



Workforce Connect PTT Pro Powered by Savanna

Enterprise-class push-to-talk and secure text messaging services

Optimizing voice and messaging communications and collaboration

Workers inside or outside the four walls depend on their mobile devices for real-time access to business applications to get the job done. But in order to maximize productivity and customer service quality, your workforce needs more than data. They need to be able to reach co-workers, customers, supervisors, remote experts and more to get answers to many questions throughout the workday. While your workers may be able to use their mobile device or personal mobile phone to place calls or send text messages over the public cellular network, those consumer services fall well short of meeting enterprise needs for performance and security.

When workers just place a telephone call to get the answers they need, there are inefficiencies that can impact productivity and customer service quality. If the person on the other end of the call doesn't answer, workers can spend minutes or hours waiting for a callback from someone who may simply be on the other line — or out of the office for the day. And when a call is critical, there is no way to notify a recipient on the line with another caller of the urgency.

Standard consumer text messaging services can be just as problematic — issues include security, visibility into presence and the availability of text message records. Text messages sent over the public network are not secure. When workers send a text message with a question that needs an immediate answer, text services over the public network won't provide visibility into whether the recipient is working and available — and time spent waiting significantly reduces productivity and customer service quality. And since you can't access a text message conversation on an employee's personal mobile device, you have no record of communications.

Workforce Connect, Powered by Savanna — delivering on the promise of the truly unified enterprise device

Workforce Connect adds powerful pbx-based voice, push-to-talk and messaging features to Zebra mobile devices, allowing you to provide your workers with a single device for application access, communications and collaboration. Life is simplified for users, who only need to manage a single device. The cost of mobility is reduced, since there are fewer devices to purchase and manage. And the ability to integrate separate voice and data workflows reduces the number of steps required to complete a task, allowing you to achieve operational excellence.

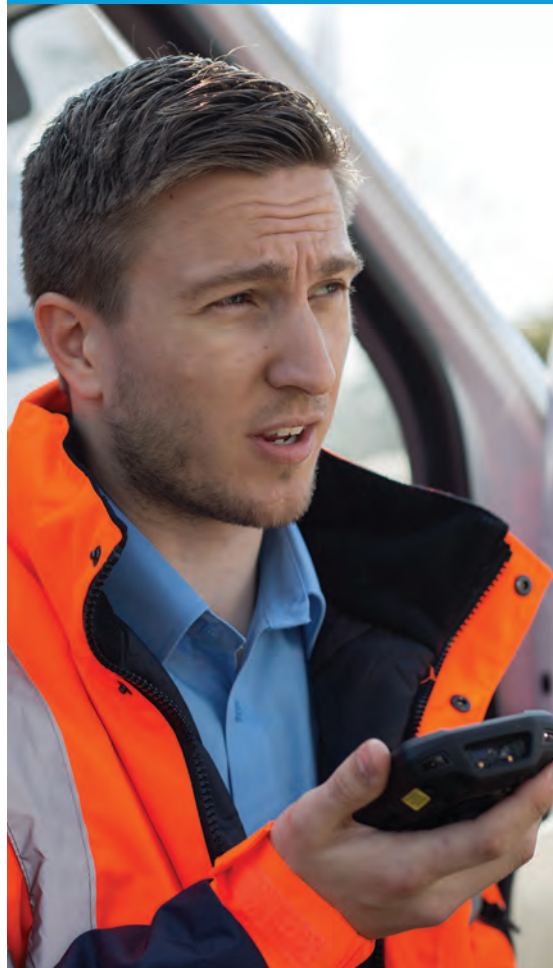
Since Workforce Connect is configurable, you can enable the features you need today and easily add features to meet new business needs tomorrow.

The solution: PTT Pro — enterprise class Push-to-Talk (PTT) and Messaging services

Workforce Connect PTT Pro addresses all these issues by connecting your workforce with enterprise-class instant PTT and secure messaging services that support text, images, audio, and video — regardless of whether your users are carrying a Zebra mobile computer or their own Android or iOS mobile device. Now, workers can talk to any user or group with the press of a button — no more waiting for a callback or phone tag. You can barge into an ongoing PTT call in the event of an emergency — and you can set a Priority Caller level so that specific users will always override any call in progress. With User Presence information, workers can identify who is available before placing a call or sending a text, audio or video message to ensure an instant connection. And unlike consumer cellular standard text message services, all text messages are encrypted in-transit, meeting enterprise security needs. Services are available over cellular* and WiFi networks, so they are always available to your workers, regardless of where they are located. Visibility into the status of every user provides workers with the intelligence to select the best contact that is available to provide an answer, right now. And deployment couldn't be easier — just subscribe to these Workforce Connect PTT Pro cloud-based services and your workers are up and running.

Get the power of one with Workforce Connect. One solution that provides enterprise-class PTT and secure messaging. One connected workforce. And all the communication services your workers need — data, voice and multi-media messaging — all on a single device.

PTT PRO: Enterprise Push-to-Talk Features



Private and group calling

Workers can place a private call to one user or a group call. Groups can be created by an administrator, pre-defined by a user or created on the fly. Groups can include up to 250 subscribers, while broadcast groups can contain up to 60,000 subscribers.

Monitor user location and availability on an easy-to-view map

Workers and managers can view an outdoor map that pinpoints the location of all users and whether they are available for a call. One or more user icons on the map can be selected to communicate via PTT voice or messaging. When a call is in process, users can also view the map to see the location of all call participants. And optional historical data provides valuable records that can help better manage the mobile workforce, provide proof of location and more.

Extend calling features to PC users

With the PC Dispatch client, your Windows computer users can use all the same push-to-talk features available to your mobile users, making it easy to connect your entire workforce.

Web-based management portal

Administrators can access our easy-to-use web-based administration portal for anywhere and anytime management of every aspect of Workforce Connect PTT Pro. And managers or supervisors can see the locations of all users at any time.

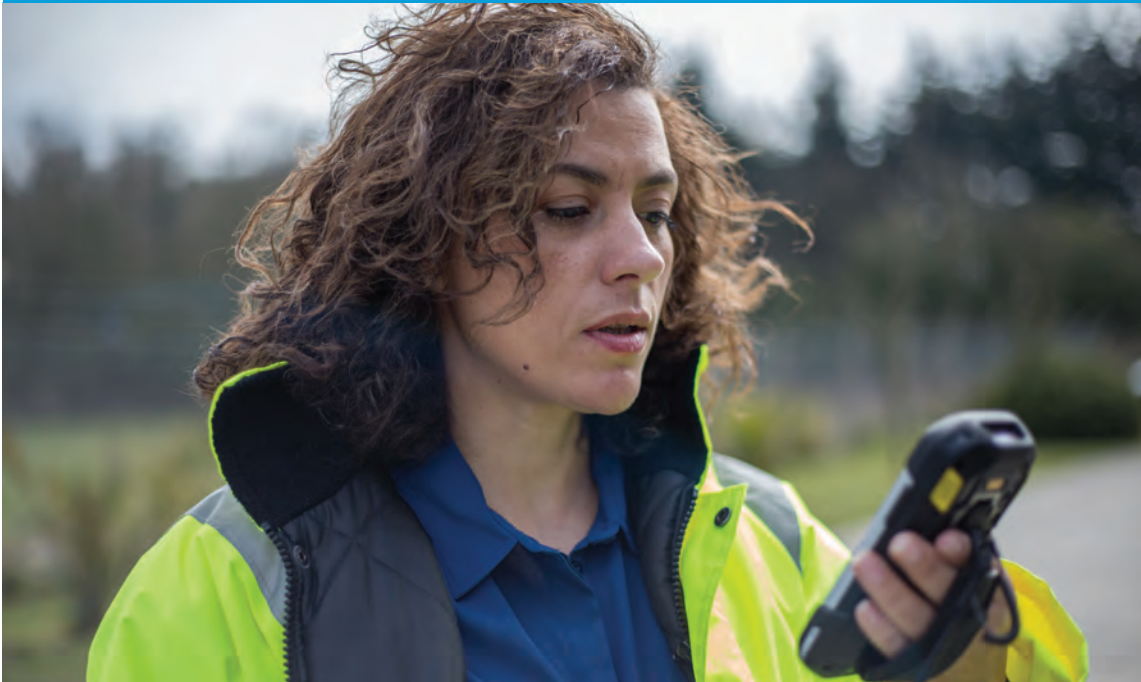
Integrate your two-way radios

Security guards, ambulance drivers, first responders and more often carry two-way radios. With interoperability support for third party Land Mobile Radio Gateways, all your users enjoy seamless push-to-talk group communication interoperability, regardless of whether they are using a Zebra mobile computer, an Android or iOS mobile device or a two-way radio.

Interworking Gateway (IWG)

This cloud-server solution delivers PTT Pro APIs to custom external clients, an LMR 2-way radio gateway, a message of the day (MOTD) and access to external audio and video file hosting for delivering playback on devices via embedded links.

PTT Pro: Enterprise Messaging Features



Enterprise security

Businesses that are bound by stringent privacy laws or where information confidentiality is critical can enable the power of multi-media messaging — without the potential security risk. Now, managers can be assured that workers are only communicating with co-workers and are not texting over public cellular networks during working hours.

Private messaging

Create and receive secure messages from any other PTT Pro user.

Flexible group feature

You can pre-define groups that make it easy for workers to reach their department or their peers — for example, managers or security guards.

Support for images

With the ability to securely send images via messaging, service technicians can get assistance with a repair, delivery drivers can send photographic documentation of proof of condition and more.

Ad-hoc group feature

Create a message and send to an ad-hoc group on-the-fly by simply selecting users from a contact list.

Pre-configured messages

Create lists of pre-configured messages that allow workers to respond to a message with a tap on the screen — ideal for recipients that are on the phone or in a meeting.

Message of the Day (MOTD)

Now, managers, regional managers and more can send important audio and video announcements to all workers or a select group. MOTD messages are stored on the network and delivered by embedded link in a message to larger groups. Users can simply click to play the message, which is streamed via the Interworking Gateway.

Messaging log

Messages that are received and sent are shown in the message log. Any text conversation can be continued by simply clicking on the message and hitting reply. And recipients can re-read the text at any time — ideal for task lists or verifying stops for delivery drivers.

PTT Pro: System Features



Easy to deploy cost-effective cloud-based service

Just activate your service and install the PTT Pro client on your compatible devices and you're ready to go. The low monthly per device license fee enables cost-effective deployment. And you can choose to have Zebra deliver Workforce Connect PTT Pro service from its cloud, or through your own private cloud.

Enterprise reliability your business requires

PTT services provide your workers with the instant answers they need to best serve your customers. That's why our cloud-based architecture is built for dependability, offering redundant servers, multiple routing options, 24x7x365 monitoring and more.

Service anywhere in the world, over WiFi and cellular wireless networks

No matter where your business is located, or whether users are in your facility or out in the field, with support for Wi-Fi and cellular networks, they are always connected with PTT Pro.

Scalable architecture

Whether you have a small business with just a few workers, a mid-size business with hundreds of workers or a large

distributed enterprise with thousands of workers, Workforce Connect PTT Pro provides affordable private and group communications to however many workers you have today. And the ability to easily scale up to meet your needs next year or ten years from now provides superior investment protection.

Presence for visibility into user status

Users can easily see the status of every PTT Pro user in their address book — whether they are available to take a call, busy on a phone call, in Do Not Disturb mode, or offline, where messages are received, stored and sent to users upon login.

OPTIONAL SERVICES

Location services

Utilize GPS to track the location of all your users. For workers traveling in vehicles, you get additional location intelligence — the speed and direction of travel. Since you can see where workers are, you can improve worker productivity, operational efficiency and customer service by identifying the closest person with the right knowledge to handle a task, such as a customer request for assistance that must take place today to comply with a pre-defined customer Service Level Agreement. Worker safety is improved

since you always know where your workers are — especially crucial for workers out in the field or in expansive facilities with large campus-style or outdoor environments. And since you always have access to up to half a year of stored historical location information, you can analyze the data to reveal and address issues that impact productivity and customer service levels.

Painless enablement with Profile Manager

With Profile Manager, the recommended deployment platform for Workforce Connect Voice and PTT Pro, it's easy to configure and manage PTT Pro push-to-talk and text messaging services. You can set detailed rules for each individual user to define what features they can access, which contacts to load into the directory, specific apps and the device behavior in specific conditions — for example, automatically switch to Do Not Disturb (DND) in certain areas of a retail store. Each worker then simply logs in via their credentials or a scan of a barcode or NFC badge. Once authenticated, the user's unique features and rules are dynamically upload to the Zebra mobile device, making it easy to create a shared pool of devices — instead of purchasing one device for every worker.

Workforce Connect Push-to-Talk Specifications

Push-to-Talk Features

Private Calling (one-to-one)	The ability to select a user from your PTT Pro contact list and have a one-on-one PTT conversation.
Group Calling (one-to-many)	Active transmission of half-duplex audio directed from one member of a Group to two or more active members in a Group.
Ad-hoc Group Calling	Ability to select various users in a contact list to conduct an instant group conversation without pre-planned configuration.
Barge Calling	Enables users to barge into a call in process for urgent communications.
Alert Calling	For non-urgent communications — recipients have the option to answer a call.
Late Join/Re-join Group Calls	Allows users to join a group call that is already in process.
In-Call Talker Override	Users that are designated 'Priority' by administrators can override any non-priority user that is speaking on a group call by simply pressing the PTT button.
Priority Call Override	Users are assigned one of five levels of Priority. Higher level users calling lower level users can opt to override an existing call in process (For example, a manager would be able to always reach his or her team.)
Alerts	Provides tones, vibration and visual indicators when inbound messages are received.

Group Types

Personal Groups	Created by a user and are only visible from the creator's Group List. Only the creator may initiate a call to a Personal Group. (Group size limit is 255.)
Member Groups	Groups that are visible to all users. Any group member can initiate a call to the group. (Group size limit is 255.)
Enterprise Open Groups	Groups that are available for any user to join. The owner/manager of the group may or may not be a participant in the group. (Group size limit is 255.)
Enterprise Closed Groups	Groups that may be created by any user, where the owner/manager of the group must add members. The owner/manager of the group may or may not be a participant in the group. (Group size limit is 255.)
Enterprise Dispatch Groups	Groups that are defined by the time of day/day of the week to enable members of a group to change for different shifts. The owner/manager of the group may or may not be a participant in the group. (Group size limit is 255.)
Broadcast Groups	Designed for the delivery of high priority messages. Broadcast Group calls are high priority unicast voice messages that will override calls in process. Broadcast messages automatically re-try until all messages have been delivered. (Group size limit is 60,000.)
Ad-hoc Groups	Allows users to create a group on the fly by selecting the desired users from the Contact List. (Group size limit is 255.)

Presence Features

Presence Indicators for Contacts	- Available: the subscriber has successfully signed in and is available to receive messages and audible alerts. - On a call - Do Not Disturb (DND): This is a subscriber initiated status. PTT call messages are not received while in DND mode. No audible alerts are generated. - Silent/Vibrate Mode - Offline: A system generated status when the subscriber is out of range or has shut down the device/service. PTT calls cannot be initiated to devices in this state. - Blocked - Not responding to communications
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Presence Indicators for Groups	- In a call - Inactive - Blocked
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Device Support

Zebra Enterprise-Class Android Mobile Devices	For the most current list of compatible Zebra devices, please visit https://developer.zebra.com/community/technologies/dna/mobility-dna-matrix
Consumer Mobile Devices	Apple iOS mobile devices on v9 or later (iPhone, iPod and iPad); Android OS mobile devices on Lollipop or later

Networks

2G GSM and CDMA Data, 3G, 4G, 4G LTE; Wi-Fi

Locationing

Administrator Controlled	Administrators can hard code location information to be ON or OFF, without giving individual users the ability to change settings.
User Controlled (Android Only)	Allows each individual user to select whether their device location is made available.
Duty Mode	Allows individuals to switch between "On Duty" with location information available and "Off Duty" with no location information available.
Displaying Location Information	Enterprise administrators can enable or disable the map display on smartphones that have Google Mobile Service (GMS) enabled.

Historical Location Information (optional)

Bread Crumb Interval	The Interval for saving GPS, position bread crumbs can be set from 30 seconds to 4.5 minutes.
Upload Interval	The interval when bread crumb information is uploaded from the mobile device to the cloud, which can be set from five to 12 minutes.
Viewing Historical Location Information	Bread crumbs tracks can be viewed using the PTT Pro web portal. Administrators can overlay bread crumbs for up to ten users simultaneously. Information included with each bread crumb includes: - Date/Time stamp - Coordinates - Speed - Direction

Boost efficiency and customer service with Workforce Connect Voice in:

Retail Stores

- Store associates
- Managers
- Regional specialists
- Headquarters

Retail Distribution

- Warehouse workers/ forklift drivers
- Engineering
- Delivery Drivers
- Maintenance

T&L

- Delivery and transport drivers
- Warehouse workers
- Forklift drivers
- Dispatchers
- Managers

Hospitality

- Managers
- Housekeeping
- Security
- Front desk
- Engineering
- Events
- Food and Beverage
- Concierge

Manufacturing

- Production line
- Managers
- Engineers
- Shipping/ Receiving
- Security
- Maintenance
- Quality
- Field service drivers
- Sales

Healthcare

- Nurses
- Physicians
- Lab technicians
- Engineering
- Maintenance
- Patient transport
- Home healthcare
- ER staff and EMTs

Workforce Connect Push-to-Talk Specifications (continued)

Web Administration Portal

User Management	Single user configuration includes enablement management, feature keys and client settings. Features include the ability to: • Add contacts to a user account • Manage group membership and permissions • View diagnostics for a user • Track messages and calls • Bulk user upload and management
Group Management	• Create new and modify existing groups • Add users to a group
RTP Gateways, Map and Associations	• Gateways are used for Land Mobile Radio integration, with preconfigured settings. • The Map tab shows department users that are currently logged in and reporting location. • The Association tab allows for contacts to be added/shared for enterprises that have multiple departments.
Call and Message History	• View the call history meta data (time, direction, initiator, recipient, group, type and end reason) for a user. • View three graphs: number of users by date, number of calls by date and call duration in minutes by date • View the history of messages sent from and to a User, as well as the message text contents.
Contacts	The Account Contacts tab will show the authorized contact person(s) for an enterprise. Contacts can be assigned one of three roles to allow different levels of system access: • Primary Role — the main contact for a company • Admin Role — has access to all departments within the Enterprise • Technical Role — has administrative access to one or more departments

Land Mobile Radio Gateway (Two-Way Radios)

Conventional Land Mobile Radio (two-way radio) integration with P25, DMR, TETRA, MotoTRBO or other supported formats; interoperability with Zebra's PTT Pro application to easily integrate private and group PTT calls between Zebra supported mobile computers, third-party supported mobile computers and supported two-way radios.

Workforce Connect Enterprise Messaging Specifications

Presence Features

Available	The subscriber has successfully signed in and has authenticated with the Enterprise Messaging server. They are now able to receive and hear messages, including audible alerts.
Do Not Disturb	This is a subscriber initiated status. While in DND, messages are still received and logged in the background to the Message Log, but no audible alerts are generated.
Offline	A system generated status when the subscriber is out of range or has shut down the device / service. Messages targeted for the subscriber in this state are stored on the server and will automatically appear on the device when the device returns to coverage range or is powered on.

Messaging Features

Private	The subscriber is able to create and receive text messages from other individual users.
Group	The subscriber is able to select a pre-defined group or create an ad-hoc group on-the-fly.
Pre-configured Messages	The subscriber can respond or send a pre-configured message.

Device Support

Zebra Enterprise-Class Android Mobile Devices	For the most current list of compatible Zebra devices, please visit https://developer.zebra.com/community/technologies/dna/mobility-dna-matrix
Consumer Mobile Devices	Apple iOS mobile devices on v9 or later (iPhone, iPod; iPad); Android OS mobile devices on Lollipop or later

User Management

Admin Console	Provides a portal for control and performance monitoring and is key to central management of the system. The administration interface is available over any current browser from a PC anywhere on the network. Features include: • Query subscriber status — on line/off line • Adding, modifying, deleting subscribers • No external toolkit required for Web Admin • Browser responsiveness unburdened by large number of subscribers
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Networks

Network agnostic: 4G/LTE, GSM, CDMA; Wi-Fi

For more information on Workforce Connect PTT Pro,
please visit www.zebra.com/workforceconnect

* Cellular service requires Zebra TC56/TC57/TC75/TC77 or user's own cellular capable Android or iOS mobile device.



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