

Identity Provider

Workcloud Communication



ZEBRA

Quick Start Guide

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Workcloud Communication IDP

The Identity Provider (IDP) service provides customers with a mechanism to maintain user identity information, supporting customers who use Workcloud Communication in a shared device model. The IDP provides a user with a single set of credentials to ensure that the user is who they say they are across multiple platforms, applications, and networks.

IDP Requirements

Zebra manages the IDP. This includes creating the realm and providing an SFTP location for the customer to upload user data. The user data is imported into the IDP and the PTT Pro Server. After the import is complete, users can log in to PTT Pro for Android and authenticate against the IDP.

Zebra and the customer must complete the following steps:

- Zebra and the customer agree on the realm name. This is the URL for the IDP.
- Zebra creates the realm and configures the SFTP site.
- Zebra shares the credentials with the customer.
- Zebra creates the customer in the PTT Pro Server.
 - The customer must include one or more departments.
 - Each department must contain one or more groups.
 - Zebra creates a sitemap file if the customer data is distributed over multiple PTT Pro Servers in the cluster.
- The customer configures their PTT Pro clients with the Client ID and the Client Secret. Zebra provides this information as a Provisioning Manager token or a JSON file. Refer to the Workcloud Communication Provisioning Manager Customer Administrator Guide and the Workcloud Communication PTT Pro for Android Configuration Guide for more information.



NOTE: Zebra PTT Pro for iOS requires Profile Manager to use the Workcloud Communication IDP.

User Import for the IDP

The user data for a PTT Pro customer is contained in a CSV. The customer uploads their user data to the Workcloud Communication IDP using SFTP. A customer administrator can verify that users are added or removed by viewing the users in the PTT Pro server. The import script runs every hour on the hour.

The IDP supports integration with the Profile Manager, and you can use a single CSV file to import users into both systems. Refer to [Integration with Profile Manager](#) for more information.



NOTE: Errors in the CSV file can disrupt users' PTT service. Verify the data and format of the CSV file before uploading it.



NOTE:

- The first row of the CSV file contains the column headers. Column headers are not required, but the columns must appear in the order specified below. The CSV fields cannot contain spaces.
- Include unused columns so the CSV file can be processed correctly.
- You can use a different column header name without changing its position.

Employee ID

A unique identifier for the user must be lowercase. This field is mandatory.

First Name

Used for the display name of the user. This field is mandatory.

Last Name

Used for the display name of the user. This field is mandatory.

Department

The department to which the user is added. The department must already exist in the PTT Pro Server before import because the CSV import process does not create a department.

Customer

Leave blank.

PTT Group

The groups in the PTT Pro Server the user is a member of. The groups must already exist because the CSV process does not create a group. Use a semicolon (;) as a delimiter to specify additional groups. A maximum of 10 groups can be specified in the CSV file. The maximum number of groups can be modified by Zebra in the IDP configuration.

ESN

This is an optional field. When a value is specified, the user is created and activated in the PTT Pro Server. The ESN value is used as the activation code. This field takes precedence over OAuth.

Time of change

Leave blank. This field is reserved for future use but must be included in the CSV.

Password

The password for the user. The password is provided to the IDP. This field is mandatory.

DomainUser

This field is mandatory. The DomainUser is the default value used for logging in to Zebra PTT Pro. The IDP's configuration can be modified to use the Employee ID instead. Contact your Zebra representative to make this change.

PTT Originate Groups

This optional field lists the PTT talk groups separated by semi-colon. Users will only be able to initiate calls to these groups but cannot receive calls. Groups can be separated by semi-colon. If there are any additional groups in PTTPro that are not in the CSV, will be removed from the user association.

Group names in PTT Receive Groups and PTT Groups should be mutually exclusive. The group name in the CSV must match the group name in the PTT Pro Server.

FeatureKey

This optional field specifies the Feature Key template that the user is associated with. This template must be created in the PTT Pro Server at the appropriate level.

The user is assigned to the department level or customer level based on the system configuration.

If the user was assigned a Feature Key template and it is not specified in the CSV, the template is unassigned.

Settings

The optional field specifies the Client Settings template that the user is associated with. This template must be created in the PTT Pro Server at the appropriate level.

The user is assigned to the department level or customer level based on the system configuration.

If the user was assigned a Client Settings template and is not specified in the CSV, the template is unassigned.

Whitelist Users

The Workcloud IDP provides a way to maintain users in the PTT Pro Server whether or not they are listed in the CSV. This is useful when the PTT Pro user accounts are not device users but used for another purpose.

The list of users to white list is created with support from Zebra. These users are listed in the IDP configuration script under the `whitelist_users` parameter.

- A user added to `whitelist_users` is not deleted from the PTT Pro Server if not included in the CSV file.
- The user names in the `whitelist_users` list must match the `userLogin` name in the PTT Pro Server and the Employee ID column in the CSV (if included).
- Linux wildcard expressions can be used to match one or more users. For example, `Test . User*` would match all the users starting with the name `Test . User`. Zebra can help develop an expression pattern to match multiple users.

Customer Responsibilities

A customer is responsible for creating, updating, and maintaining the CSV file of user information. This includes the initial upload of users. A customer can reduce the potential for errors by creating a process to manage changes to the CSV file.

- Designate a person who is responsible for changes to the CSV file.
- Update and upload the CSV file to reflect user roles and responsibilities.
- Maintain a backup copy of the CSV file.
- Verify the accuracy and format of the CSV file and submit changes through SFTP.
- Review changes in the PTT Pro server to verify the addition, removal, or modification of users.

User Management

The CSV file specifies the users and their passwords in the Workcloud Communication IDP and the PTT Pro Server. The number of users is controlled by licensing in the PTT Pro Server. If the number of users in the CSV file exceeds the number of licenses, the PTT Pro Server limits the number of imported users.

Adding and Removing Users

Users can be added or removed by modifying the CSV file.

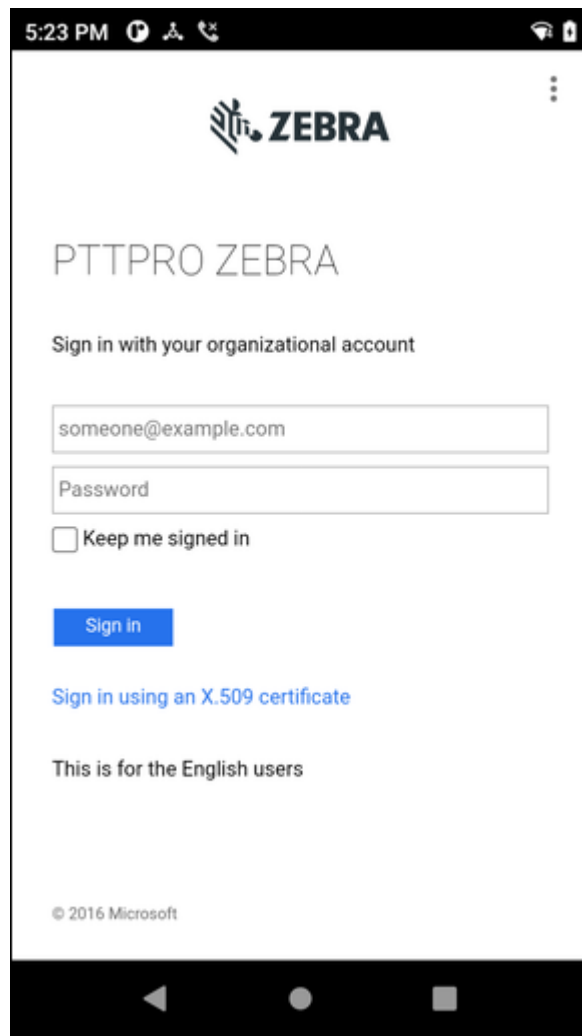
- When a user is added to the CSV file, the user is added to the IDP and the PTT Pro Server.
- When a user is removed from the CSV file, the user is removed from the IDP and the PTT Pro Server. If an error occurs for a user record, for example, the user password does not meet the password requirement policy, the user is not added to the PTT Pro Server.

The CSV file must contain the full list of users. The exception is for users using the PTT Pro PC Client. These users must be created using the PTT Pro Management Portal because the PC Client does not support OAuth.

Password Management

User authentication for PTT Pro uses OAuth. When users open PTT Pro for Android, they are prompted for their user name and password.

Figure 1 PTT Pro OAuth Login Screen



By default, passwords are managed through the CSV file. Any password changes made in the PTT Pro Server or through the device are overwritten during the next CSV file import. You can ask Zebra to modify how passwords are managed by changing the value of the `customerpwdforcechange` parameter.

When `customerpwdforcechange` is set to Y, the password is specified in the CSV file. When the value is N, the password specified in the CSV file is ignored.

Integration with Profile Manager

The IDP can be used in a Profile Manager environment. The same CSV file can be used to import users into Profile Manager, and the PTT Pro Server imports users from Profile Manager. Profile Manager is required to support Zebra PTT Pro for iOS users.



NOTE: If you use a different identifier provider, users can be added only to the PTT Pro server. For assistance, contact your Zebra support.

The column header name is not used by the IDP. The order of the columns in the CSV file is used to determine the user attribute. The Profile Manager uses the column header name to determine the user attribute. Columns used by Profile Manager that are not used by the IDP need to be placed after the last column used by the IDP.

Table 1 Profile Manager User Attributes

Profile Manager User Attribute	IDP Column	Description
User Name	Employee ID	
Password	Optional	
First Name	First Name	
Last Name	Last Name	
User Role Level	NA	Add a column to the end of the CSV file.
User Roles	Default PTT Group or PTT Originate Only Groups	
Organization	Optional	
Department	Department	
Force Logout	NA	Add a column to the end of the CSV file. Set the value to TRUE.
Authentication Method	NA	Add a column to the end of the CSV file. Set the value to OAUTH2.
PBX Extension	NA	Optional. If used, add a column to the end of the CSV file.

Table 2 PTT Pro User Attributes

PTT Pro User Attribute	IDP Column	Description
UserLogin	Employee ID	
FirstName	First Name	
LastName	Last Name	
GroupName	Optional	
organization	Optional	
Department	Department	
Phone	NA	Optional for PTT Pro

Table 2 PTT Pro User Attributes (Continued)

PTT Pro User Attribute	IDP Column	Description
Email	DomainUser	
oauthName	DomainUser	
GroupUserTemplate	NA	Optional. If used, add a column to the end of the CSV file.
FeatureKeysTemplate	FeatureKey	
ClientSettingsTemplate	Settings	

Revision History

Version	Date	Description
MN-004666-01	March 2023	First version.
MN-004666-02	April 2024	Updates to CSV field descriptions.
MN-004666-03	August 2024	Support for multiple PTT Pro Servers and integration with Profile Manager.
MN-004666-04	September 2024	Support to split large groups.
MN-004666-05	March 2025	Added that iOS requires Profile Manager to use the IDP. Updated description of ESN and DomainUser CSV fields.

