

Workforce Connect

Interworking Gateway V2



ZEBRA

Customer Administrator Guide

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About This Guide

This guide provides information about how to operate the Zebra Workforce Connect Interworking Gateway V2.

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

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.

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.

When contacting support, please have the following information available:

- Licensing information
- Software version.

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

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

Overview

Introduction

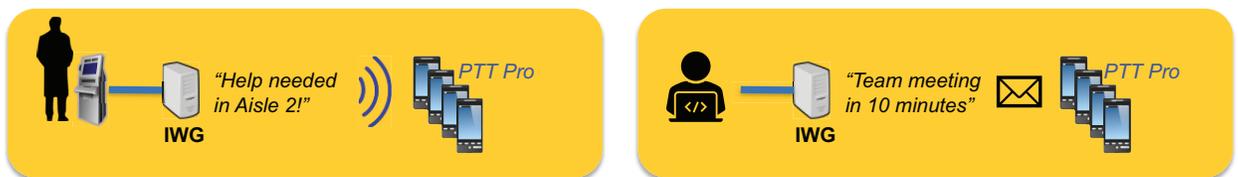
The Zebra Workforce Connect Interworking Gateway (IWG) allows third party applications to submit audio files or text messages to PTT Pro individuals or groups. PTT Pro is a server-based Push-to-Talk service supporting individual and group communications.

The IWG supports interworking via APIs:

- **Announcer REST APIs** - Allows audio messages to be submitted to the IWG with the target endpoints. The audio message is processed and immediately broadcast to available target endpoints. Endpoints which are not available at the time of the broadcast do not receive the message.
- **Messenger REST APIs** - Allows text messages to be submitted to the IWG with the target PTT ProText endpoints. The audio text is processed and sent to the target PTT Pro endpoints. The PTT Pro system can store text messages. Target endpoints which are not available at the time of the broadcast will receive the text message when they become active again in PTT Pro.

Text interworking is currently only supported from external applications to the PTT Pro Text endpoint. Text messaging in the reverse direction is not supported.

Figure 1 Interworking APIs



PTT Pro Interworking

PTT Pro is a Push To Talk system supporting group and individual communications for both audio and text messaging. It supports several advanced features including late join and priority override. PTT Pro is supported via an app on the end user device which communicates with server infrastructure.

To send an audio or text message from the IWG to PTT Pro, a destination group or individual is configured in the IWG as a PTT Pro endpoint. In order for the PTT Pro endpoint to reach the destination PTT Pro group or user, the IWG must communicate with the PTT Pro server using a proxy user, or a proxy client.

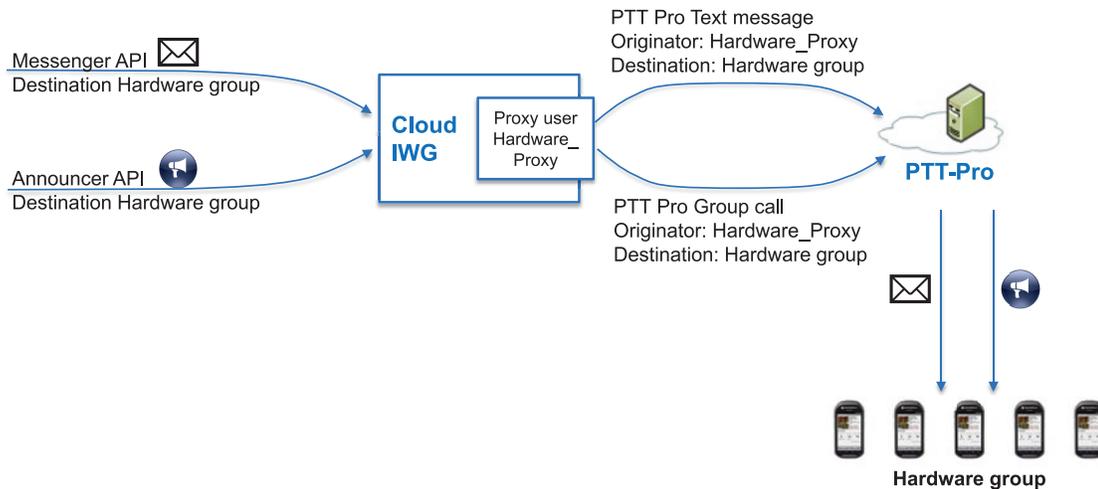
The PTT Pro server is not aware that the proxy client is not being used as a normal PTT Pro user. The proxy client acts like any other PTT Pro user, but instead of running on a device, it runs on the IWG and forwards communications from the Messenger and Announcer APIs.

Proxy clients must be configured in PTT Pro as users, and have an associated PTT Pro user client running on the IWG. If the appropriate configuration information is provided when a PTT Pro endpoint is added, the IWG adds the proxy client to the PTT Pro server automatically.

PTT Pro Interworking Example

In the following example, the enterprise owner desires to connect the PTT Pro group Hardware to other IWG endpoints.

Figure 2 PTT Pro Audio Interworking



For this example, the customer admin adds an endpoint to the IWG with the following information:

- Endpoint name - PTT_Pro_Hardware
- Group name - Hardware
- Proxy client name - Hardware_Proxy
- PTT Pro server information.

The IWG performs the following actions:

1. The IWG adds a user to PTT Pro with the specified proxy client name, in this case Hardware_proxy.
2. If this proxy client is communicating with a group, the IWG adds the proxy client to the specified group. In this case, the group is called Hardware. If the group does not yet exist, the IWG creates the group.
3. The IWG then adds the endpoint to the IWG with a proxy of Hardware_proxy.

As a result of adding Hardware_proxy as the proxy client, the IWG registers with the PTT Pro server as the user Hardware_proxy. It also verifies that the Hardware group exists, and if not, the IWG creates the group.

After this setup, whenever the PTT Pro group Hardware starts a group call, the PTT Pro server includes the user Hardware_proxy and routes control and audio to the IWG. The IWG forwards the communication from Announcer or Messenger to this PTT Pro endpoint.

Note that when communication is forwarded from Announcer and Messenger to the Hardware group, the originator is identified by the name of proxy – in our example, this is Hardware_proxy.

A proxy may be used with multiple PTT Pro endpoints. However, only one audio message (Announcement) using that proxy may occur at any time. If an audio communication comes in for a PTT Pro endpoint whose proxy is employed in another audio communication, the second audio communication will fail.

PTT Pro endpoints are licensed in the IWG. The PTT Pro Proxy users are NOT licensed in the IWG; however, since they appear as normal users to the PTT Pro system, each proxy user consumes a PTT Pro user license when it is configured in the PTT Pro system.

Licensing

The IWG V2 is included with your PTT Pro purchase. Each endpoint added in the IWG uses one PTT Pro license. Before adding endpoints in the IWG, ensure the necessary PTT Pro licenses are available in the PTT Pro portal.

For information on how to view licenses, see [License on page 21](#).

Activation

This chapter describes how to log in and activate the IWG.

To access the IWG Manager, use a host computer with one of the following supported web browsers. Mobile browsers are not supported.

- Chrome 63 or higher
- Internet Explorer 11 or higher
- Firefox 44 or higher
- Safari 11 or higher
- Edge 16 or higher

Logging in to the IWG

Log in to the IWG using a supported web browser.

When a new user is added to the IWG, an email is automatically sent to the user's email address containing a link to set their password.

1. In the email from the Zebra IWG Manager, click the link to set your password.

The **Reset Password** popup displays.

2. In the **New Password** field, enter a new password. The password must be at 8 to 40 characters long, contain at least one digit, one lower case, one upper case, and one special character (! @ # \$ % .).
3. In the **Confirm Password** field, re-enter the password.
4. Select **Submit**.

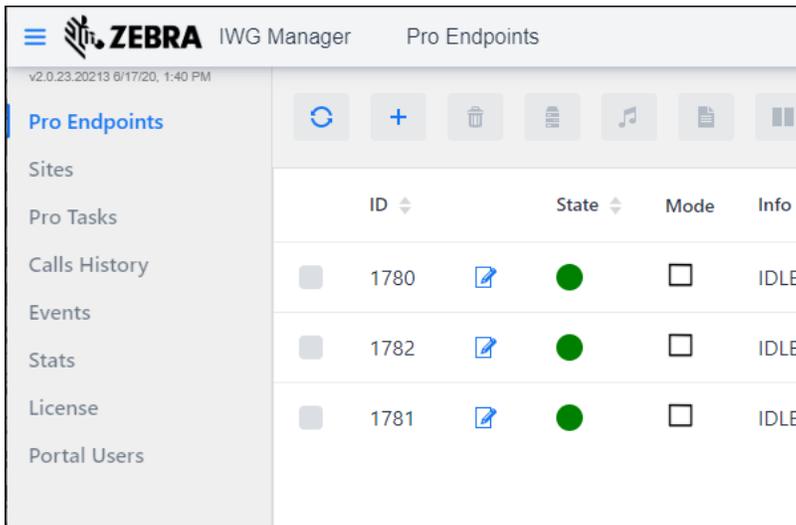
Links to set or reset a user's password expire after approximately one hour. To send a new link, see [Portal Users on page 22](#).

Activating the IWG

Use the IWG Manager to add licenses to the IWG. In some instances, licenses may have already been added by your Zebra administrator.

1. In the IWG Manager, select **License** from the left menu.
2. From the Actions menu, select **+**.

Figure 3 Adding a License



3. In the **License Code** field, enter the license code provided in the Zebra software entitlement email.
4. In the **Count** field, enter the number of times to activate the license.
5. Select **Add**.

Configuration

This section explains how to configure the Zebra Workforce Connect Interworking Gateway (IWG).

Configuring Endpoints

Before configuring endpoints, ensure that all required Sites (PTT Pro departments) are configured in the IWG Manager. For more information contact your Zebra administrator.

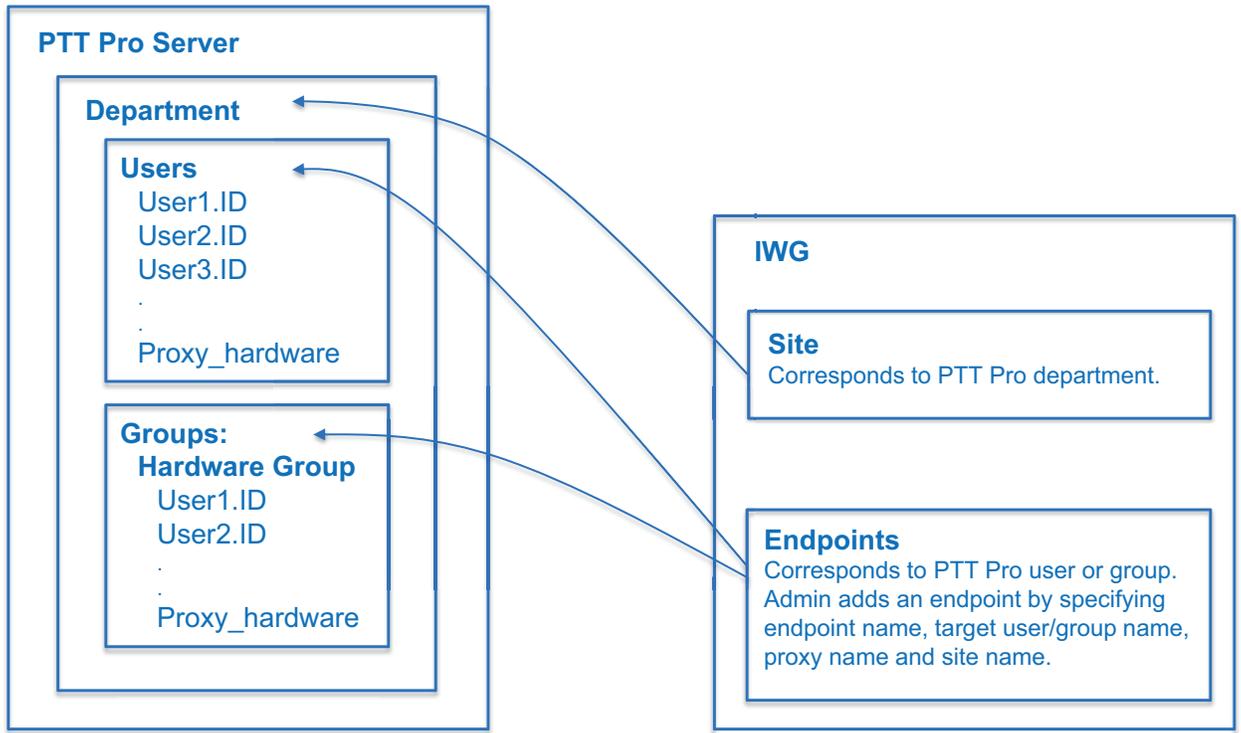
- Configure endpoints to identify the target PTT Pro user or group. Endpoints must specify a proxy user name and a Site.

Configuration Example

The following flow chart shows how Sites added in the IWG correspond to departments in the PTT Pro server. It also shows that when adding PTT Pro groups as endpoints, the IWG adds the group (if necessary), then adds the proxy user. A proxy user is first added as a PTT Pro user and then as a member of the group.

In the following flow chart, the Hardware group is added to the IWG as an endpoint. First, it is added as a proxy user with Proxy_hardware as the proxy name. Then, it is added as a member of the Hardware group.

Figure 4 Configuration Flow Chart



Configuration Methods

Configure the IWG using the following methods:

- Using the IWG Manager Graphical User Interface (GUI).
- Using the IWG Manager to Import a configuration file.
- Using the IWG Manager REST APIs to manage endpoints or import a configuration file.

IWG Manager GUI

Use the IWG Manager to:

- Configure endpoints
- View sites
- View PTT Pro tasks
- View call log
- View event log
- View system statistics
- Configure licensing
- Configure portal users

For more information on the IWG Manager and available configuration actions, see [Using the IWG Manager on page 15](#).

IWG Manager - Import a Configuration File

Use the import feature in the IWG Manager GUI to import an XML configuration file.

It is highly recommended to release licenses before using a configuration file to modify activation IDs. To release licenses using the IWG Manager, see [License on page 21](#).

If licenses are not properly released and become unusable, contact Zebra support and have your activation ID available.

Importing a Configuration File

Create an XLS configuration file and then import it using the IWG Manager GUI.

The configuration file must be a spreadsheet in XLS format with up to three sheets. If no configuration changes are required for a sheet, leave that sheet empty. For descriptions of the parameters in the XLS configuration file, see [Configuration Parameters on page 14](#).

A template for the XLS configuration file is available for download through the IWG Manager REST API's Import Controller. For more information, refer to the Workforce Connect IWG Manager REST API Developer's Guide.

1. Log in to the IWG Manager.
2. From the IWG Manager header menu, select **Import**.
3. Before selecting a file to import, set the following optional parameters.
 - If desired, enable the **Delete all existing records** to remove all previously imported configuration information.

- If desired, enter a comma separated list of sites to reset and import.
When entering multiple sites, make sure there are no spaces in the list.
- 4. Drag and drop the XML configuration file, or select **Import** to browse for the file.
The file loads and the total records imported displays.
- 5. Select **Close** to return to the IWG Manager.

IWG Manager REST APIs

Use the IWG Manager REST APIs to manage endpoints or import an XLS configuration file. To try out the REST APIs, select **APIs** from the IWG Manager header menu.

For details on using the IWG Manager REST APIs to configure the IWG Manager, refer to the Workforce Connect IWG Manager REST API Developer’s Guide.

Configuration Parameters

The following table describes the configuration parameters for the IWG Manager.

Table 1 Configuration Parameters

Sheet Name	Column Name	Description
Endpoints	site	Name of the site where this endpoint is located.
	name	Name of the endpoint in the IWG.
	proxy	PTT Pro proxy user name associated with this endpoint. Must be made up of letters, numbers, and “.”s, and between 3-25 characters long.
	target	Target of the target user or group name in PTT Pro.
	contact	Indicates if the target is a contact or group. Set to true if the target is a user, or set to false if the target is a group.
	userPriority	Optional proxy user priority (default - 0).
	groupPriority	Optional group priority (default - 0).
Licenses	code	Activation ID (AID) formatted as xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx. The activation ID is found in the Zebra Software Licensing entitlement email. Make sure to use the Activation ID (AID), and not the Entitlement ID (EID).
	count	Number of licenses to claim for the activation code. For example, an AID could include 50 IWG groups. To activate all 50 groups, set the count field to 50.
Users	name	Name of the user.
	email	User’s email address. This is used as the username to log in to the IWG Manager.
	role	Role of the user in the IWG Manager. See Portal Users on page 22 .

Using the IWG Manager

The IWG provides a Graphical User Interface (GUI) allowing the administrator to enable interworking between services managing PTT Pro endpoints.

Figure 5 IWG Manager Screen



Table 2

Item	Description
1	Left menu
2	Header menu
3	Actions menu
4	Main Window

IWG Manager

Use the IWG Manager to add endpoints, map between endpoints, modify licensing information, perform administrative actions, and display logs. The management portal is divided into the following tabs:

- [Sites on page 16](#)
- [Pro Endpoints on page 16](#)
- [Pro Tasks on page 19](#)
- [Calls History on page 20](#)
- [Events on page 20](#)
- [Stats on page 21](#)
- [License on page 21](#)
- [Portal Users on page 22](#)

Options and information displayed varies depending on the user role. To view information about the currently logged in user account, select the user name from the header menu bar. For information on how to view, add, and modify all users, or how to change your password, see [Portal Users on page 22](#).

Sites

The Sites page lists available PTT Pro departments. To edit, add, or remove sites, contact your Zebra administrator.

- Actions menu - Buttons used to perform actions on or filter sites. Click on a site to select it.
 -  - Refresh the list of sites.
 -  - Restart all endpoints on the selected site.
 - **Verify/Update Pro Server** - Enable to sync the data of all endpoints on the site with the Pro Server.
 - **Clear Public Key** - Enable to clear the public key.
 -  - Resume all endpoints on the selected site.
 -  - Pause all endpoints on the selected site.
 - **Show All** - Enable to show all sites, including sites without endpoints.
 - **Name Filter** - Use this field to filter the list of sites by a specific site ID or site name.
- Main window - Provides information for each site.
 - **Site ID/Name** - Name assigned to the site when it was added.
 - **Endpoints Count**- Displays the number of endpoints added to this Site.

Pro Endpoints

Use the **Pro Endpoints** page to view, add, and modify endpoints. The Pro Endpoints page displays a list of all available endpoint types.

To add an endpoint, from the actions menu select **+**. For detailed information on adding endpoints, see [Adding a Pro Endpoint on page 18](#).

