ZEBRA

STAFF COMMUNICATIONS

THE POWER OF ONE

Connect your workforce to it.

PRESENTED BY:

TIM LOEWENSTEIN

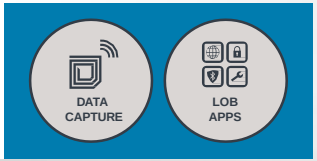
Global Solutions Manager

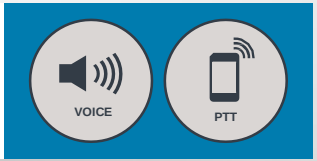
Workforce Connect

September 2016

Fit for Purpose
Hardware / Software

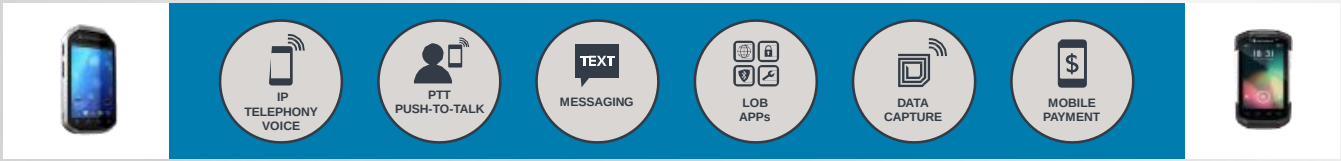
YESTERDAY





Single Device / Multi Purpose

TODAY and...



INTEGRATE APPLICATIONS

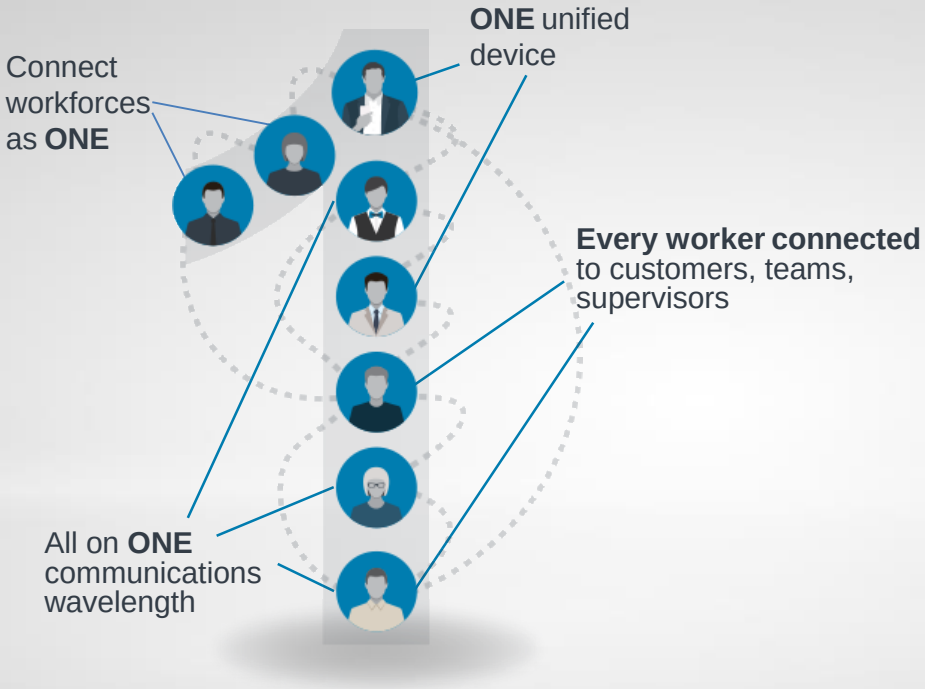
- PBX IP Voice
- Push-to-talk
- Messaging
- Data Capture
- Line of Business Application

INTEGRATE APPLICATIONS

- Connects workflow and information using multiple modes of communication
- Integrates disparate workflows and technologies
- Customize by role

INTEGRATE APPLICATIONS

- Streamlines process, increasing operational visibility and efficiency
- Improves customer experience, bringing business applications to users when needed

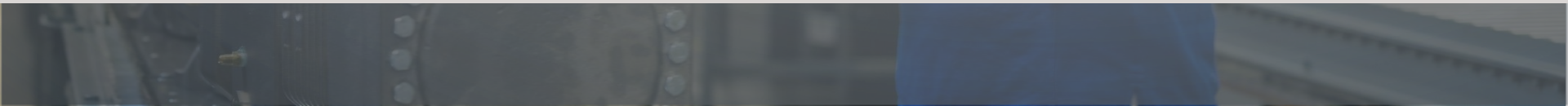


The Power of One:
The Impact of Many

WORKFORCE CONNECT VOICE CLIENT

ENTERPRISE-CLASS MOBILE TELEPHONY

WITH PUSH-TO-TALK CO-EXISTENCE



VOICE

SIP Telephony Categories

FREE SIP CLIENT	VENDOR SPECIFIC	ADAPTIVE WORKFLOW CLIENT
skype	Cisco Jabber, Avaya one-X Mobile	Workforce Connect Voice Client
3CX	Vocera, voalté	
ZoIPer	Mitel, ShoreTel Communicator	

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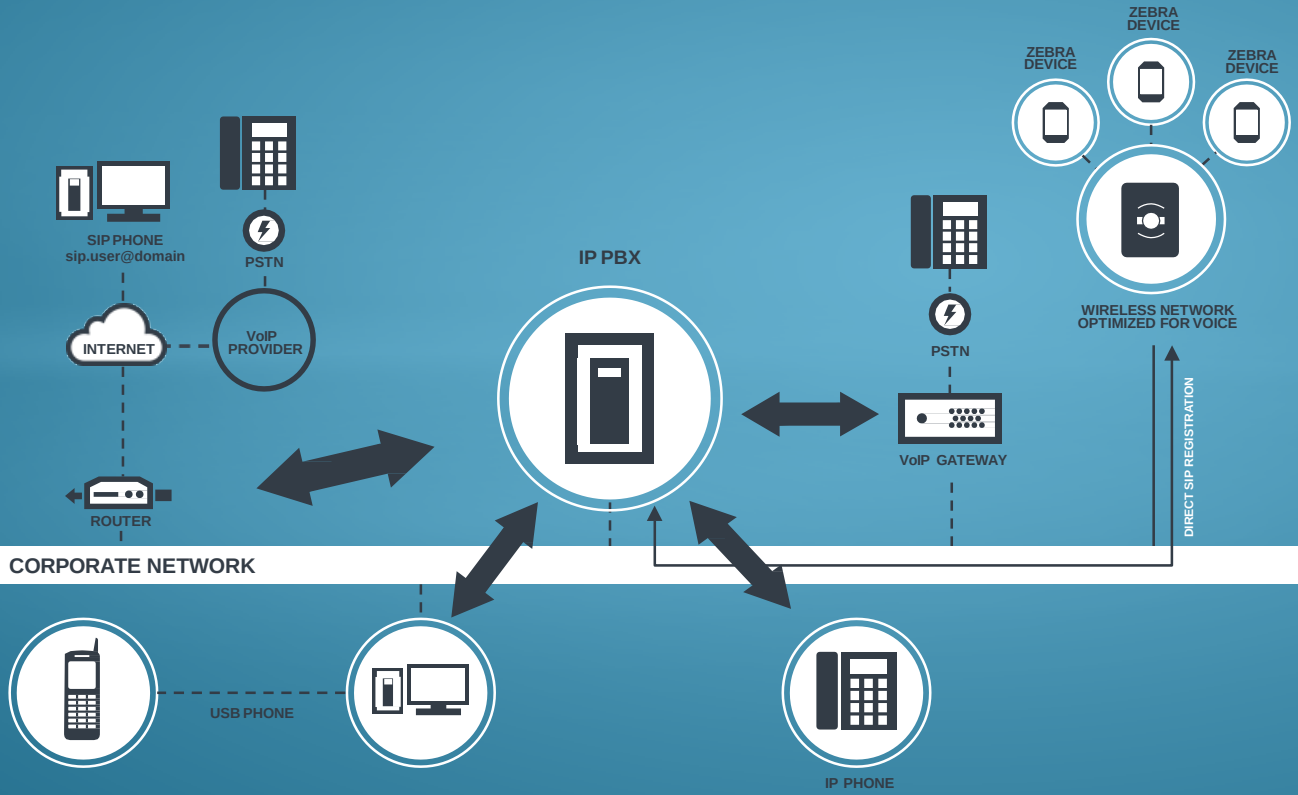
Reference Architecture



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PBX Integration Roadmap

Flexibility for multiple PBX brands for large enterprises

CURRENT

NATIVE INTEGRATION WITH ADVANCED LINE & CALL FEATURES

CISCO

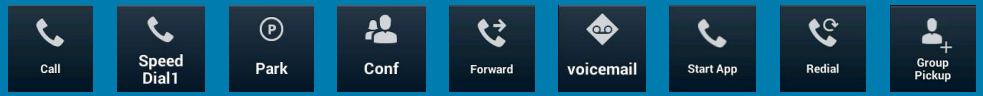
CUCM 8.6,9.1,10.5
CME 9.1,10.5
Native 9971 Emulation SIP

AVAYA

Aura 6.3
Native 9611 Emulation

ADVANCED VOICE FEATURES

- Shared/Multi-Line/Bridged Line Appearance up to 6 Extensions
- Distinctive Ring for Call Park
- Distinctive Ring for Call Hold
- Dashboard of Parked Calls (CME only)
- Corporate Directory Accessed from PBX or Other Source
- Ad-Hoc Conferencing
- Call Forwarding (Unconditional)
- Call Park & Retrieve
- PBX Failover
- Call History



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PBX Integration Roadmap

Flexibility for multiple PBX brands for large enterprises

CURRENT

BASE CALL FEATURES

AVAYA

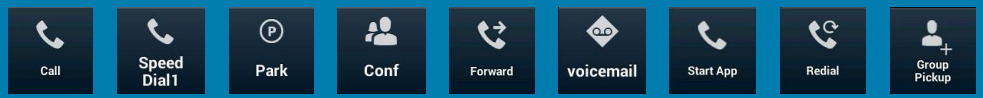
IPO 9.0**
Third party SIP

Asterisk

Mitel

BASE CALL FEATURES

- Make & Receive Calls
- Call Hold/Resume
- Call Waiting
- Voice Mail Indicator
- Call Forwarding
- Call Transfer
- Three-Way Calling
- Caller ID (Name & Number)
- Multiple Call Appearances up to 4
- Multiple Ring Tones



VOICE

Flexible Screen Configuration

HOME SCREEN

IN-CALL SCREEN

VOICE

Custom User Experience

Flexible User/Group Profiles

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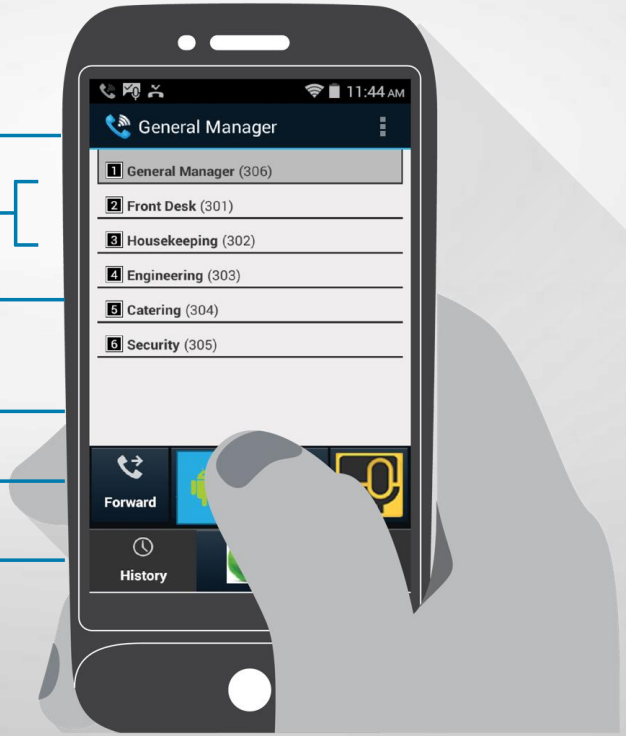
Home Screen Configuration

- **Header Displays Line-in-Use as well as Line**
- **Share or Dedicated Line Appearance** (Set in PBX – Call Routing > Directory)
- **Dashboard: Line/Extensions/Buttons** (Pushed from the PBX)
- **Dashboard: Workforce Connect Voice Client** (Customizable voice feature action buttons)
- **Launch On-Device Android Applications**
- **Footer: Most Common / Used**



VOICE

Dashboard Configuration

```
Dasboard>
    <Columns>4</Columns>
        <Button>
        <title>Speed Dial #1</title>
        <action>SPEED_DIAL</action>
        <value></value>
        <enabled>true</enabled>
        <confirm>false</confirm>
        <description></description>
        <icon><icon>
    </Button>
Dashboard>
```

Defines buttons in the screen's dashboard area and their layout on the Workforce Connect client screen

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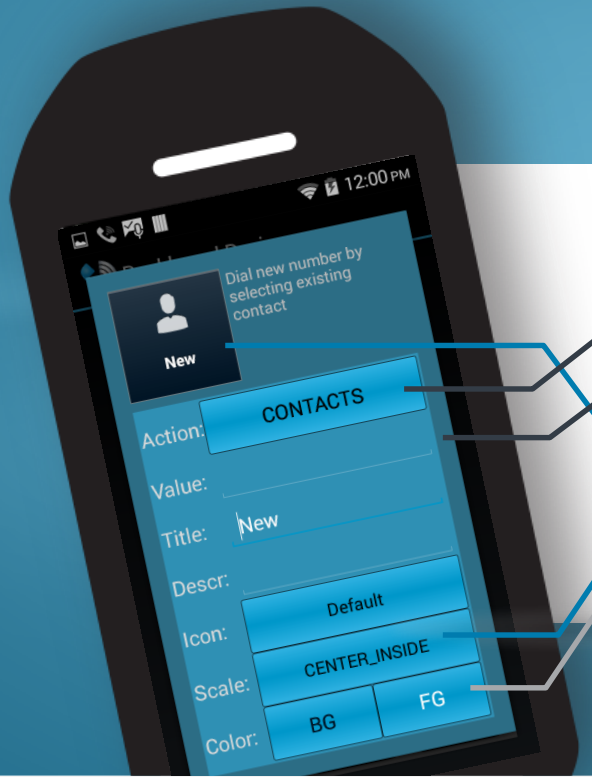
In-Call Screen Customization

VOICE

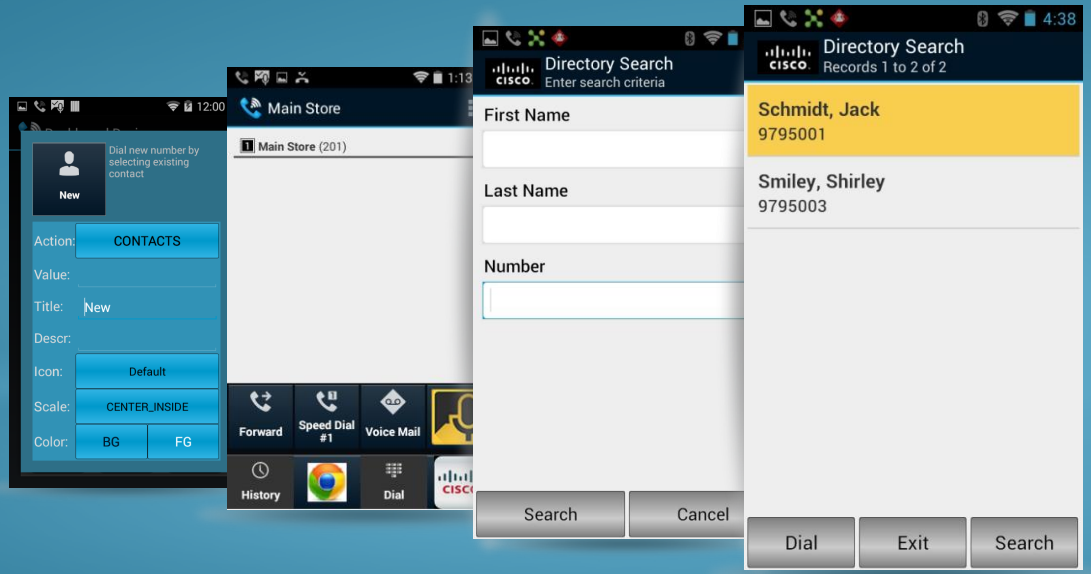
In-Call Configuration Example




```
<CallButtons>
    <Button>
        <title>Add Call</title>
        <action>ADD_CALL</title>
        <value></value>
        <enabled>true</enabled>
        <confirm>false</confirm>
        <description></description>
        <fg_color>#FFFFFFFF</fg_color>
        <icon>Default</icon>
    </Button>
</CallButtons>
```

VOICE

CUCM User Directory



- Custom button to display PBX User Directory
- Value is: https://X.X.X.X:8443/ccmcip/xmldirectoryinput.jsp

VOICE

In-Call Footer Configuration

```
<Footer>
    <Button>
        <title>Redial</title>
        <action>REDIAL</action>
        <value></value>
        <enabled>true</enabled>
        <confirm>false</confirm>
        <description></description>
        <fg_color>#FFFFFFFF</fg_color>
        <icon><icon>
    </Button>
</Footer>
```

- Defines the buttons, or soft keys, on the optional footer section of the client screen
- Buttons are listed in the order they appear on the screen

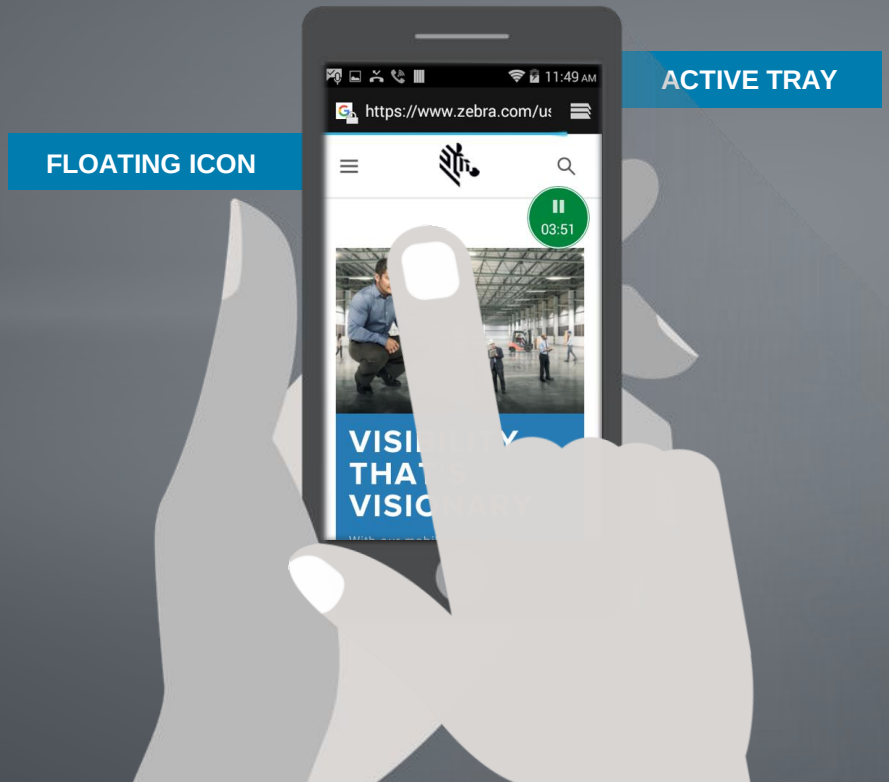
VOICE

Shared Device Login Options

1. User selects their profile from a scrollable menu
2. User clicks on their role
3. The WFC Client downloads the profile and PBX information from the TFTP server
4. WFC Client registers with the PBX
5. When user is done with their job, they log out
6. Scrollable menu reappears for the next user

VOICE

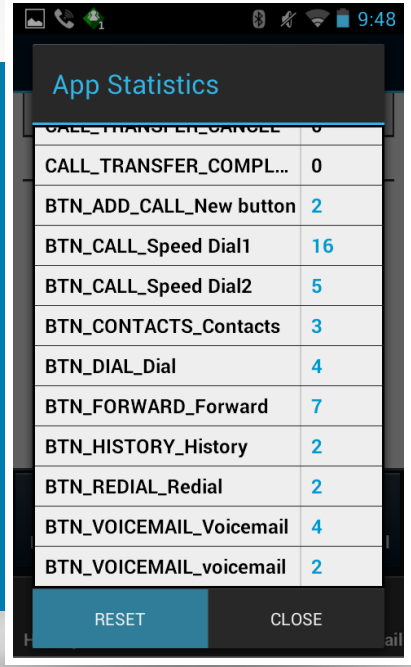
In-Call Application Examples



VOICE

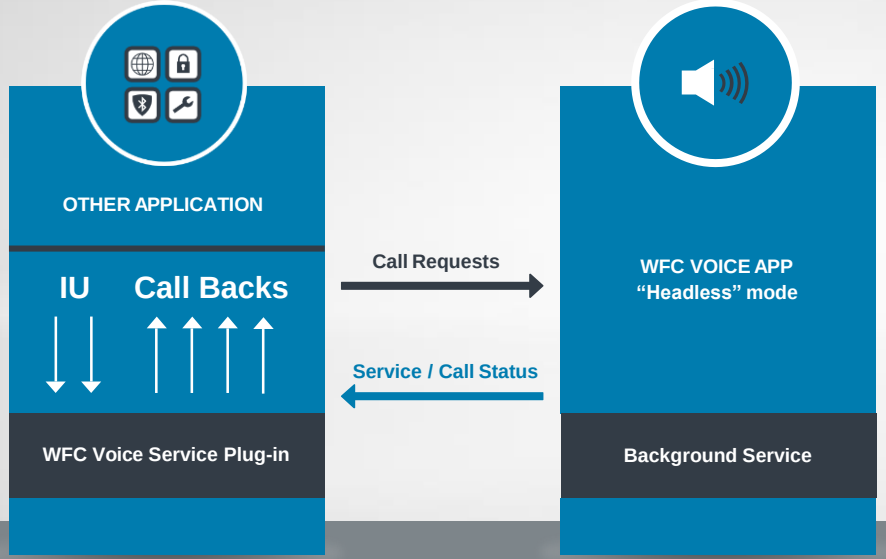
User Feature Usage Capture for Analytics

- Feature Analysis
- Data Stored on Device
- MDM can Pull Data for Parsing
- Baseline Versus Actual Testing



VOICE

3rd Party Application Integration



- “Headless” client mode
- Background service to allow for 3rd party apps to manage calls
- Remotely manage calls with API
- Create custom UI screens for business application integration

VOICE

Industry-Leading Roaming Devices

TC70

MC40

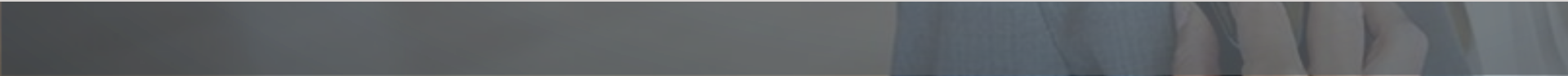
TC75

Enterprise Roaming Devices

WORKFORCE CONNECT PTT EXPRESS

SMALL GROUP COMMUNICATIONS

FOR REMOVING COMMUNICATION BOUNDARIES



PTT Express Current Offering

Features:

- Delivered as part of the device BSP
- Group talk only with private reply
- Limited to 75 enabled devices
- Included on most Zebra mobile computers
- Some client configuration required
- Multi-cast protocol
- Single subnet configuration
- Compatible with new WFC Inter-Working Gateway

PTT PRO

WORKFORCE CONNECT PTT PRO WITH ENTERPRISE MESSAGING

REMOVING COMMUNICATION BOUNDARIES

PTT PRO

Introduction

Encrypted Communications

- Push-To-Talk (PTT) Voice
- Multi-Media Messaging

Flexible Delivery Model

- Network/Carrier Agnostic
- Multiple Language Client

Location Services

- Live Position
- Historical Position(s)

Multiple Platform Integration

Software as a Service (SaaS) or On-Premise Options Available

User Management Web Portal

PTT PRO

Calling Features

Private Calling
- Initiate a secure voice session to a single subscriber in a contact list

Group Calling
- Initiate a secure call to a preconfigured group of users

Ad-hoc Group Calling
- User selects various other Users in a contact list to establish an instant group call

Barge & Alert Calling
- Barge Calling for urgent communication
- Alert Mode for non-critical communication

Re-Join on Group Calls
- Users can Re-Join ongoing group calls
- Users can Late Join group calls

Priority Call Override
- In-Call Talker Override for designated Users
- Priority override of ongoing PTT calls

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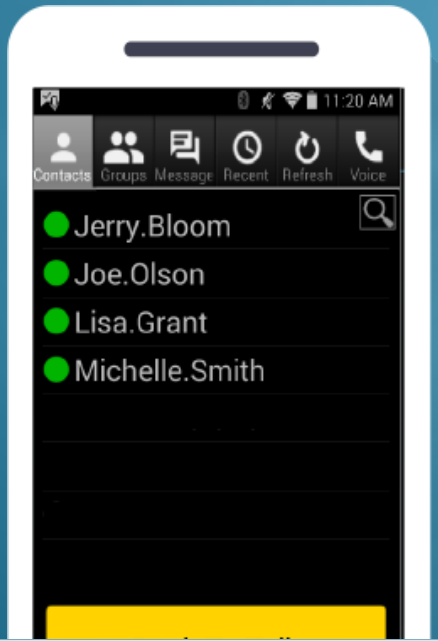
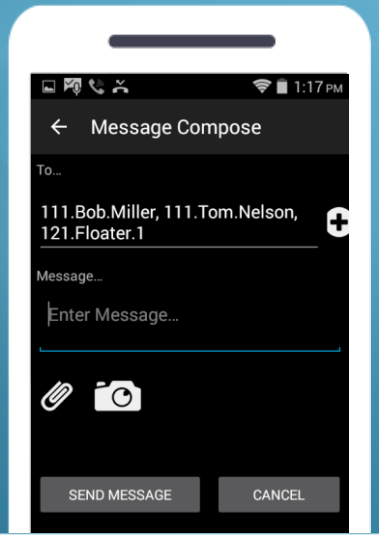
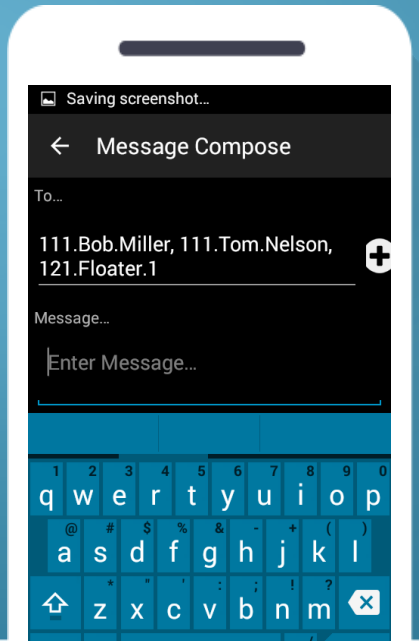
PTT PRO

Private Messaging

Create and receive secure text messages to or from other individuals.



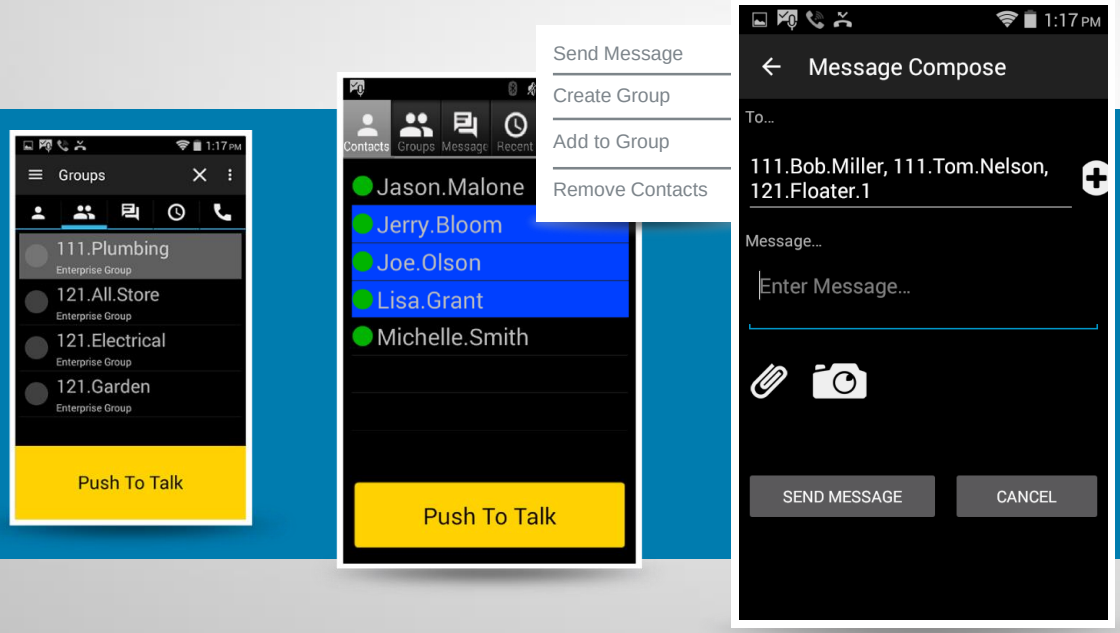




PTT PRO

Group & Ad-hoc Group Messaging

Create a secure text message that is sent to multiple users at the same time or create an ad-hoc group and send messages.



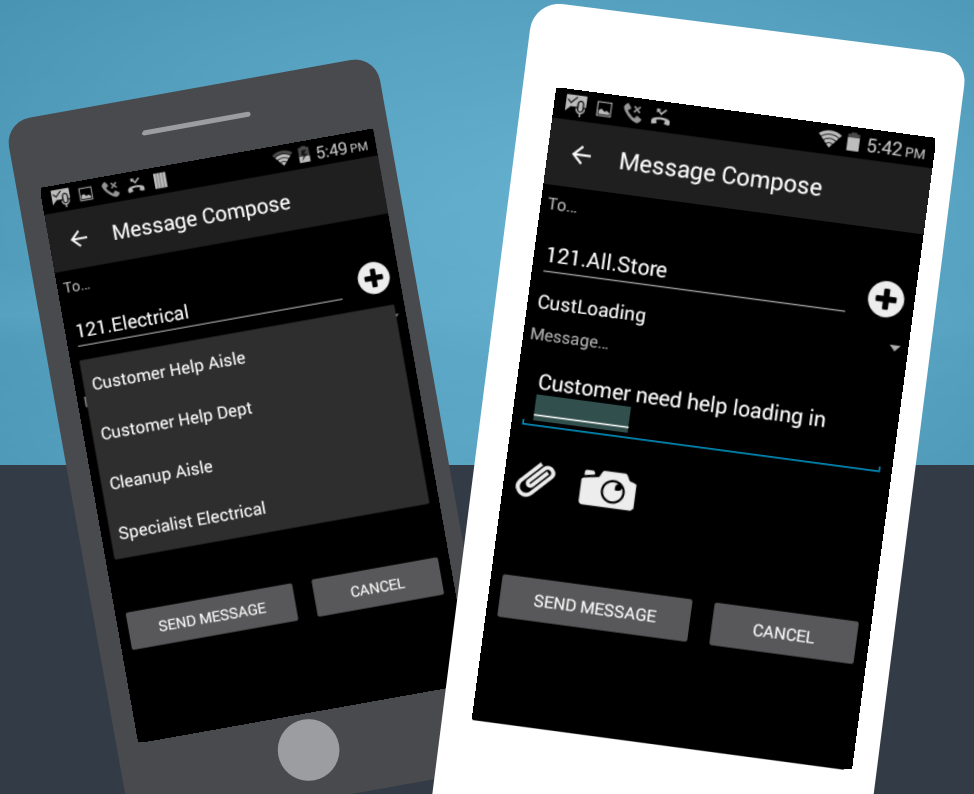
PTT PRO

Image Attachment

Attach a picture or image to an individual or group message.

PTT PRO

Pre-Configured Messaging



Respond or send a pre-configured message.

(Support on Apple will be released in 1H2017)

PTT PRO

Presence Features

Status for each subscriber indicates availability.

Contact Presence Indicators

- Contact is available
- Contact is on a call
- Contact is in Do Not Disturb (DnD)
- mode Contact is in silent/vibrate mode
- Contact's device is off or out of coverage area
- Contact's device is signed out of Zebra PTT
- Pro Contact is blocked
- Contact is not responding to Zebra PTT Pro communication

Contact Presence Indicators

- Group is not active
- Group is active in call
- Group is blocked

PTT PRO

Supported Platforms and Devices

Supported Hardware & OS Platforms

Oct 2016

MOBILE	DESKTOP
Android Apple	Windows 7

MOBILE DEVICES SUPPORTED

MC40 TC55B MC67 Android TC70

TC75 Consumer Android Apple

CLIENT DISTRIBUTION AVAILABILITY

AppGallery SOTI

Available for Android at Google play

airwatch by vmware

Available on the iPhone App Store

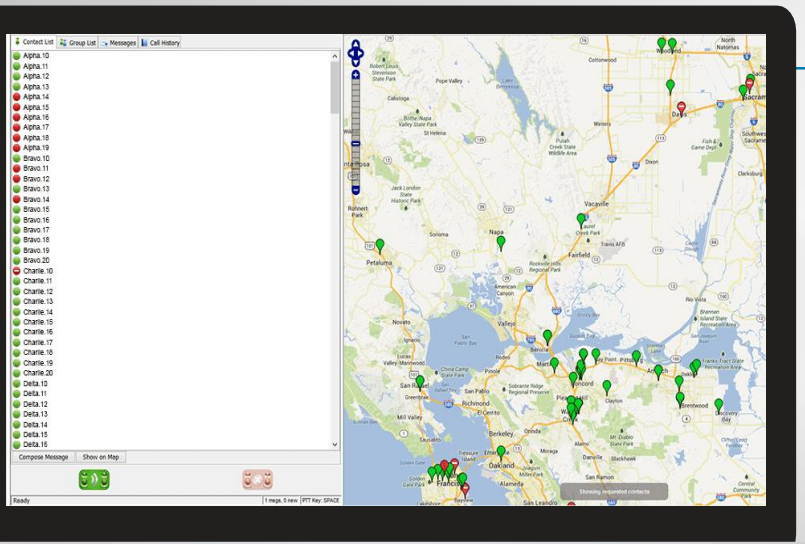
Other MDM's

MOBILE	DESKTOP
Windows Mobile **Transition Client** Minimum Features	Windows 10

MC67
Win 6.5 /T&L UI

PTT PRO

Windows Desktop With Fleetcom Features



Communicate from a Desktop or Laptop

- Enable office employees to connect with the field anywhere in the world
- Enabled for PTT Voice and Messaging
- Monitor multiple talk groups
- Determine location for enhanced response
- Communicate via LMR Gateway to on-site two-way radios

PTT PRO

Fixed Location Services

Refresh

Designator	User Login	Last Name	First Name
A	Rick.Baker	Baker	Rick
B	Don.Speese	Speese	Don
C	Rick.Barrer	Barrer	Rick
D	Ken.Crafton	Crafton	Ken
E	P.Pandelidis	Pandelidis	Paul
F	DAN.GONZALEZ	Gonzalez	Daniel
G	JOHN.WOLF	Wolf	John
H	Tom.Moore	Moore	Thomas
I	Hayden.Eastman	Eastman	Hayden
J	John.Buchanan	Buchanan	John

Showing 1 to 10 of 19 entries

First Previous 1 2 Next Last

View Location of Users on

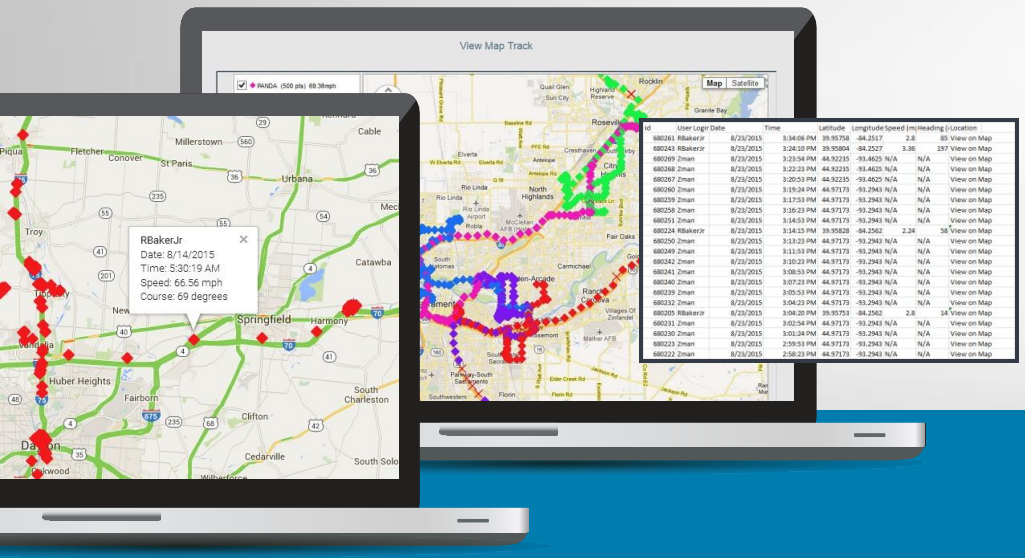
- **End User Device**
- **Web Portal**
  - Individual
  - Department Level View

User / System Configurable Options

- **System Feature On/Off**
- **User Disablement Option**
- **Off Duty Mode**

PTT PRO

Location Services Historical Options



Collection Options

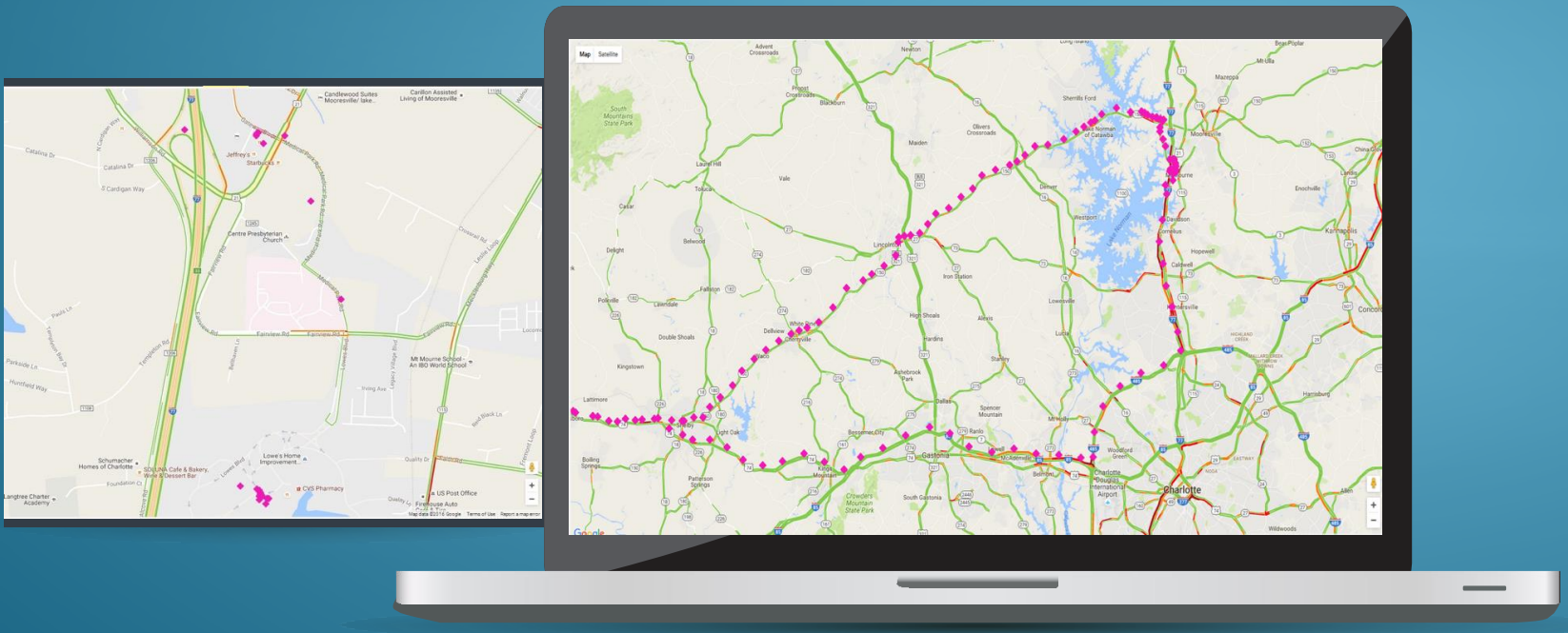
- **Breadcrumb Interval**
- **Upload Interval**
- **Information collected for each user**
- Date/Time Stamp
- Coordinates
- Speed
- Direction

Breadcrumb Web Portal

- **View 1 to 10 end users**
- **Data is exportable**
- **Date kept for 6 months**

PTT PRO

Location Services Historical Breadcrumb Example

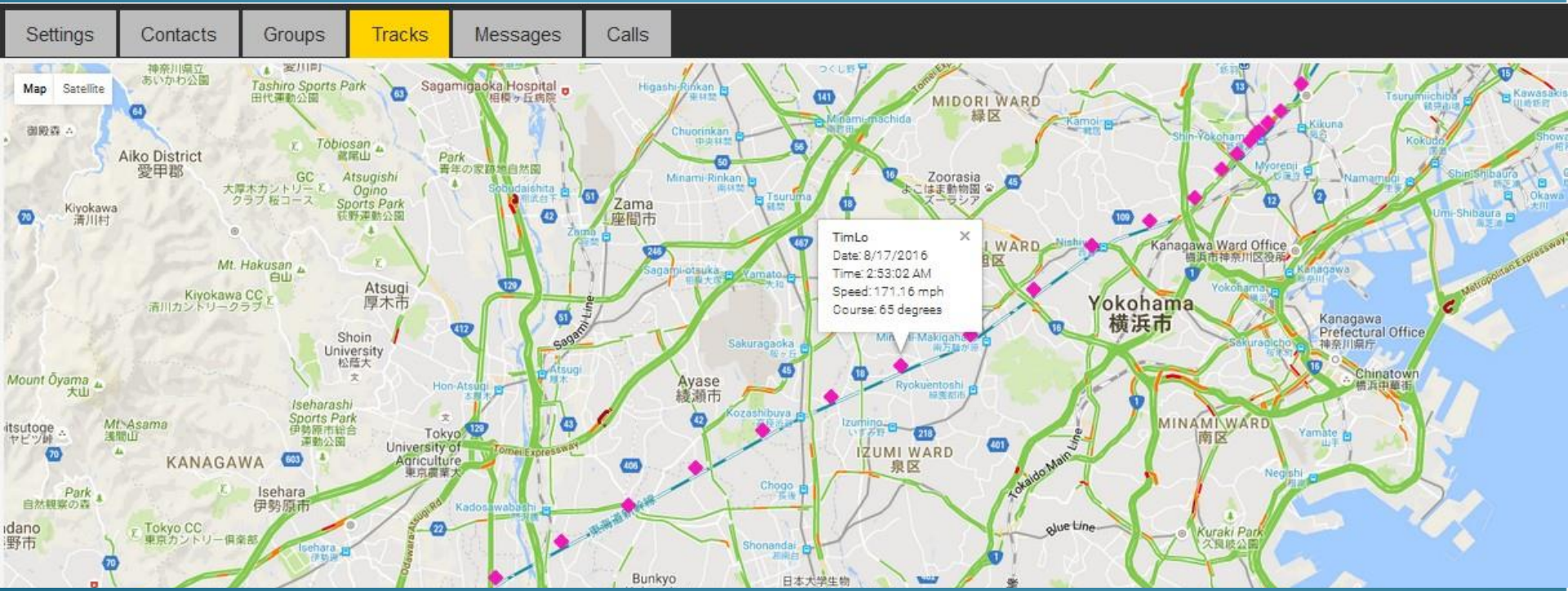


PTT PRO

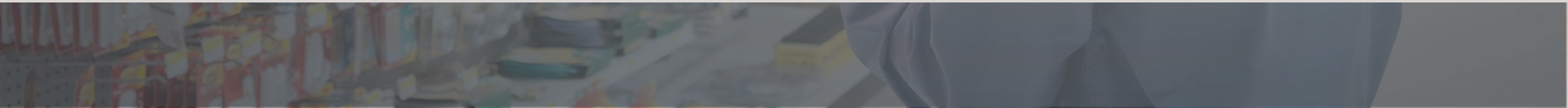
Historical Breadcrumb Example

PTT PRO

Historical Example

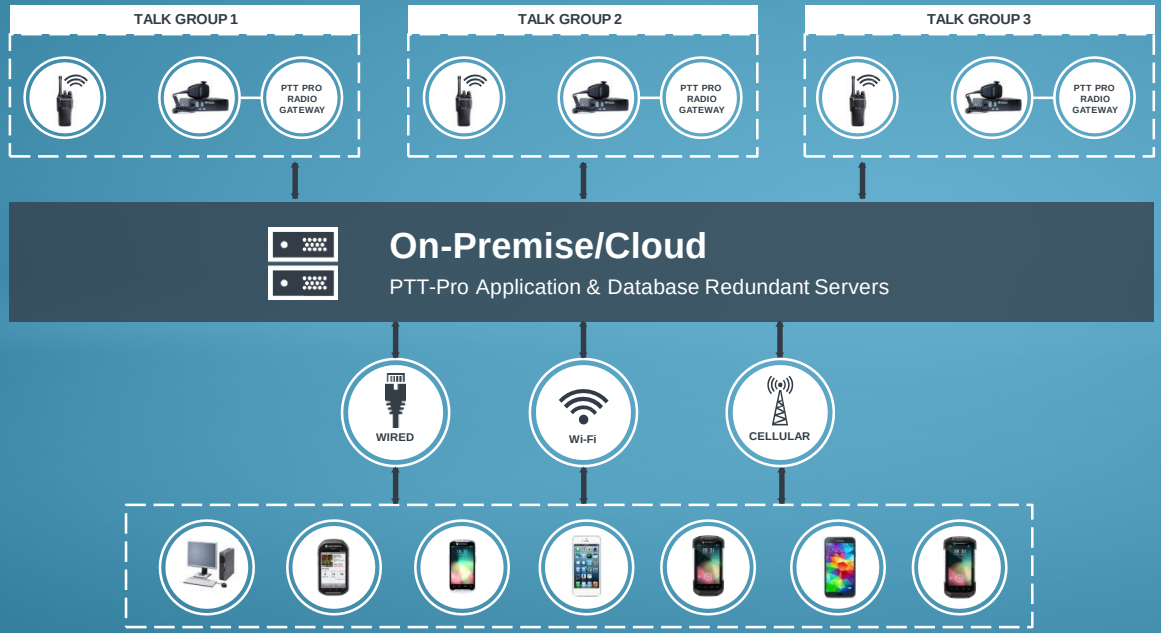


WORKFORCE CONNECT PTT PRO INTEROPERATION WITH TWO-WAY RADIOS



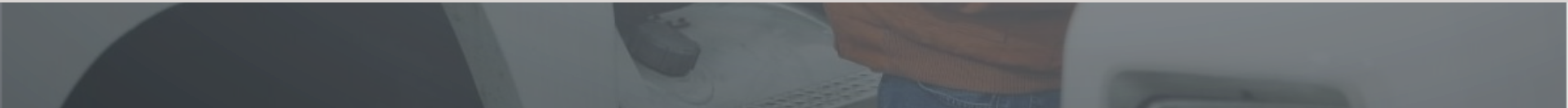
PTT PRO INTEROPERATION

Two-Way Radio Integration



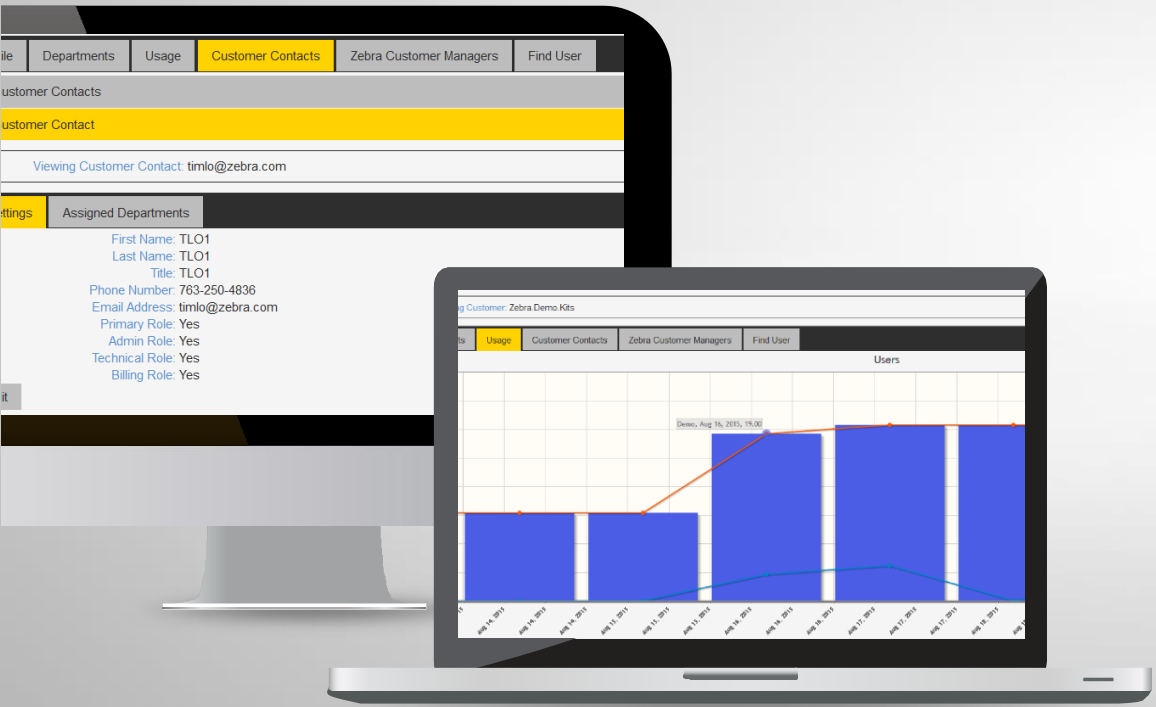
- Simple Donor Radio / Gateway Combination
- Simple Deployment with Talk Group Mapping to PTT PRO
- Talk Groups can be accessed by anyone on PTT PRO platform with permissions

WORKFORCE CONNECT PTT PRO ADMIN PORTAL



PTT PRO ADMIN PORTAL

Centralized Flexible User Administration



Contact Management

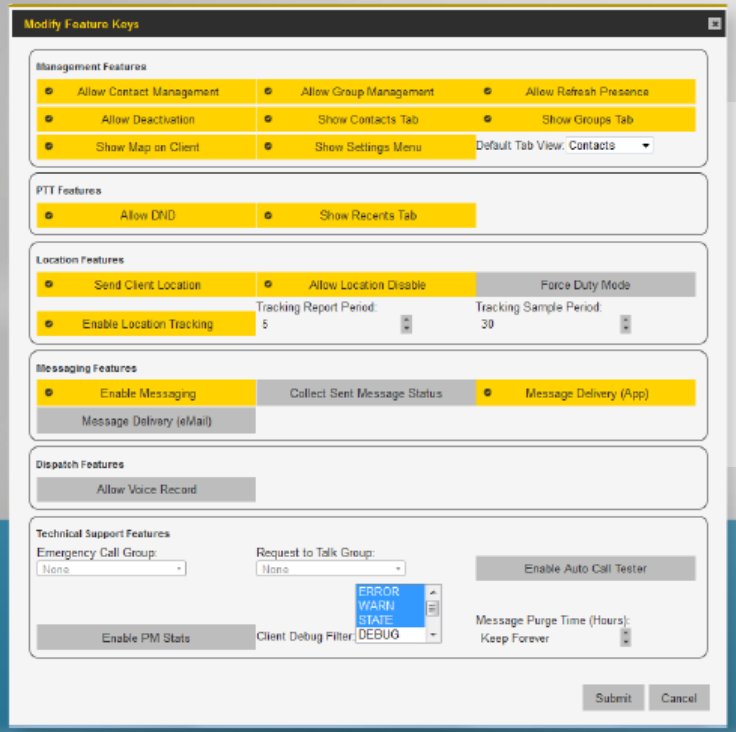
- Primary Contact
- Admin Contact
- Technical Contact
- Billing Contact

Analysis

- Usage reports of customers and departments
- Data available for six months to customers
- Trending analysis

PTT PRO ADMIN PORTAL

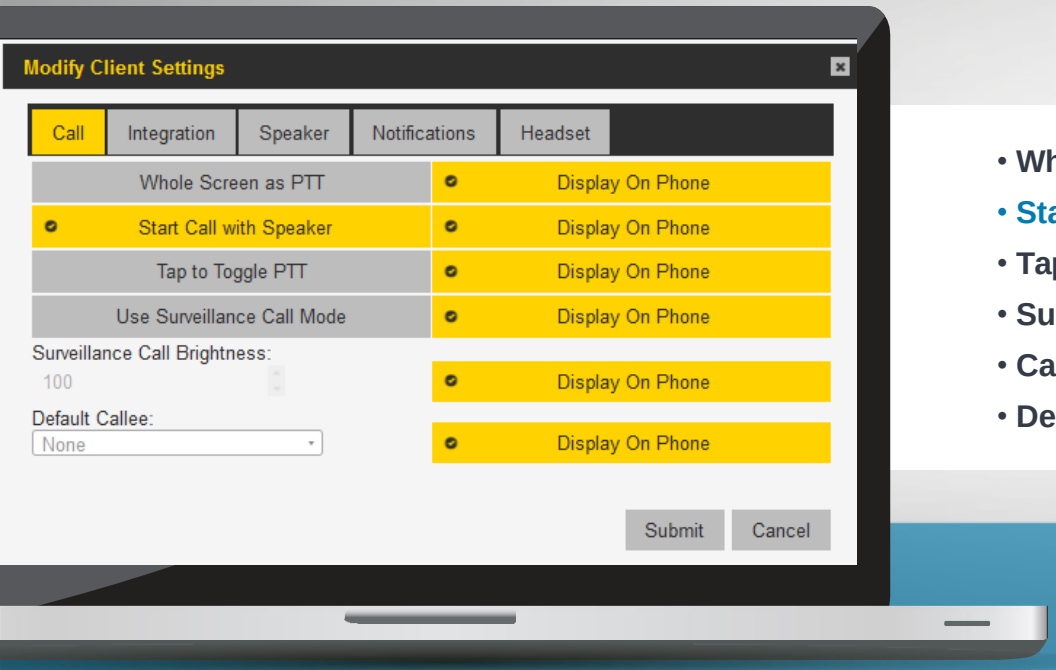
User Settings



- Management Features
- PTT Features
- Location Features
- Messaging Features
- Dispatch Features
- Technical Support Features

PTT PRO ADMIN PORTAL

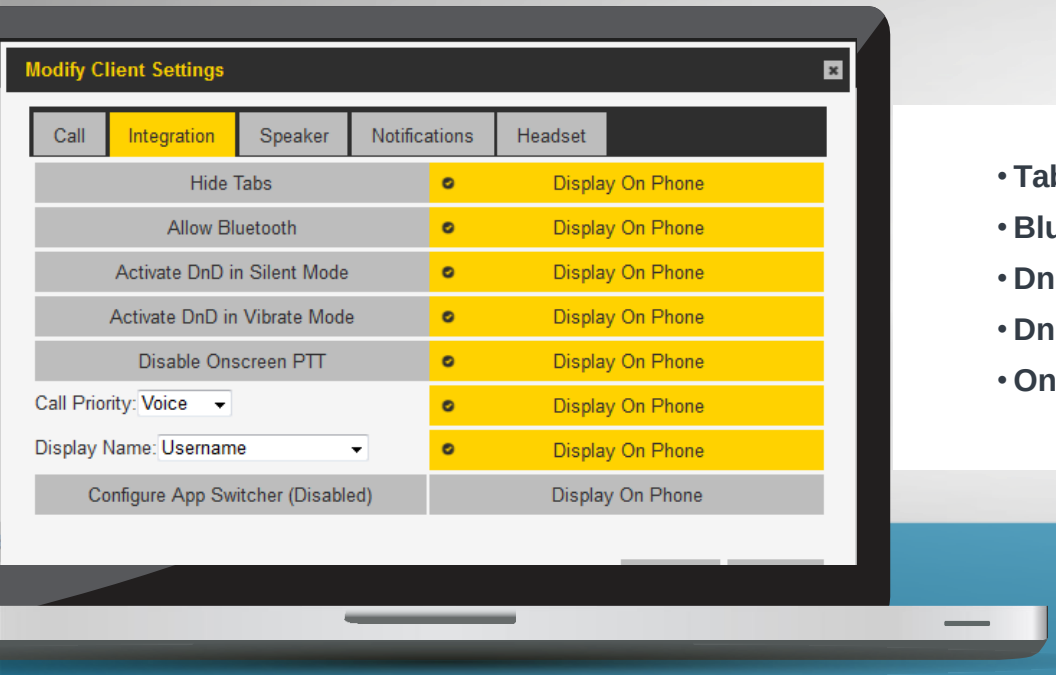
Call Settings



- Whole Screen PTT
- Start Call with Speaker
- Tap or Hold for PTT
- Surveillance Call Mode
- Call Screen Brightness
- Default Callee

PTT PRO ADMIN PORTAL

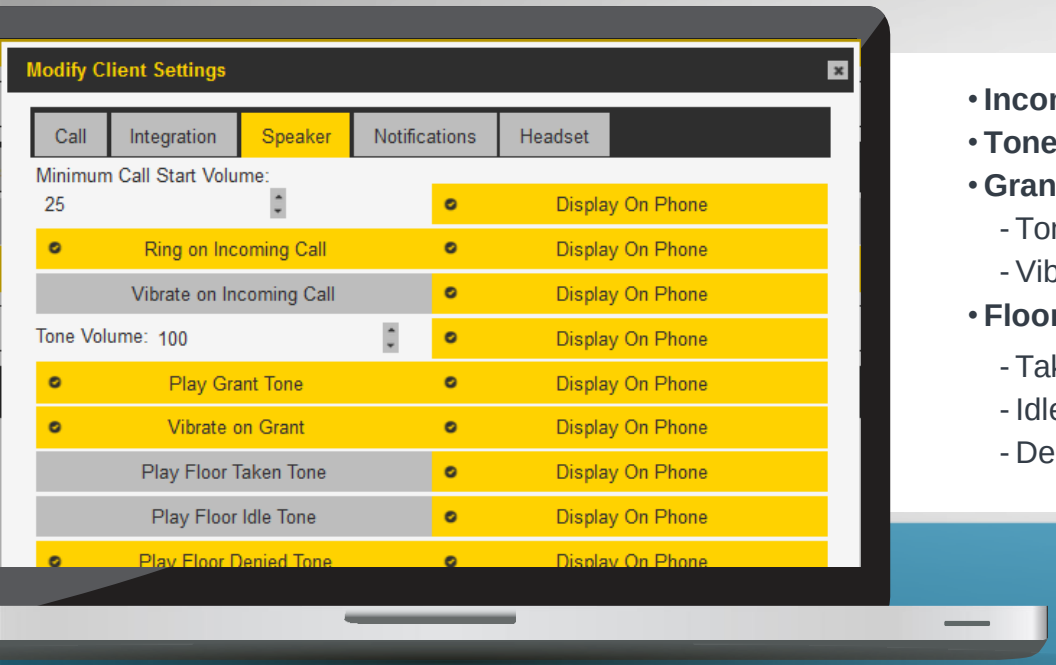
Integration



- **Tab Configuration**
- **Bluetooth On/Off**
- **DnD Silent Mode Control**
- **DnD Vibrate**
- **On-Screen PTT Button**
- **Control**
- **Call Priority**
- **Display Name**
  - Username
  - First, Last
  - Last, First

PTT PRO ADMIN PORTAL

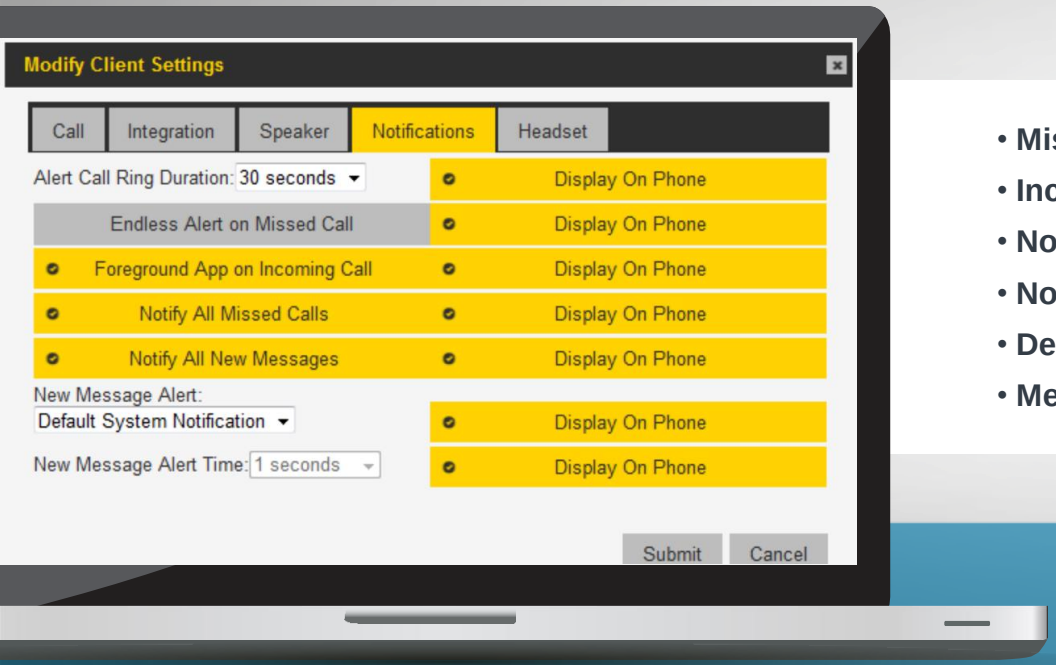
Speaker



- **Incoming Call Control**
- **Tone Volume**
- **Grant**
  - Tone
  - Vibrate
- **Floor**
  - Taken
  - Idle
  - Denied
  - Revoked
  - Lost
- **Volume Boost**
- **Ring Gain**
- **Busy Bonk**

PTT PRO ADMIN PORTAL

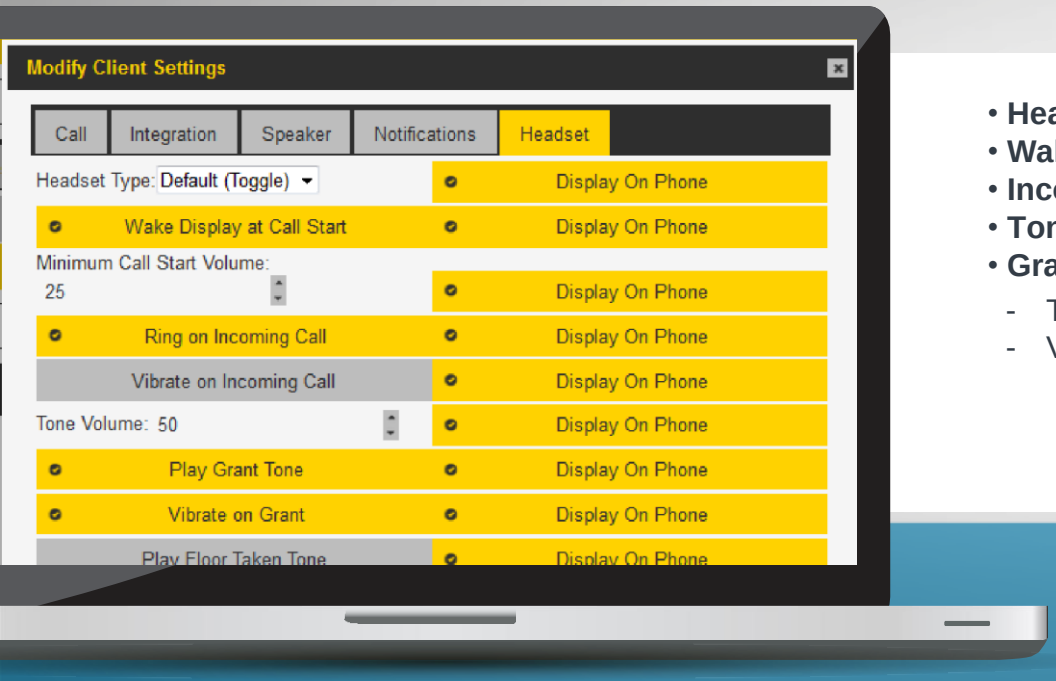
Notifications



- Missed Call
- Incoming Call
- Notify All Missed Calls
- Notify All New Messages
- Default New Message Alert
- Message Alert Time

PTT PRO ADMIN PORTAL

Headset



- **Headset Type**
- **Wake Display**
- **Incoming Call Control**
- **Tone Volume**
- **Grant**
  - Tone
  - Vibrate
- **Floor**
  - Taken
  - Idle
  - Denied
  - Revoked
  - Lost
- **Volume Boost**
- **Ring Gain**
- **Busy Bonk**

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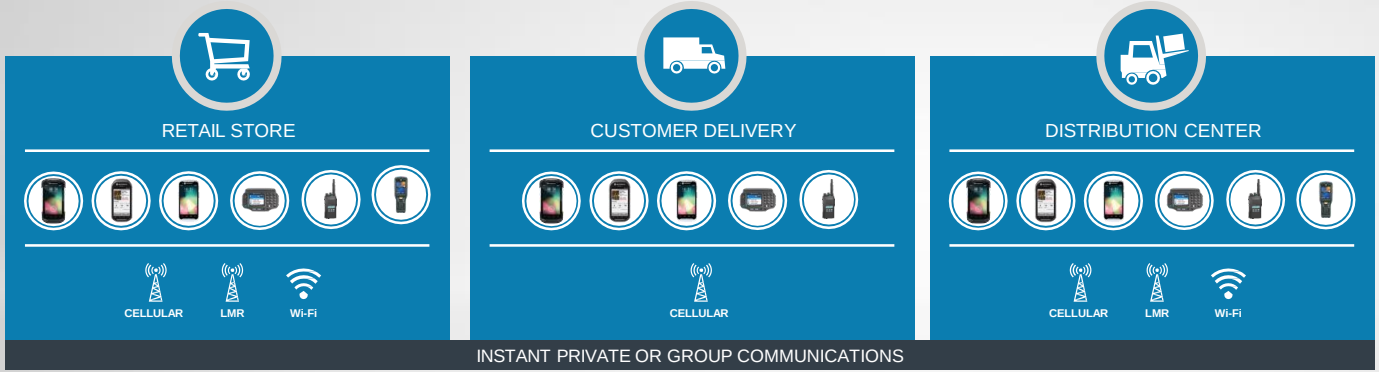
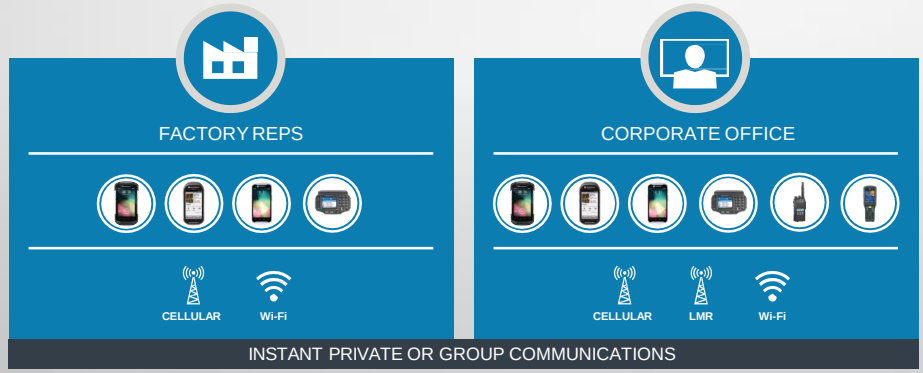
Removing Communication Boundaries

Retail





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Hospitality

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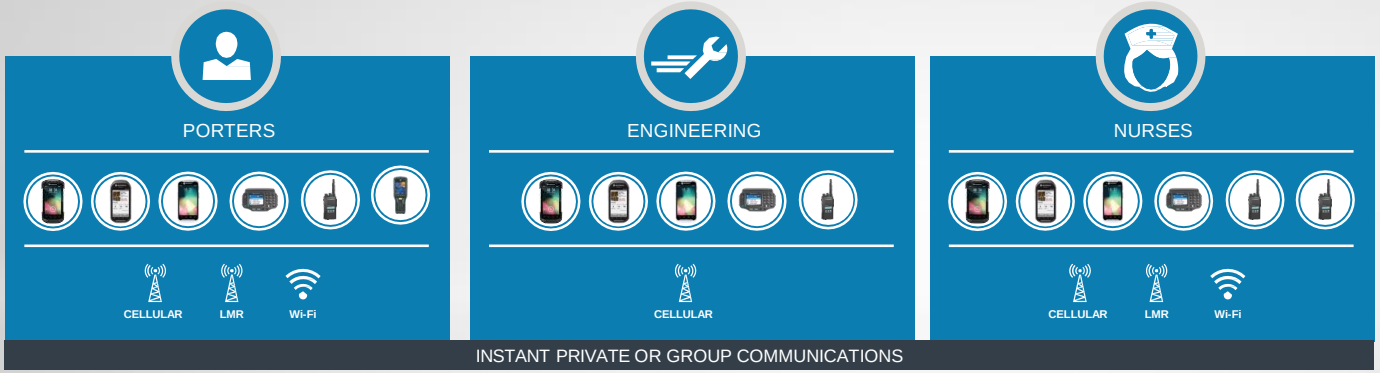
Healthcare



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Removing Communication Boundaries

Manufacturing

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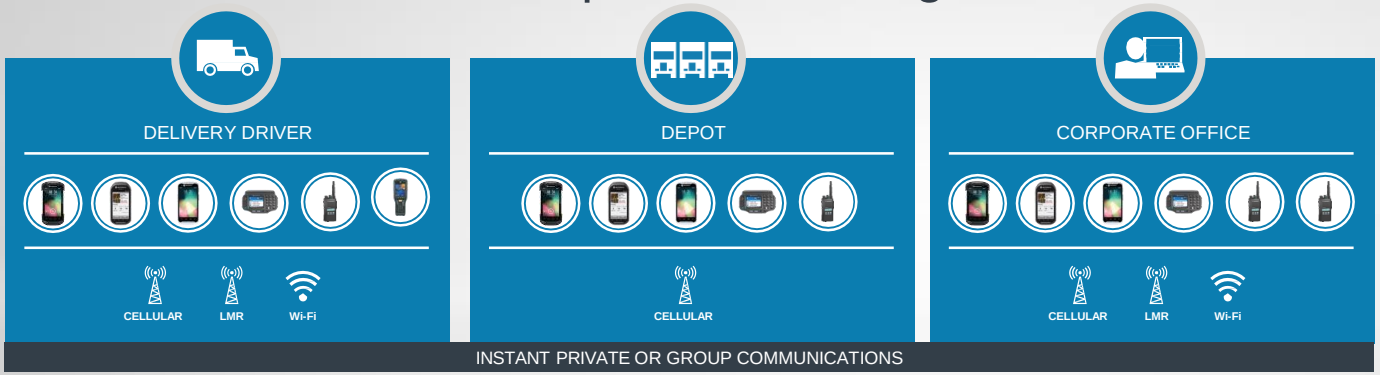
Removing Communication Boundaries

Transportation & Logistics



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ONE Communications Wavelength

ONE Truly Mobile Workforce

That's the real **power of one**
that unleashes the impact of many.

ANY QUESTIONS?

WORKFORCE CONNECT

zebra.com/workforceconnect