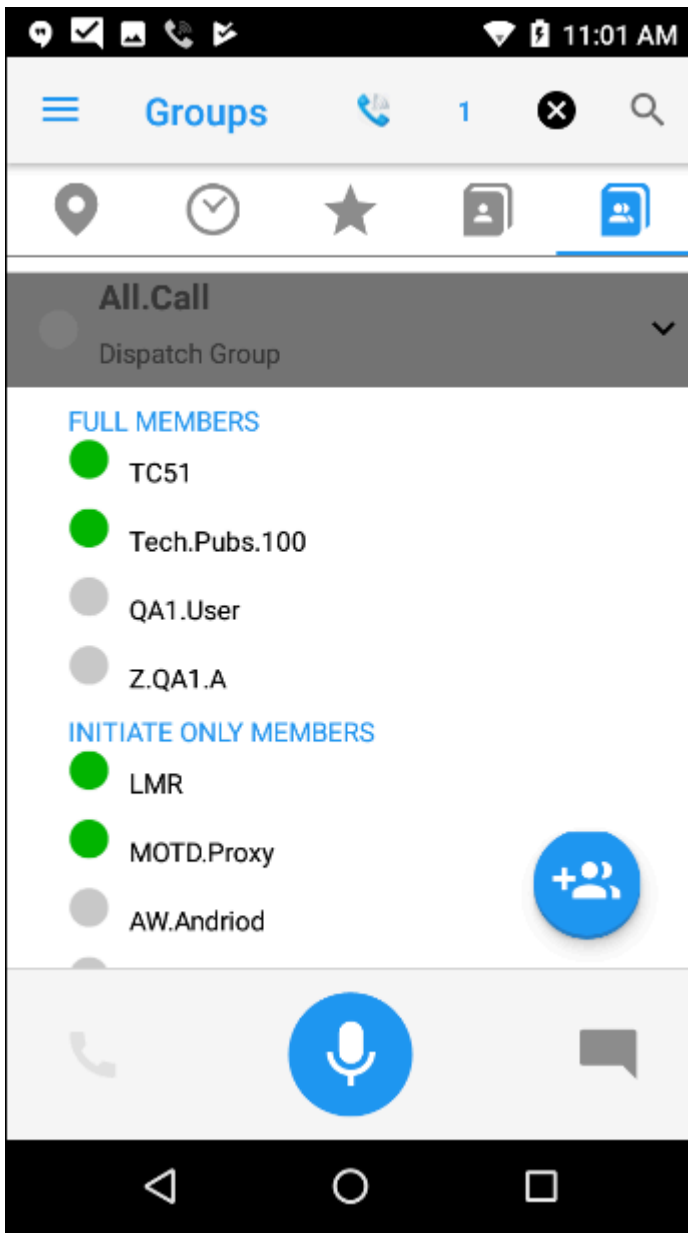
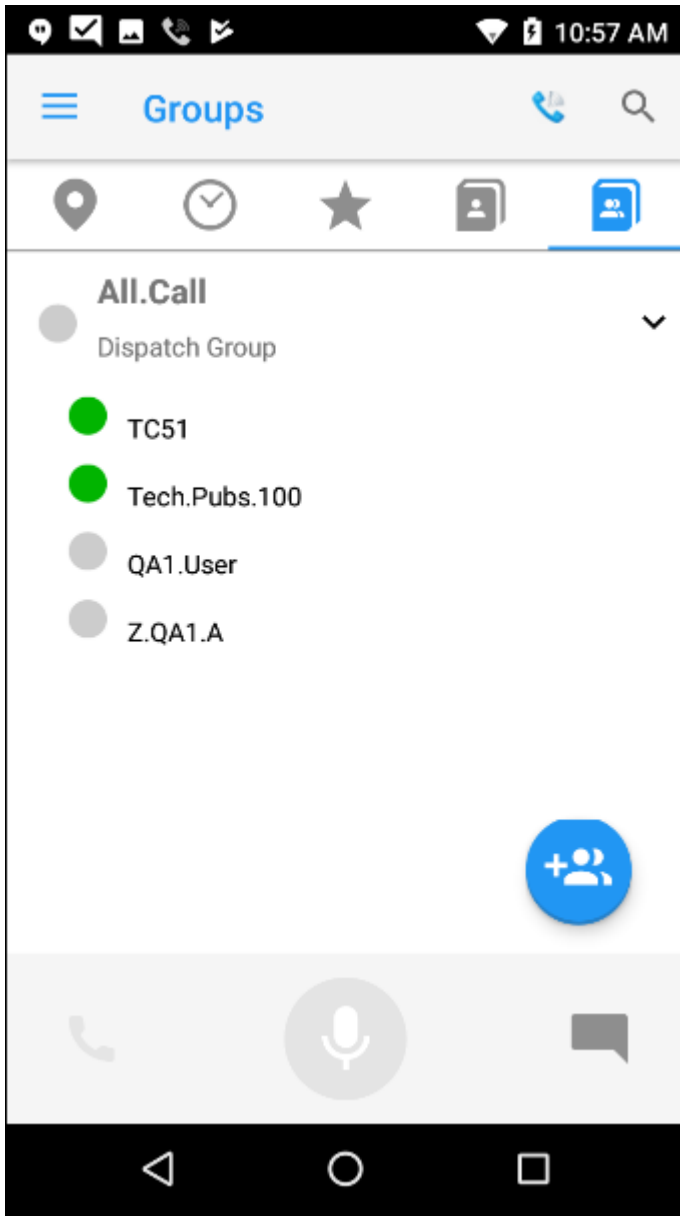


Figure 6 showGroupMemberHeaders Set to False



Voice Commands

The voice commands parameters allow an administrator to enable and configure the Voice Command feature of PTT Pro for Android.

Table 7 Voice Command Parameters

Parameter	Description	Type	Default Value	Configurable Values
vaVoiceCommandStatus	Displays the status of the Voice Command feature (enabled/disabled) and allows the user to change the status.	Integer	2	There are 3 possible values: <ul style="list-style-type: none"> When 0, the client does not show the status and the user cannot enable or disable voice command. When 1, the client shows the status but the user cannot enable or disable voice commands. When 2, the client shows the status and the user can enable or disable voice commands.
vaEnableVoiceCommand	When true, enables voice commands.	Boolean	false	true or false
vaMessageTargetAskConfirmation	When true, the client asks the user to confirm the intended recipient of the message.	Boolean	true	true or false
vaMessageDetailAskConfirmation	When true, the client asks the user to confirm the message contents.	Boolean	false	true or false
vaPTTTargetAskConfirmation	When true, the client asks the user to confirm the intended recipient of the PTT call.	Boolean	true	true or false
vaAnnounceByFullNameFirst	When true, the client announces the first name and last name (full name) unless two users with the same full name.	Boolean	true	true or false

Table 7 Voice Command Parameters (Continued)

Parameter	Description	Type	Default Value	Configurable Values
vaEachMessageDeleteConfirmation Requires PTT Pro 3.3.10112 or later.	When true, the client asks the user to confirm deleting a message with "Are you sure you want to delete the message?".	Boolean	true	true or false
vaVoiceCommandBlockedInLockScreen Requires PTT Pro 3.3.10112 or later.	When true, it prevents the client from performing certain voice commands when the device is locked	Boolean	true	true or false
showVoiceCommandUI Requires PTT Pro 3.3.10121 or later.	When true, it enables the Voice Activity Screen.	Boolean	true	true or false

OAuth Configuration

The variability of customer environments and their authentication requirements is addressed with the oAuthClientSecret, oAuthClientID, and oAuthBasicHeader parameters.

The Client Secret and Client ID information is provided by the customer. When this information is presented by to the PTT Pro for Android authenticating service as an access token. If this information is not provided or is not presented exactly, access is not possible,

Table 8 OAuth Configuration Parameters

Parameter	Description	Type	Default Value	Configurable Values
oAuthClientID	Client ID	String	368xxxxxxxxxxxxxxxx-xxxxxxxx-xxxxxxxxxxxxbda If using the client's default client ID, there is no need to configure this.	string
oAuthClientSecret	Client Secret	String	empty	string
oAuthBasicHeader	Determines the location of the ClientID and Client Secret when the device submits the access request. When set to false, the credentials are placed in the request body. When set to true, the credentials are placed in the request header.	Boolean	false	true or false

OAuth 2.0 Device Authorization Grant Support

Input-constrained devices that connect to the internet, rather than authenticate the user directly, ask users to go to a link on their computer or smartphone to authorize the device. This avoids a poor user experience for devices that do not have an easy way to enter text. PTT Pro for Android supports OAuth 2.0 Device Authorization Grant (Flow) with supported Identity Providers (IdP). To enable this support, configure the following parameters in PTT Pro for Android.



NOTE: A Zebra administrator will configure the appropriate OAuth parameters, including the client secret and the authorization URL when creating the customer in Workcloud Communication Provisioning Manager.

Prerequisites

- ESN/AID of the device must be added to the **Devices** tab in the Workcloud Communication PTT Pro Management Portal.
- must be configured to use OAuth under the **Users** tab in the Workcloud Communication PTT Pro Management Portal.

Requires PTT Pro 3.3.10223 or later.

Table 9 OAuth Parameters for Device Authorization Grant Support

Parameter	Description	Type	Default Value	Configurable Values
enableDeviceAuth	Uses the OAuth device authorization grant.	Boolean	false	<ul style="list-style-type: none"> • true • false
enableTokenValidation	PTT Pro client signs out when the refresh token expires, regardless of the client's status. This parameter requires that enableDeviceAuth is true.	Boolean	false	<ul style="list-style-type: none"> • true enables token validation • false turn off token validation



NOTE: These parameters are only supported for the standalone PTT Pro client. A Profile Manager deployment is not supported.

Sign In Using Device as Code

Starting with PTT Pro for Android 3.3.10256, the enableDeviceAuth parameter displays a QR code to provision a device.

UI Examples

Figure 7 WS50 with Scannable Code



Figure 8 TC78 with Scannable Code

Enable Single Sign On (SSO)

When PTT Pro for Android is configured to use OAuth authentication, an administrator can configure the OAuth sign-in process to authenticate additional apps.

Requires PTT Pro 3.3.10235 or later.

PTT Pro for Android users authenticate through a web page provided by the PTT app, referred to as Android WebView. The `use_webview` parameter enables the use of a Chrome custom tab for OAuth authentication.

When a user authenticates through the Chrome custom tab:

- If another app has authenticated to the same OAuth URL, PTT Pro for Android does not prompt for credentials and opens to the default view.
- If another app has not been authenticated, the OAuth content displays in the custom tab, and the PTT user has to provide the credentials. After the user logs in, PTT Pro for Android opens to the default view.



NOTE: This parameter requires that OAuth is configured for PTT Pro for Android. Refer to [OAuth Configuration](#) for more information.

Table 10 use_webview Parameters

Parameter	Description	Type	Default Value	Configurable Values
use_webview	Controls whether the OAuth login displays in the WebView or the Chrome custom tab. Set this parameter to false to enable the custom tab.	Boolean	true	true or false
custom_tab_logout_api	The administrator must specify the logout URL so that the user can logout from the custom tab.	String	N/A	N/A

JSON Example

The following code snippet for `WFCPTTProDefault.json` provides an example for enabling single sign-on. You need to provide values for `client_id`, `client_secret`, and `custom_tab_log_api`.

```
{
  "custom_tab_logout_api": "http://auth-server/auth/realms/{realm-name}/protocol/openid-connect/logout",
  "oAuthClientID": "client_id",
  "oAuthClientSecret": "client_secret",
  "use_webview": false
}
```

When enabled, the client displays the following behavior:

- If a user logs in to a second device without logging out of the first device, then the first device may not operate as expected.
- The activation screen briefly displays before launching the WebView or custom tab.
- If the user taps the close menu or backpress, the activation screen displays.
- When a user signs out, the custom tab displays and the user needs to consent to log out. The user is signed out automatically, even if the user does not provide consent.

Custom User Agent String with OAuth WebView Login

This parameter allows an administrator to configure a custom User Agent (UA) string for OAuth WebView login.

Requires PTT Pro 3.3.10177 or later.



NOTE: This feature is not available with Profile Manager.

An example of the default User Agent string:

```
Mozilla/5.0 (Linux; Android 11; TC52AX Build/11-16-05.00-RG-U00-STD-HEL-04; wv)
```

AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Chrome/102.0.5005.78 Mobile
Safari/537.36

An administrator can configure `customUserAgentString` as follows:

```
customUserAgentString: WFC Android/PTTPro
```

Table 11 `customerUserAgentString` Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>customUserAgentString</code>	Configure a custom User Agent (UA) string for OAuth WebView login.	String	empty	Valid User Agent String

Location Area Service

Refer to the Workcloud Communication Location Area Service Customer Administrator Guide for the JSON configuration parameters of the Location Area Service.

Ignore the Power Optimization Setting for EC30

The Zebra EC30 device running Android 10 or later enforces power optimization settings from the BSP. The `ignorePowerOptimizedSysProperty` allows an administrator to disable the power optimization settings in the BSP.

Requires PTT Pro 3.3.10110 or later.

Table 12 `ignorePowerOptimizedSysProperty` Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>ignorePowerOptimizedSysProperty</code>	Disable the BSP power optimization settings for the EC30 device.	Boolean	false	true or false

Configure PTT Pro for Android with the Workcloud Communication Profile Client

When PTT Pro for Android is used with the Workcloud Communication Profile Client, an administrator can control the visibility of certain menu items.

Table 13 Configuration Parameters Used with Workcloud Communication Profile Client

Parameter	Description	Type	Default Value	Configurable Values
<code>profileSwitchRoleAllow</code>	When true, it enables the user to see the Switch Role menu item.	Boolean	true	true or false
<code>profileSignOutAllow</code>	When true, it enables the user to see the Sign Out menu item.	Boolean	true	true or false

Task Tracker Configuration

Refer to the Workcloud Communication PTT Pro Task Tracker Customer Administrator Guide for the PTT Pro for Android JSON configuration parameters.

Configure Task Tracker Associate Display Name

Configure how an assignee name displays in Task Tracker screens.

Requires PTT Pro 3.3.10202 or later.

An administrator can use the `task_tracker_assignee_display_type` parameter to set the assignee display name for the following screens:

- Create Task assignee list
- Task Details screen
- Edit Task screen
- Edit Task screen assignee list

Table 14 task_tracker_assignee_display_type Parameters

Parameter	Description	Type	Default Value	Configurable Values
task_tracker_assignee_display_type	Determines how the PTT Pro user name is displayed in the Task Tracker screens. This parameter applies to task assignees, it does not change the name of the Supervisor.	Integer	0 - username	<ul style="list-style-type: none"> • 0 - username • 1 - FirstName LastName • 2 - LastName, FirstName • 3 - FirstName • 4 - LastName

Worker Duress Configuration

Worker Duress enables a site manager, for example, a Hospital Ops Manager, Store Manager, or Warehouse Manager can enable their staff to raise an alert through their mobile device when in duress or panic situation. The alert, sent to designated people, shows physical presence information about the affected staff seeking help. Once notified, the designated recipients can arrange for help.

Requires PTT Pro 3.3.10134 or later.

Table 15 Worker Duress Parameters

Parameter	Description	Type	Default Value	Configurable Values
drop_detection_feature_enable	When true, enables Work Duress.	Boolean	1	1 or 0
drop_detection_auto_alert_title	Specifies the title on the first screen when Worker Duress is initiated by Drop Detect. If the specified title length exceeds what can be displayed on a single line, the title is cropped to fit with an ellipsis.	String	Drop Detected	User-specified string.
drop_detection_manual_alert_title	Specifies the title on the first screen when Worker Duress is initiated by the designated key press. When the value is not set or is empty, the title is Duress Detected. If the specified title length exceeds what can be displayed on a single line, the title is cropped to fit with an ellipsis.	String	Duress Detected	User-specified string.
drop_detection_default_text_message	Specifies the emergency PTT text message sent after the alert time elapses.	String	Empty	User-specified string.
drop_detection_recipient_type	Specifies whether the alert recipient is a group or a user. A value of 1 indicates a group and a value of 0 indicates a user. This value is required when the feature is enabled.	Integer	Empty	1 = group 0 = user
drop_detection_recipient_name	Recipient of the alert message. The value can be a single group or a comma-separated list of users. The group name or user name(s) are case-sensitive and must match the names defined in the PTT Pro Management Portal. A group or user name is required when the feature is enabled.	String	Empty	List of user names or groups.

Table 15 Worker Duress Parameters (Continued)

Parameter	Description	Type	Default Value	Configurable Values
drop_detection_alarm_duration	Specifies the duration, in seconds, of the alarm on the initiator's device when an alert is triggered. The value must be greater than 30 seconds and less than 10 minutes (600 seconds). A value less than 30 seconds defaults to 30 seconds and a value greater than 600 seconds defaults to 600 seconds. An invalid value defaults to 30 seconds.	Integer	30 seconds	A minimum value of 30 seconds and a maximum value of 600 seconds.
drop_detection_skip_first_screen	Enables or disables the countdown screen on the initiator's device. A value of 1 skips the countdown screen and a value of 0 enables the countdown screen.	Boolean	0	0 enables the countdown screen. 1 disables the countdown screen.

Example

```
{
  "drop_detection_feature_enable": "1",
  "drop_detection_auto_alert_title": "Free Fall Detected",
  "drop_detection_manual_alert_title": "Duress Initiated",
  "drop_detection_default_text_message": "Help me! I am in duress",
  "drop_detection_recipient_type": "1",
  "drop_detection_recipient_name": "Duress.Group",
  "drop_detection_alarm_duration": "30",
  "drop_detection_skip_first_screen": "0"
}
```

Enable Sign Out in Cradle

When this feature is enabled, and the device is connected to power or the device is placed in a powered cradle, PTT Pro for Android signs out the user after giving 15 seconds of warning with a notification. The user can cancel the sign-out process within 15 seconds.

Requires PTT Pro 3.3.10166 or later.



NOTE: This feature is not available in a Profile Manager environment.



NOTE: If the device is placed inside a Zebra Workstation Connect (ZWC) enabled cradle and a secondary display is available, PTT Pro for Android will not sign out the user.

Table 16 signOutOnPowerEnable Parameters

Parameter	Description	Type	Default Value	Configurable Values
signOutOnPowerEnable	When true, signs out the user when the device is connected to power or the device is placed in a cradle.	Boolean	false	true or false

DnD Mode Reminder

This feature enables an administrator to configure an audio reminder that the DnD mode is enabled on the device. When this feature is enabled, the client generates a notification tone and displays a brief message indicating that the DnD mode is enabled.

Requires PTT Pro 3.3.10094 or later.

When DnD is enabled, the reminder interval in minutes can be set. While in DnD, at the configured interval, the device's default notification tone is heard and a momentary message is displayed.

Figure 9 PTT Pro for Android DnD Reminder Message

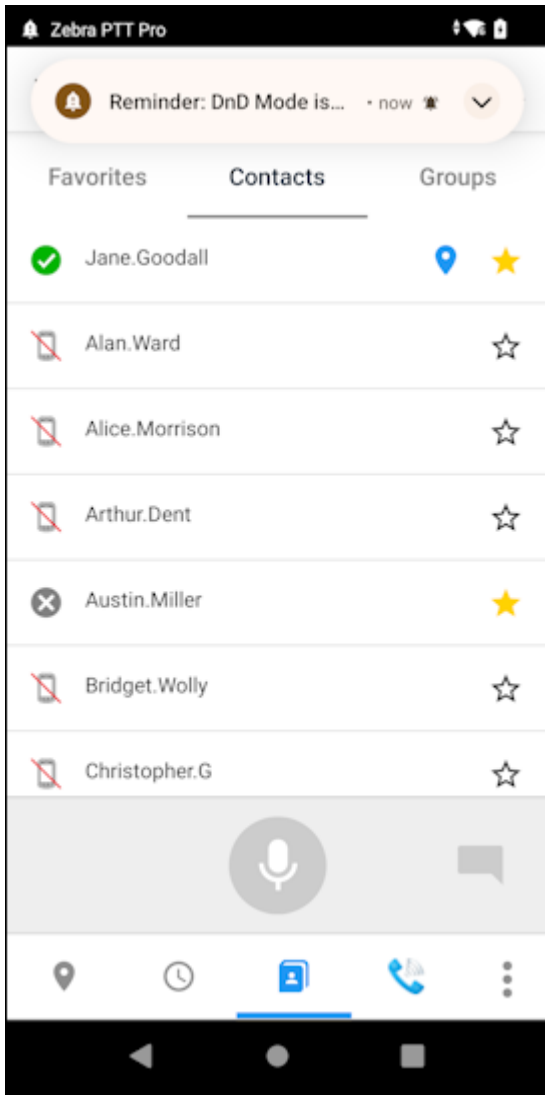
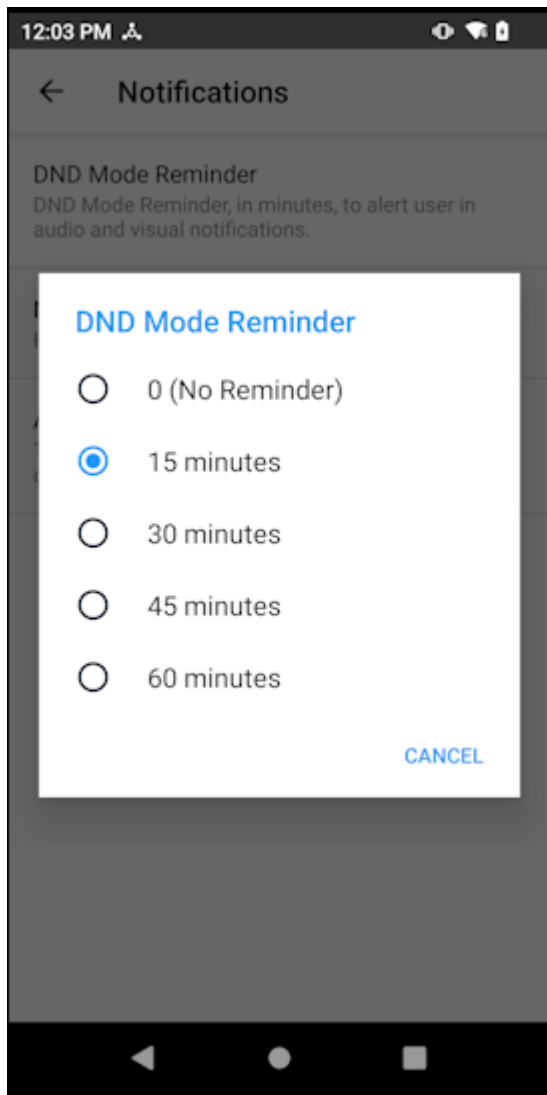


Table 17 dndModeReminder Parameters

Parameter	Description	Type	Default Value	Configurable Values
dndModeReminder	DND visual and sound notification.	integer	0	<ul style="list-style-type: none"> • 0 - No reminder • 15 - 15 minutes • 30 - 30 minutes • 45 - 45 minutes • 60 - 60 minutes

This setting can be accessed on the client under the Notifications settings: **Settings > Notifications > DND Mode Reminder.**

Figure 10 DnD Reminder Setting Options

Enable DnD in Cradle

When this feature is enabled, and the device is connected to power or the device is placed in a powered cradle, PTT Pro for Android puts the user in DnD (Do not Disturb) mode. The DnD mode is only activated if the user is not already in the DnD mode. When the device is removed from the cradle, DnD mode is disabled if it was enabled.

Requires PTT Pro 3.3.10176 or later.



NOTE: This feature is not available in the Profile Manager environment.



NOTE: If the device is placed inside a Zebra Workstation Connect (ZWC) enabled cradle and a secondary display is available, PTT Pro for Android will not enable DnD mode.

Table 18 activate_dnd_mode_while_charging Parameters

Parameter	Description	Type	Default Value	Configurable Values
activate_dnd_mode_while_charging	When true, enables DnD mode when the device is connected to power or placed in a powered cradle	Boolean	false	true or false

Automatically Disable DnD Mode

When a user enables DnD mode on a device and the device is placed in a charger, DnD mode remains enabled. If another user takes the device, they may not notice that DnD is enabled. Use the `auto_cancel_dnd` parameter to automatically disable DnD mode when a device is removed from the charger.

Requires PTT Pro 3.3.10230 or later.



NOTE:

- This parameter requires that `activate_dnd_mode_while_charging` is not enabled.
- This parameter does not override the Activate DnD on Silent Mode or the Activate DnD on Vibrate Mode settings in PTT Pro for Android.

Table 19 auto_cancel_dnd Parameters

Parameter	Description	Type	Default Value	Configurable Values
auto_cancel_dnd	Disables DnD mode when a device is removed from the charger.	Boolean	false	true or false

Zebra Enterprise Messaging Service Configuration

Refer to the Zebra Enterprise Messaging Service Customer Administrator Guide for PTT Pro JSON configuration parameters.

ZEMS Urgent Message Configuration

Refer to the Zebra Enterprise Messaging Service Client User Guide for JSON configuration parameters that control notification intervals for urgent messages.

Navigation Bar Button Arrangement

The `navBarOrder` parameter provides the administrator with the ability to arrange the button layout in the navigation bar. Each button is represented by an integer, 0 to 6, to indicate its position in the navigation bar.

The rules for arranging the buttons are:

- The integer values must be between ≥ 0 and ≤ 6
- An integer cannot repeat (no duplicates)

- The number of buttons must be exactly 7



NOTE: The More Apps (overflow menu) is always the last option and is not configurable with the `navBarOrder` parameter.

Parameter	Description	Type	Default Value	Configurable Values
<code>navBarOrder</code>	Integers representing the navigation bar buttons are: <ul style="list-style-type: none"> • 0 - Map • 1 - Recent • 2 - Favorite • 3 - Contacts • 4 - Groups • 5 - Experts (SME) • 6 - Zebra Voice 	Integer Array	PTT Pro version to 3.3.10128 the button order was [0,1,2,3,4,5] PTT Pro version 3.3.10133 and above, the default button order was [0,1,2,3,4,5,6] PTT Pro version 3.3.10205 and above, the Favorite and Groups buttons are on the Contact screen. Changing the order of 2 and 4 does not affect the client configuration.	[0,1,2,3,4,5,6]

Enable PTT Button Support for Bluetooth Headsets

PTT Pro for Android uses Zebra Communication Central to enable the PTT button on supported Bluetooth headsets. Zebra Communication Central must be configured to receive `onTap`, `onDoubleTap`, and `onLongPress` events from the Bluetooth headset.

Zebra Communication Central is a separate APK and must be installed on the device with PTT Pro. Refer to the Zebra Workcloud Communication Central Installation and Configuration Guide for more information.

Zebra Communication Central requires PTT Pro version 3.3.10199 or later and Zebra Communication Central 1.0.22306 or later.

Table 20 headsetType Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>headsetType</code>	When set to 6, it enables Zebra Communication Central to receive events from supported Bluetooth headsets. Refer to the Workcloud Communication PTT Pro for Android User Guide for a list of headsets and headset types.	Integer	0	<ul style="list-style-type: none"> • 0 = Toggle • 1 = Two Pulse • 2 = Event • 3 = Bluetooth SPP • 4 = Bluetooth LE • 5 = None • 6 = Zebra Communication Central

Beginning with PTT Pro for Android version 3.3.10256, the value of `headsetType` persists when an administrator sets the value using the `WFCPTTProDefault.json` configuration file or Provisioning Manager. The value persists when users log out and log in. The administrator must change the value of `headsetType` to modify the value.

Double PTT Key Press to Reject PTT Call

This feature allows the user to terminate their current call by pressing the physical PTT button on the device twice. If enabled, the second button press must occur within the specified time.

Requires PTT Pro 3.3.10090 or later.

Table 21 doubleKeyPress Parameters

Parameters	Description	Type	Default Value	Configurable Values
doubleKeyPressTimeLimit	Time, in milliseconds, that the user must press the physical PTT button twice to function as a double key press.	Integer	600	<ul style="list-style-type: none"> • 600 • 700 • 800 • 900
doubleKeyPressEnable	When true, enables the double key press feature.	Boolean	false	true or false

Support Physical PTT Key on Third-Party Device

PTT Pro for Android operates on both Zebra and third-party Android devices. Customers that use PTT Pro services on a third-party device may want to configure a physical button on the device to activate PTT. Using a physical button for PTT on a third-party device affects certain PTT Pro features.

Voice Commands

The client supports voice commands that are activated by the PTT physical button. If a physical key on the third-party device is configured to initiate a PTT call, the voice commands feature is not available.

Call Rejection

The client supports the ability to reject an incoming call by pressing the physical button. If the physical key is configured to initiate a PTT call, then the call rejection feature is not available.

Initiating a PTT call from a physical key on a third-party device requires the following steps:

- Add a PTT button to your Android application.
- Use intents below to initiate or end a PTT call.

When the button is pressed

```
Intent intent = new Intent("com.symbol.wfc.ptt_pressed");
activity.sendBroadcast(intent);
```

When the button is released

```
Intent intent = new Intent("com.symbol.wfc.ptt_released");
activity.sendBroadcast(intent);
```

PTT Button Behavior Modification

An administrator can modify how PTT Pro for Android handles events generated by a PTT button press.

When the `enablePTTButtonSpecial` parameter is enabled, PTT Pro for Android works as follows:

- The client ignores PTT button events when it is in the background.
- The client process PTT button events when:
 - The client is in the foreground.
 - The client is in a PTT call.
 - The user presses the soft PTT button.
- The client does not initiate calls to the default callee.
- The client does not respond to voice commands in the background.

Requires PTT Pro 3.3.10223 or later.

Table 22 PTT Button Modification Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>enablePTTButtonSpecial</code>	When enabled, causes the client to interpret PTT button presses as described above.	Boolean	false	true false

Send PTT Pro for Android to Background

The `sendAppToBackground` parameter sends PTT Pro for Android to the background after a PTT call ends and the app was in the background before the call. An administrator can apply this parameter using the JSON configuration file or with a token using Provisioning Manager. When enabled, this parameter persists when users log out or log in.

Requires PTT Pro 3.3.10256 or later.

Table 23 `sendAppToBackground` Parameters

Parameter	Description	Type	Default Value	Configurable Values
<code>sendAppToBackground</code>	When true, sends PTT Pro to the background when a PTT call ends and the app was in the background before the call.	Boolean	False	<ul style="list-style-type: none"> • true - enables the parameter • false - disables the parameter



NOTE: This parameter requires that the Foreground app on Call setting is enabled in the client.

Miscellaneous Settings

The settings described below control different aspects of PTT Pro for Android.

Parameters	Description	Type	Default Value	Configurable Values
clusterStartThreshold	In the Map view, the device location marker shows devices in a cluster when the number of devices exceeds the threshold value.	Integer	10	
showResetDeviceConfig	When true, displays the Reset Device Config menu option. This option is only available for OAuth configurations and is shown in the Login Web View screen.	Boolean	false	true or false
showAdhocCallWarningOn	When true, displays a warning message before making an Adhoc call when the number of contacts exceeds the adhocCallWarningThreshold.	Boolean	false	true or false
adhocCallWarningThreshold	Specifies the maximum number of contacts that can be included in an Adhoc call before PTT Pro displays a warning message.	Integer	50	
hideTabs	When true, it enables the user to hide tabs in PTT Pro.	Boolean	false	true or false

Message of the Day (MOTD)

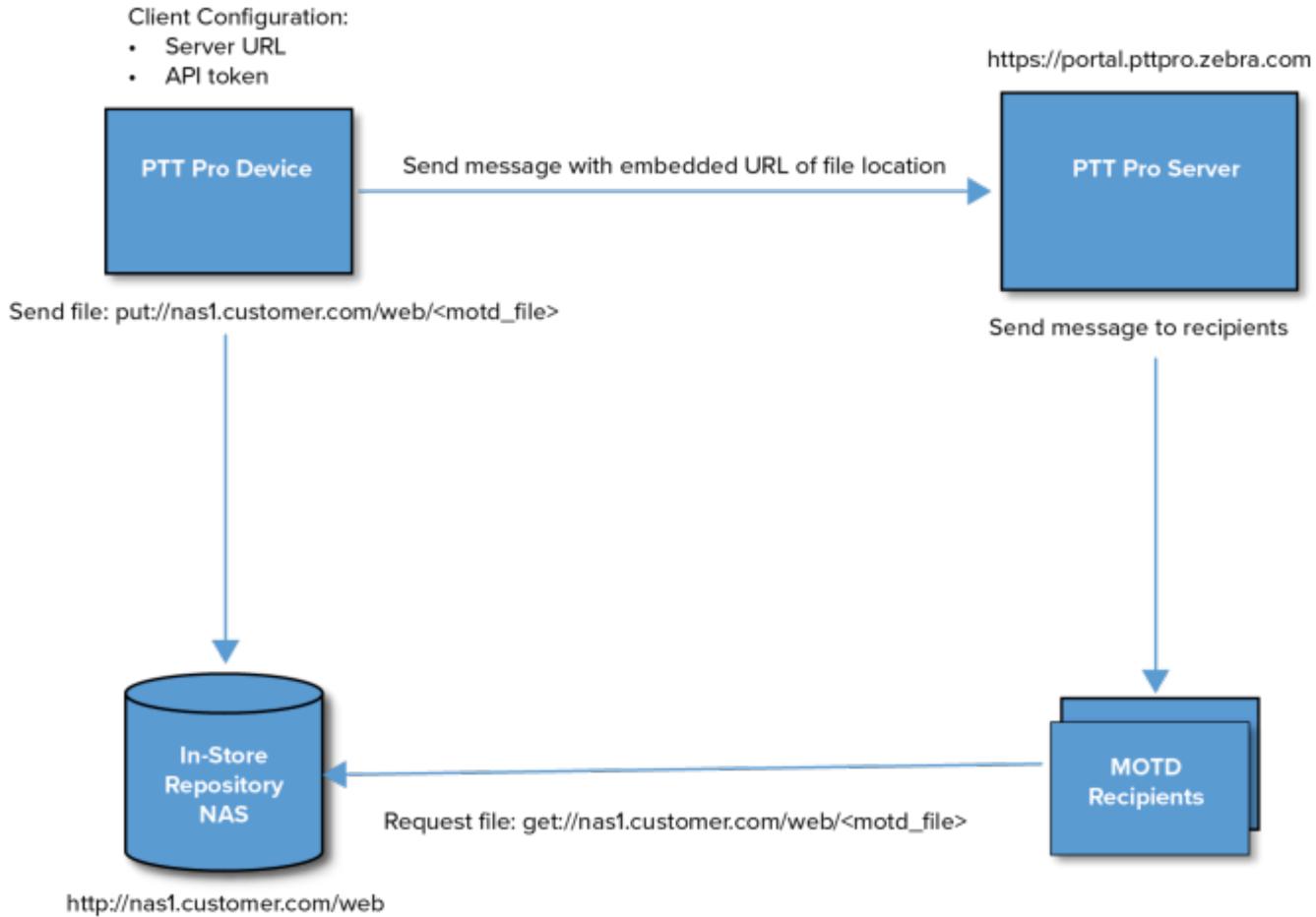
MOTD is the ability of a PTT Pro user to send a message with an audio or video file to a list of recipients. When the recipients log on, or when the message is received, the attached media file is played on the recipient's device. The media file can be replayed as many times as required.

MOTD recipients can be any PTT Pro user with messaging enabled; no additional permissions or group membership is required. Sending a MOTD is supported for group messages, ad hoc messages, and one-to-one messages.

MOTD Functionality Model using the NAS

The diagram illustrates the MOTD data flow in the architecture that supports NAS utilizing the PUT Method.

Figure 11 MOTD Data Flow



Enable MOTD

The ability of a user to generate and include MOTD URL references in a message is determined by their group membership.

- If a group member is included in an authorized group, then the Audio and Video message attachment will be allowed in Messaging.
- Any Group name is possible.
- The Groups identified must be those created on the Portal instead of personal or member groups.
- Enablement and usage are configured by tags defined in the `WFCPTTProDefault.json` file
- The `WFCPTTProDefault.json` file should be placed in the appropriate folder for the version of Android.

Elements in the JSON file to control the functionality of MOTD are:

```
"showServerConfig":true,
"serverURL": "http://10.80.213.29:8000",
"allowVideo":true,
"serverUploadHTTPMethod": "PUT",
"allowRecordingGroups": ["store.managers", "store.asm", "store.it.admin"]
```

Enabled MOTD Initiators

The user who initiates a MOTD must be a member of the group configured with MOTD permission. The PTT Pro group must be created through the PTT Pro Management Portal because Personal and Member groups are not supported.

Table 24 allowRecordingGroups Parameters

Parameter	Description	Type	Default Value	Configurable Values
allowRecordingGroups	The allowRecordingGroups JSON parameter specifies the group or groups whose members can initiate a MOTD.	String	empty	See example below

Examples

```
"allowRecordingGroups": ["admin.team", "cashiers", "management"]
```

To initiate a MOTD, the user must be a member with initiating rights in one of these groups.

The allowRecordingGroup also supports the use of departmental wildcards. If the group’s names are prefixed with the department (site location number) for consistency across the enterprise, the wildcard inserts the PTT Pro Department identifier into the allowRecordingGroup string.

In the example above, if the Department is 123456, and the allowRecordingGroup is [{"\$pttDepartment}.admin.team], then the string will be [123456.admin.team].

Additional MOTD Parameters

The JSON parameters provide configure various aspects of MOTD functionality.

Enable Video

Video files are larger and introduce more network overhead. The standard MOTD configuration supports sending both audio and video files. Use this parameter to disable video.

Table 25 allowVideo Parameters

Parameter	Description	Type	Default Value	Configurable Values
allowVideo	When true, enables video attachments in MOTD messages.	Boolean	false	true or false

Enable MOTD Configuration Settings

Determines whether the MOTD configuration settings are displayed in the Settings for the PTT Pro client.

Table 26 showServerConfig Parameters

Parameter	Description	Type	Default Value	Configurable Values
showServerConfig	When true, the device user can view and modify the MOTD configuration.	Boolean	false	true or false

HTTP Upload Methods

Audio and video files can be uploaded to the NAS server using POST or PUT methods.

Table 27 serverUploadHTTPMethod Parameters

Parameter	Description	Type	Default Value	Configurable Values
serverUploadHTTPMethod	Defines the MOTD HTTP transfer method.	String	POST	PUT or POST

In the JSON configuration file:

```
"serverUploadHTTPMethod": "PUT"
```

File Repository URL

This parameter defines the repository destination for audio and video files.

Table 28 serverURL Parameters

Parameter	Description	Type	Default Value	Configurable Values
serverURL	Defines the MOTD file repository URL.	String	empty	See below

In the JSON configuration file:

```
"serverURL": "http://nas1.customer.com/web"
```

Similar to the allowRecordingGroup parameter, serverURL supports the use of wildcards. For example, if the Department name is 123456 and the serverURL is `http://server.{pttDepartment}.customer.com/motd`, then the URL used will be `http://server.123456.customer.com/motd`.

Show MOTD Link

This parameter provides the ability to turn off the URL to the media file sent with the MOTD. This parameter does not change the experience of the sender but changes the what the recipient sees. This parameter does not affect the recipients ability to view or hear the media file.

Table 29 showMotdLink Parameters

Parameter	Description	Type	Default Value	Configurable Values
showMotdLink	When false, the link to the media file in the MOTD message is not shown.	Boolean	true	true or false

MOTD Link Indication String

This parameter provides the ability to prepend a text message to the MOTD message. This helps the recipient to understand the message is an MOTD. The maximum string length allowed is 64 characters.

Table 30 MOTDLinkIndicationString

Parameter	Description	Type	Default Value	Configurable Values
MOTDLinkIndicationString	The string is automatically prepended to the MOTD text message. The maximum length of the string is 64 characters.	String	empty	N/A

Hiding Contacts

Service users are created to support MOTD in the PTT Pro Management Portal. These service users are not useful for PTT Pro so an administrator can hide these service accounts to avoid confusion. Enabling this parameter affects the Contacts, Favorites, and Group Member List views, including group members in the Recent view.

Table 31 hideDisplayStringList Parameters

Parameter	Description	Type	Default Value	Configurable Values
hideDisplayStringList	Hides usernames or groups that match the specified string.	String	empty	See example below

The string is not case sensitive, for example iwG, IWG, and iWg match the same set of users or groups. Consider the following example.

```
"hideDisplayStringList":["Proxy","IWG", "dispatch"]
```

The string "Proxy", "IWG", "dispatch" hides the following usernames:

```
Customer.IWG.1234
Customer.456.IWG
Customer1234.Proxy
CustomerProxyAbcd
Dispatch.User
```

To show all contacts and disable hiding, configure an empty array:

```
"hideDisplayStringList": [],
```

Select the Audio Recorder

This parameter selects the audio recorder that is used to record an audio message. By default, this parameter selects the integrated PTT Pro audio recorder.

Table 32 usePTTProAudioRecorder Parameters

Config String	Description	Type	Default	Configurable Values
usePTTProAudioRecorder	Selects the audio recorder to be used by MOTD recording. When enabled, the integrated PTT Pro recorder will be used. When false, the Android Sound Capture App will be used.	Boolean	true	true or false

Revision History

Change	Date	Description
MN-004641-01 Rev A 3.3.10198	November 2022	First GA version
MN-004641-02 Rev A 3.3.10206	March 2023	New parameters showlasinfo and task_tracker_assignee_display_type; and update to navBarOrder.
MN-004641-03 Rev A 3.3.10233	July 2023	New parameters for OAuth 2.0 Device Authorization Grant.
MN-004641-04 Rev A 3.3.10235	November 2023	New parameters for DnD and Chromium custom tab for OAuth authentication.
MN-004641-05 Rev A 3.3.10250	January 2024	Update to drop_detection_alarm_duration
MN-004641-06 Rev A 3.3.10255	March 2024	New sendAppToBackground and enableDeviceAuth parameters and update to headsetType parameter.

