

# ProPTT2 Smart Video Push-To-Talk Service

The next generation of Push-To-Talk

v10.0

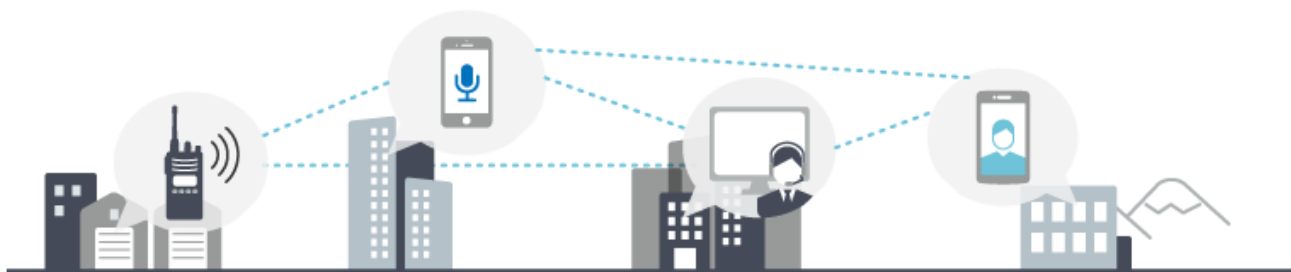
WORLD'S FIRST  
VIDEO PUSH-TO-TALK SERVICE

# ProPTT2



*Beyond the limits of existing voice push-to-talk, ProPTT2 proposes various video push-to-talk service.*

Mobile network(Wi-Fi, 3G, LTE) and smart devices-based, ProPTT2 is a IP-Video PTT service that provides services with video/voice PTT, real-time video sharing PTT, Text chat, transfer image/file, location sharing etc. and also it's voice PTT compatible with two-way radio.



Wi-Fi/3G/LTE and Smart devices-based

# Various professional video push-to-talk service

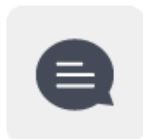
ProPTT2 | Smart Video Push-To-Talk



Video PTT  
(1:1,1:N)



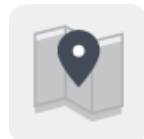
Real-time  
Video Sharing  
PTT



Text chat  
(1:1,1:N)



Transfer  
Image/File



User's location  
Sharing/Tracking



Interrupting  
PTT



SOS  
Message



Admin's  
Alert Message



Push-to-Talk  
History



Multi channel  
connection  
at same time

# For accurate situational awareness and rapid response Real-time video sharing push-to-talk

ProPTT2 | Smart Video Push-To-Talk



Full HD (H.265 Supported) quality real-time video sharing between users



Voice push-to-talk and text chat during the Video Sharing



Supports external UVC camera connection for useful video sharing

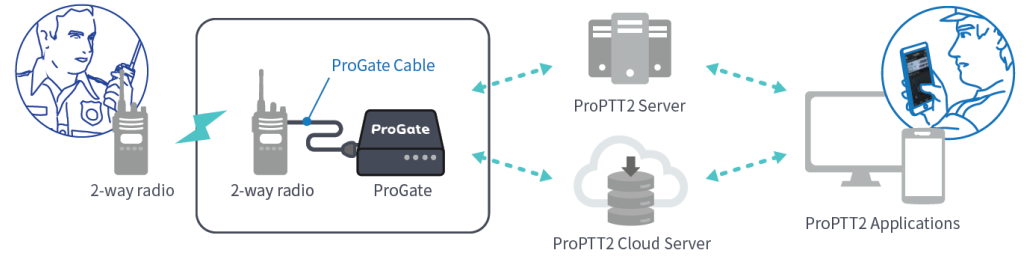
With RoIP gateway device(ProGate)

# Voice PTT compatible with two-way radios

ProPTT2 | Smart Video Push-To-Talk



ProGate is the RoIP(Radio over IP) gateway device that provides you voice PTT communication environment between IP based Push-To-Talk service and two-way radios(FRS, UHF, VHF, TRS).



# For useful push-to-talk, Support various platforms and PTT devices

ProPTT2 | Smart Video Push-To-Talk

## Support video PTT applications of various platforms



- Smartphone App(iOS, Android)
- Embedded App(Android)
- Wearable App
- PC Client(Windows)

Has acquired GS certification(The first grade)



## Support PTT dedicated devices



ProPTT2 supports various screen resolutions of PTT devices and also supports to use PTT button when the app is in background or the device is screen-off.  
You can send/receive SOS messages each other by using SOS hard key.

※ You can connect and use the functions of ProPTT2 app to button of PTT phone.

## Support various Bluetooth/wired accessories



Bluetooth PTT button

Bluetooth Speaker Mic with PTT button

Wired PTT headset

## World first video push-to-talk service

# Major features and techniques of ProPTT2

### ProPTT2 | Smart Video Push-To-Talk



#### Patent registered IP-based video push-to-talk

- Video-based PTT service, Support full real-time push-to-talk
- World first, support bi-directional PTT in 1:N channel
- World first, support dual audio mode (VoIP of Full-Duplex/MP3 of Half-Duplex)
- High quality video/voice push-to-talk(Opus, H.265, Codec2)
- AI based Noise Reduction



#### Professional video push-to-talk

- Video PTT, Real-time video sharing PTT
- Text chat/Transfer image/file, User's location sharing
- Interrupting PTT, Voice PTT batch transmission by admin, SOS/Alert message
- Multi channel connecting at same time, PTT history



#### Support user's convenience for push-to-talk

- Optimized PTT features and UI/UX for smart devices
  - Set external button as PTT features, Support various screen resolutions and using PTT button when screen is off
- Support various mobile/Bluetooth devices
  - PTT devices, Smart Watch, PTT Accessory, USB camera



#### Compatible with other's system

- Voice PTT compatible with two-way radios(RoIP gateway integration)
- Voice PTT compatible with SIP Phone(SIP gateway integration)
- Sharing video of IP-CCTV camera(RTSP integration)



#### Customizable PTT products for B2B customer

- On-premise Server Package(S/W), Sign up for cloud service(ASP)
- Support PTT system's bulk service with scalability for Many users
- Use video PTT app per user and administrator(iOS/Android, Windows)
- Real-time management for user and PTT channel's information



#### Strong security for video PTT service

- Support strong data encryption(OTP, SSL/TLS, AES/ARIA, E2EE)
- Support customer's encryption module
- Support SSAID/IMEI/Phone number authentication of smart devices
- Use PTT app in mobile network(3G, LTE) only



#### Support various customizing tool

- ProPTT2 SDK for development of video PTT app
- ProPTT2 OpenAPI, Plug-in for integration with B2B customer's system
- ProGate Firmware for production of RoIP gateway device
- Support changing B2B customer's logo image



#### Video PTT for global customer

- Global server farm for Cloud Service(Asia, North America, Europe)
- Download ProPTT2 app from App Store, Play Store and ProPTT2 website(www.proptt2.com)
- Multi-language for global service(Up to 204 countries, 90 languages)

# IP-based video push-to-talk solution

## ProPTT2's Products

ProPTT2 | Smart Video Push-To-Talk



### ProPTT2 Server Package(S/W) On-premise Server Software

With ProPTT2 Server Package, It's possible to build customer's own video push-to-talk system.



### ProPTT2 Cloud Service Sign up for video PTT service(ASP)

Without building and managing a new system, you can use video PTT service by monthly plan.



### ProPTT2 Applications(S/W) iOS/Android App, Wearable App, PC Client

Customer's users for Server Package and Cloud Service can download and use ProPTT2 app on App Store, Play Store.



### ProGate(H/W) RoIP(Radio over IP) Gateway device

ProGate provides you voice PTT compatible between IP-based PTT service and two-way radios (FRS,UHF,VHF,TRS).



### ProPTT2 SDK(S/W) iOS/Android/Windows

With ProPTT2 SDK, for customer's needs, you can develop new video PTT app or add video/voice PTT function on your customer's application.



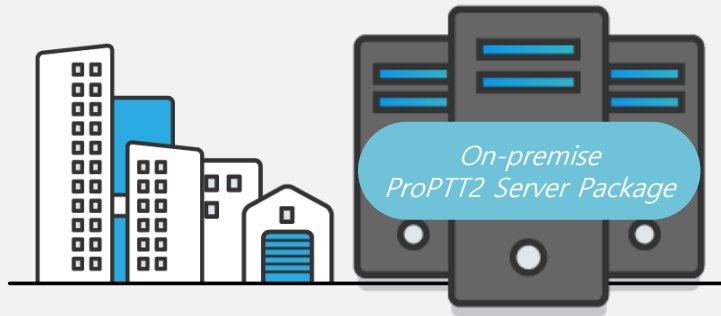
### ProPTT2 App Service For individual users(B2C)

Users can download ProPTT2 app for free and use paid app service(In-App purchase).



# With ProPTT2's products implementation of video PTT service for you

ProPTT2 | Smart Video Push-To-Talk



**Customer/** ProPTT2 Video PTT Server System

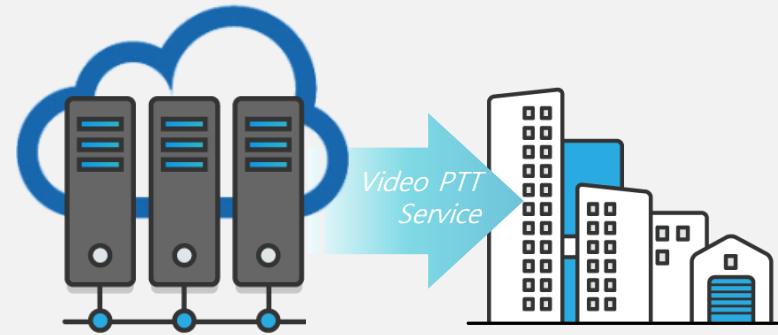
## On-premise Server Software

ProPTT2 Server Package(SW, User license)

ProPTT2 Applications for free

- Voice PTT compatible with two-way radios(with ProGate)
- Development of customer's own video PTT app(with ProPTT2 SDK)
- Support integration with customer's system (with OpenAPI, Callback API, Plug-in)

*According to your needs,  
It's possible to build your own video PTT system.*



**IMPTT/** ProPTT2 Cloud Service System

## Sign up for Service

ProPTT2 Cloud Service(by monthly plan)

ProPTT2 Applications for free

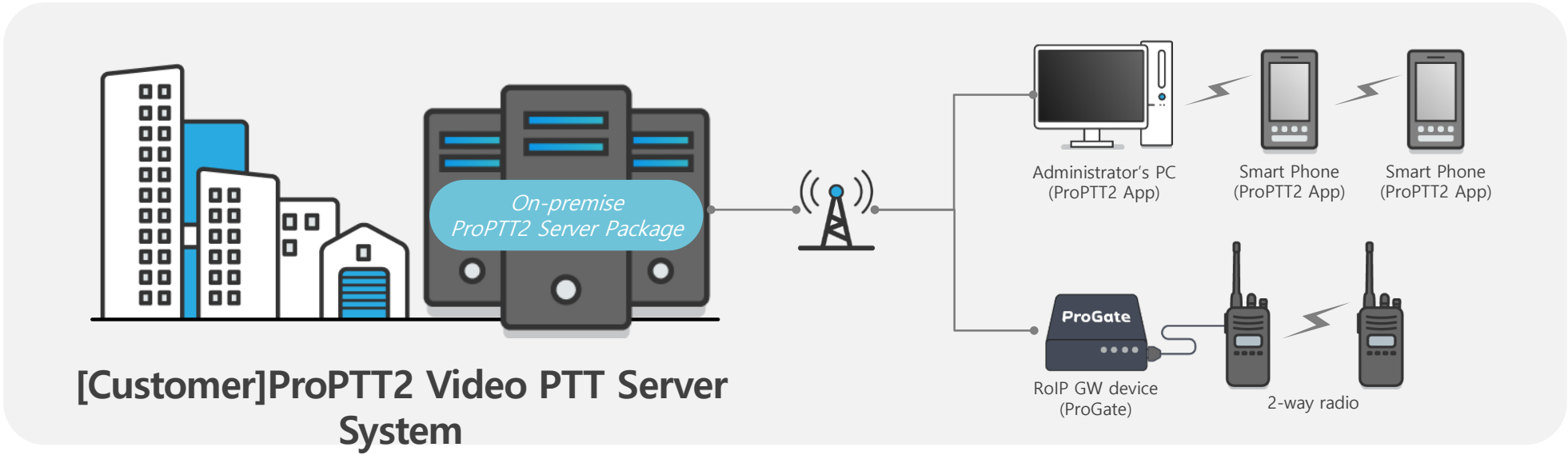
- Voice PTT compatible with two-way radios(with ProGate)
- Development of customer's own video PTT app(with ProPTT2 SDK)
- Support integration with customer's system (with OpenAPI, Callback API)

*Without building new system, just you can use video PTT service.*

# 1. On-premise server software for IP-PTT system

## ProPTT2 Server Package | support Windows and Linux

ProPTT2 | Smart Video Push-To-Talk



[Customer]ProPTT2 Video PTT Server System

According to number of users/server type/ needed PTT features, Customer can select ProPTT2 server package's version and install it for your own video PTT system.

The image shows three circular icons representing different ProPTT2 server package versions. The first icon is a blue box labeled "ProPTT2 Server Package" with "Standard / Enterprise" below it. The second icon is a light blue circle labeled "Mini" with "Minimum 1~30 users" below it. The third icon is a medium blue circle labeled "Standard" with "Basic 1~1,000 users" below it. The fourth icon is a dark blue circle labeled "Enterprise" with "Professional 1~3,000+ users" below it.

# 1. On-premise server software for IP-PTT system

## ProPTT2 Server Package | version

ProPTT2 | Smart Video Push-To-Talk



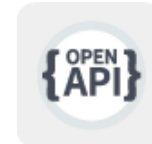
### Video-based IP-PTT service

Compatible Voice PTT with radios  
User's location sharing/tracking



### Build your own PTT system

Bulk service with scalability for users  
Support low-spec server equipment



### Integration with customer's system

Changing B2B customer's logo image  
Strong security(AES/ARIA, E2EE)

ProPTT2 Server Package	Mini	Standard	Enterprise		
			Stand Alone	Clustered	
Users	1~30	1~1,000	1~1,000	1~3,000+	
Server Type	Single	Single	Single	Dual	
Server Function	Minimum	Basic	Professional	Professional	
	Video/Voice PTT, Text chat, transfer images/files, user's location sharing Support "Admin Web" for managing user and PTT channel's information				
	Support low-spec server equipment	Video sharing PTT (only 1user per 1 channel can transmit the video) User's location monitoring on Admin Web		Video sharing PTT (Multi users per 1channel can transmit the videos) User's location monitoring and tracking on PC Client(Dispatcher) Server-side PTT/Video recording	
		Support integration with customer's system(OpenAPI / Plug-in / Callback API) and SSAID/IMEI/Phone number authentication of smart devices			
Server OS	Windows, Linux				
PTT App.	Free(App Store, Play Store / www.proptt2.com)				

# 2. Sign up for video PTT Service(ASP) ProPTT2 Cloud Service

ProPTT2 | Smart Video Push-To-Talk



**ProPTT2 Cloud Service System**  
Global Server Farm : Asia, North America, Europe



*Who wants to save time and use video PTT service immediately*

*who wants to use affordable service without worrying about building & managing new system*

*Customer : by monthly plan, ProPTT2 App for free / ProGate not included*

[IMPTT Inc.]

Operation and management of Cloud-based video PTT system



Sign Up for Cloud Service



Create Administrator Account



Register Channels/Users



Enjoy Service

[Customer]

Without building and managing a new system, you can use video PTT service by monthly plan.



Smart phone (ProPTT2 App)



Smart Phone (ProPTT2 App)



Administrator's PC (ProPTT2 App)



RoIP GW device (ProGate)



# 3-1. Professional video push-to-talk application

## ProPTT2 Smartphone App | iOS, Android

ProPTT2 | Smart Video Push-To-Talk

Support OS : iOS 8.1 or above, Android 5.0 or above  
 App Download : App Store/Play Store, ProPTT2 homepage



### World first, Dual audio mode(MP3/VoIP)

- Support both VoIP mode of Full-Duplex and MP3 mode of Half-Duplex
  - Support minimum bandwidth(2.4kbps/VBR)
  - Support noise reduction and low-path filter during audio input/output for sound quality
- ※ ProPTT2 Android/Embedded app only

### Optimized PTT features for smart devices

- Using PTT button when screen is off
- Set device's external button/keypad as PTT features
- VOX PTT and chat with voice recognition
- PTT widget and floating PTT button on screen
- Support wearable app(Apple Watch / Android wear)

### Professional video push-to-talk

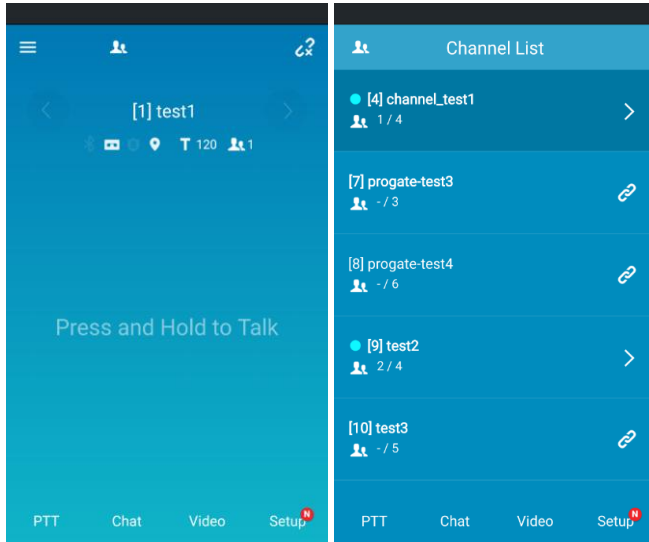
- Interrupting PTT
- SOS/Alert message
- Real-time channel synchronization
- SSAID/IMEI authentication of smart devices
- Use PTT app in mobile network(3G,LTE) only

# 3-2.Simple PTT application, Support multi screen resolution

## ProPTT2 Embedded App | Android

ProPTT2 | Smart Video Push-To-Talk

### Screen of ProPTT2 Embedded App



Support OS : Android 5 or above  
App download : ProPTT2 homepage

### Example of ProPTT2 Embedded App



PTT dedicated device

Android Tablet for auto

Android-based Watch



#### Fit to any screen

Support optimized app's UI for various screen resolution of smart devices  
(Wearable, PTT devices with keypad, Android Tablet)



#### Simple user interface for video PTT

Removed the visible "PTT button" of app and simplified App UI for easy and convenient



#### Handy PTT with screen touch

Just push the main screen to transmit PTT and don't worry about pressing the wrong button in a small size screen



#### Support KIOSK mode

Embedded App Always on Foreground  
Support kiosk mode that make the app stay in foreground status for instant push-to-talk.



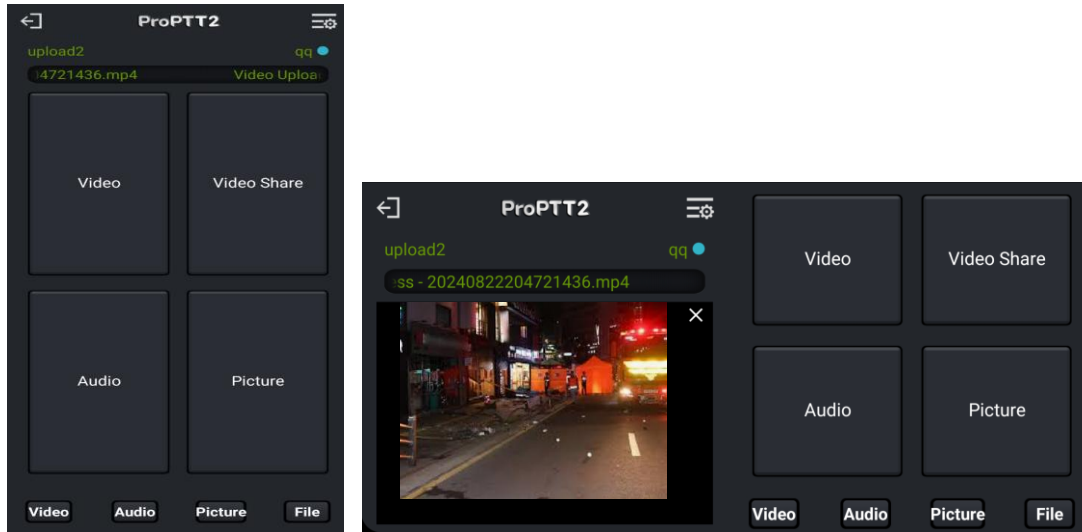
#### Lock your push-to-talk setting

Lock your own Push-To-Talk settings to keep it not be arbitrarily changed while using the app.

# 3-3.Supports BodyCam ProPTT2 Upload App | Android

ProPTT2 | Smart Video Push-To-Talk

## Screen of ProPTT2 Upload App



Support OS : Android 5 or above  
App download : ProPTT2 homepage

## Dedicated devices of ProPTT2 Upload App



Hytera VM780



Hytera SC580



4Fact LIVE ST20



### [Support for various media](#)

Supports video recording, voice recording, and photo taking. Supports local file transfer.



### [Supports automatic upload](#)

Media recorded offline is automatically transferred to the server when online. Supports real-time transfer when online even while recording.



### [Supports H.265](#)

Supports H.265 when recording video. Performance is improved by supporting the terminal's HW encoder.



### [Supports PTT function integration](#)

Supports PTT transmission and reception during recording. Supports video sharing while recording.



### [Configuration](#)

Supports user settings such as radio settings, camera settings, and language settings.

### 3-4. Push-to-talk with your wearable devices

# ProPTT2 Wearable App | Apple Watch & Android Wear

ProPTT2 | Smart Video Push-To-Talk



androidwear

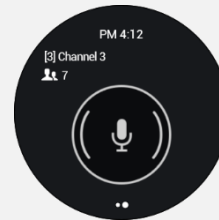
Android OS 6.1 or above  
Android Wear 1.4 or above



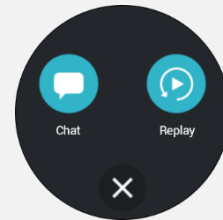
WATCH

iOS 9.0 or above  
Apple Watch Series 2(Watch OS 3) only

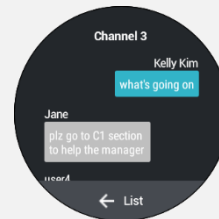
Your wearable device paired with your smartphone can be used as a PTT button via ProPTT2 Wearable App.



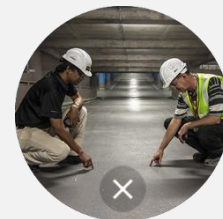
Transmit voice PTT



Replay last PTT



Recent chat



chat > view image

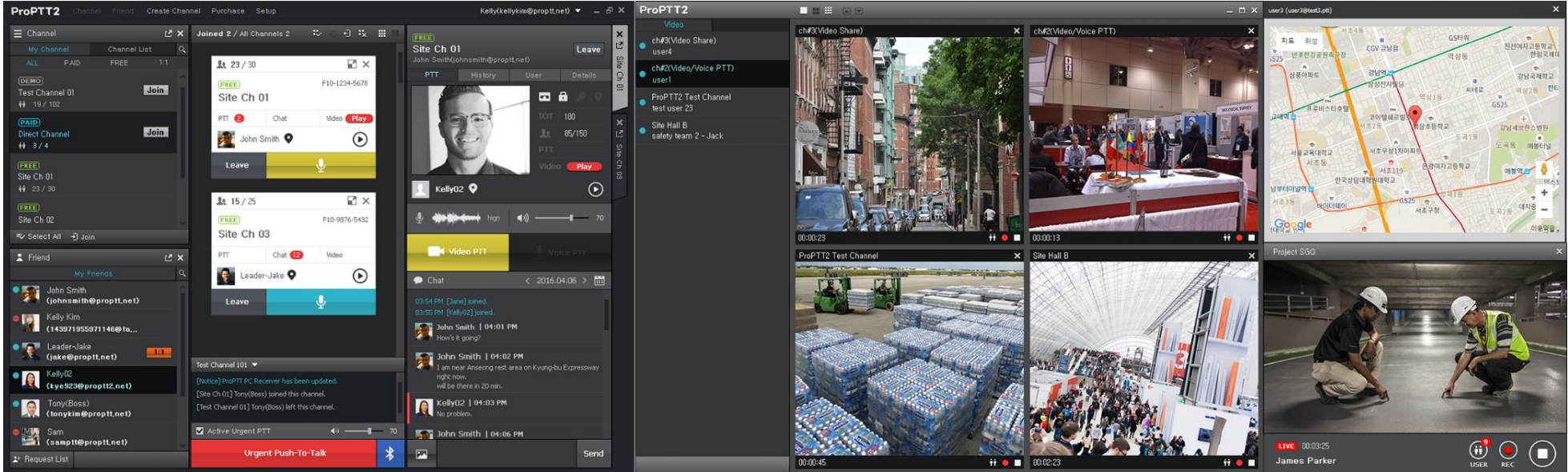
Features of ProPTT2 Wearable App



# 3-5. Administrator's video push-to-talk program

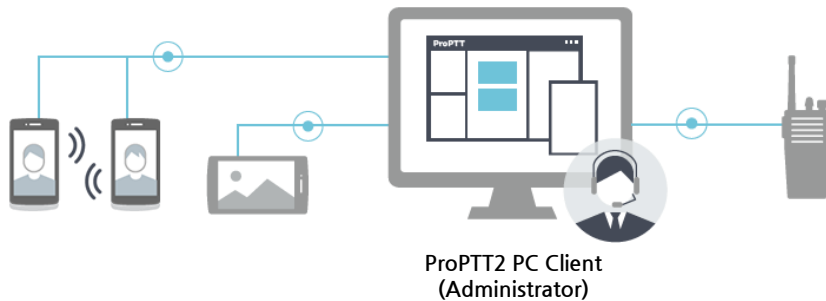
## ProPTT2 PC Client | Windows

ProPTT2 | Smart Video Push-To-Talk



Support OS : Windows 10.0 or above, Edge  
App download : ProPTT2 homepage

### For Administrator, ProPTT2 video PTT program(PC Client)



- Connect up to 64 PTT channels at same time
  - 1:1, 1:N Video/Voice PTT, Text chat, Transfer image/file
  - View user's PTT/chat history per PTT channel
- Play up to 16 PTT channels' real-time videos from users
  - Smartphone video sharing, PC screen sharing, CCTV video sharing
- **Voice PTT batch transmission/Send alert message by Administrator after selected several channels**
- **Interrupting PTT by Administrator**
- **Support user's location monitoring and tracking**

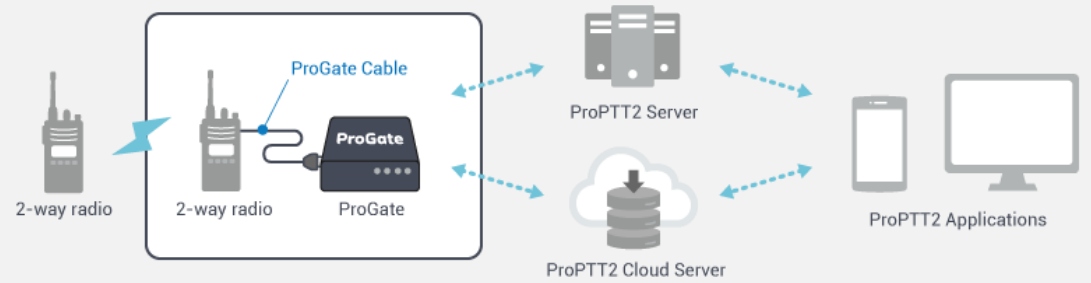
# 4. Compatible voice PTT with two-way radios ProGate(RoIP Gateway device)

ProPTT2 | Smart Video Push-To-Talk



## ProGate/ Radio to Smartphone

ProGate provide voice PTT environment between smartphone/PC with ProPTT2 applications and two-way radio.



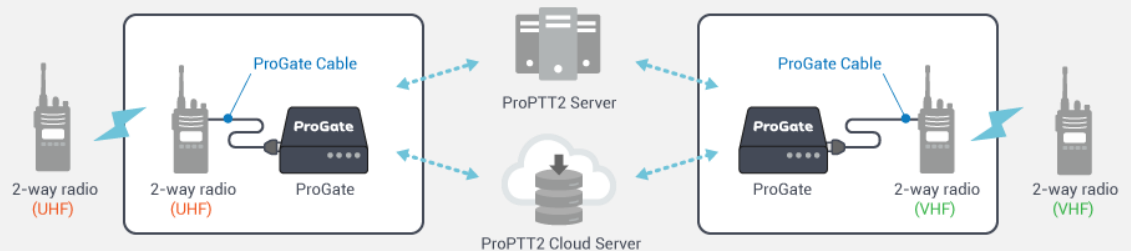
## Support voice PTT compatible with two-way radio (FRS,UHF,VHF,TRS) and smartphone app/PC client

(You can apply ProGate to to ProPTT2 server package and ProPTT2 Cloud service.)

- Use multiple radio channels as a single unified PTT channel (Multi-channel Bridge)
- Prevent PTT lock duplicates in multiple ProGate installation environment
- Support "Admin Web" for managing ProGate's network/account/PTT channel settings

## ProGate/ Multi-channel Bridge

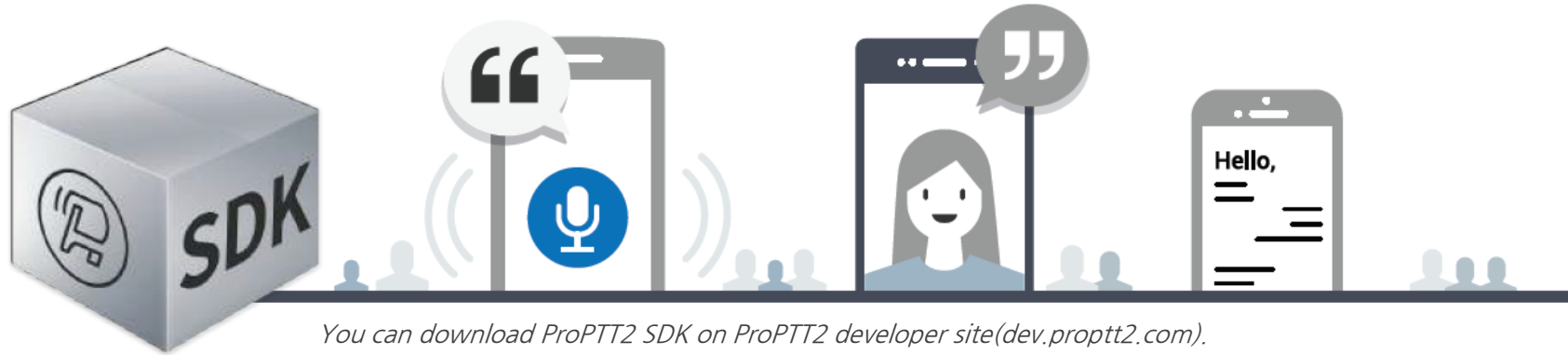
You can use multiple radio channels as a single unified channel by integrating several ProGate, which connected to each radio channels, with ProPTT2 Server.



# 5. Develop customer's own video PTT app

## ProPTT2 SDK | Software Development Kit

ProPTT2 | Smart Video Push-To-Talk



You can download ProPTT2 SDK on ProPTT2 developer site([dev.proptt2.com](http://dev.proptt2.com)).



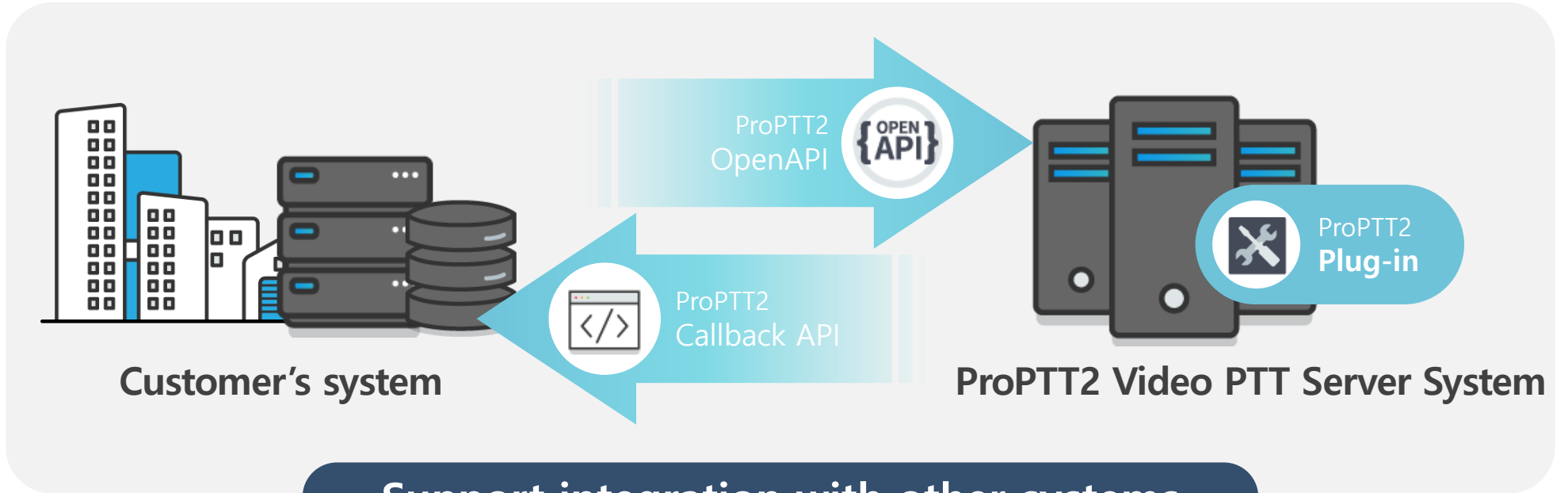
[ProPTT2 provides iOS/Android/Windows SDK for free.](#)

With ProPTT2 SDK, for customer's needs, you can develop new video PTT app or add video/voice PTT function on your customer's application.

## 6. Integration with customer's system

# ProPTT2 OpenAPI

ProPTT2 | Smart Video Push-To-Talk



**Support integration with other systems**

ProPTT2 OpenAPI, Callback API, Plug-in

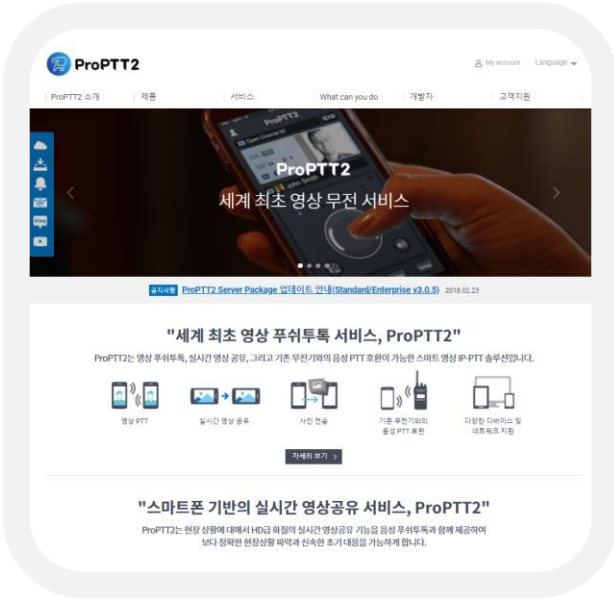
SIP gateway integration : support voice PTT compatible with SIP Phone

RTSP integration : support sharing real-time/recorded videos of IP-CCTV camera and VMS

# Introduction of product and techniques

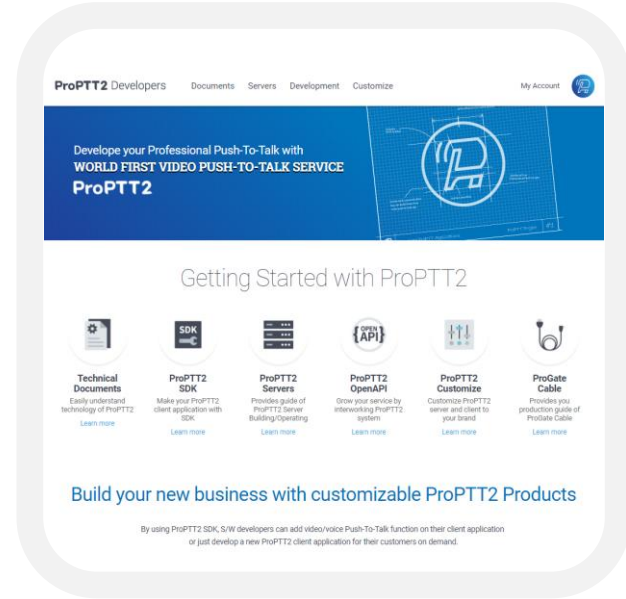
## ProPTT2 Site

ProPTT2 | Smart Video Push-To-Talk



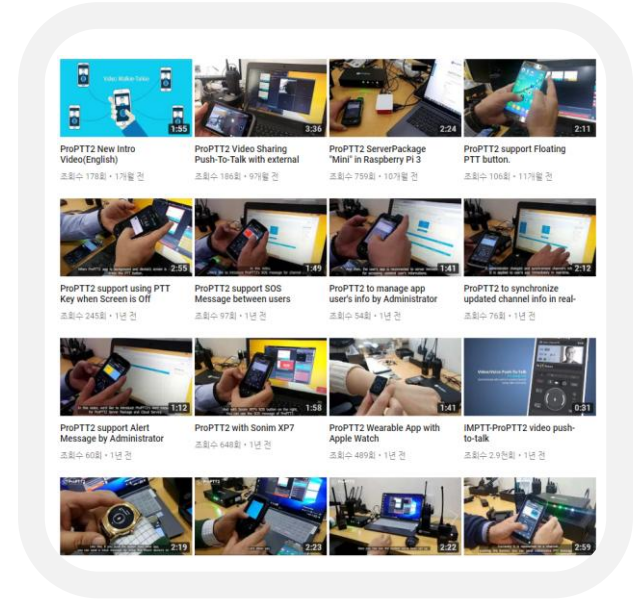
[ProPTT2 homepage]  
[www.proptt2.com](http://www.proptt2.com)

Introduction of ProPTT2's all ProPTT2 App Download



[ProPTT2 Developers]  
[dev.proptt2.com](http://dev.proptt2.com)

Guide of ProPTT2 technique/development ProPTT2 SDK Download



[ProPTT2 video for demo]  
[www.youtube.com/c/ProPTT2VideoPushToTalk](http://www.youtube.com/c/ProPTT2VideoPushToTalk)

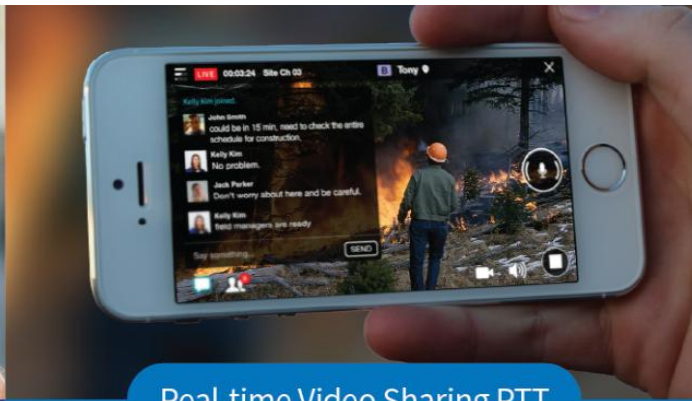
Introduction of ProPTT2 video for demo (PTT App, Devices, Accessories)

# Thank you.

ProPTT2 | Smart Video Push-To-Talk



Voice/Video PTT



Real-time Video Sharing PTT



Talking with Two-way Radio