

ProPTT2 Smart Video Push-To-Talk Service

The next generation of Push-To-Talk

v9.0



WORLD'S FIRST VIDEO PUSH-TO-TALK SERVICE ProPTT2

<u>Beyond the limits of existing voice push-to-talk,</u> <u>ProPTT2 proposes various video push-to-talk service.</u>

propTT2

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







Real-time Video PTT Video Sharing (1:1,1:N) PTT



Text chat (1:1,1:N)



Transfer User's location Image/File Sharing/Tracking



Interrupting

PTT



SOS

Message



Admin's







Push-to-Talk History



Alert Message

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

ProPTT2 | Smart Video Push-To-Talk





Full HD 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

UVC camera(USB/Webcams)

Features | 4

With RoIP gateway device(ProGate) Voice PTT compatible with two-way radios

ProPTT2 | Smart Video Push-To-Talk



ProPTT2 Cloud Server

Features | 6

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

ProPTT2 | Smart Video Push-To-Talk

Support video PTT applications of various platforms



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

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

Has acquired GS certification(The first grade)



Bluetooth PTT button



with PTT button



Bluetooth Speaker Mic Wired PTT headset

World first video push-to-talk service Major features and techniques of ProPTT2

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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.264, Codec2)



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

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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

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Customer/ ProPTT2 Video PTT Server System

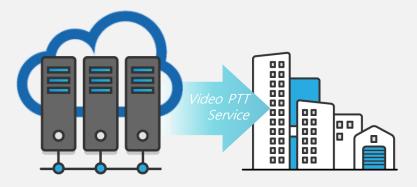
On-premise Server Software

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)

> <u>According to your needs,</u> <u>It's possible to build your own video PTT system.</u>



IMPTT/ ProPTT2 Cloud Service System

Sign up for Service

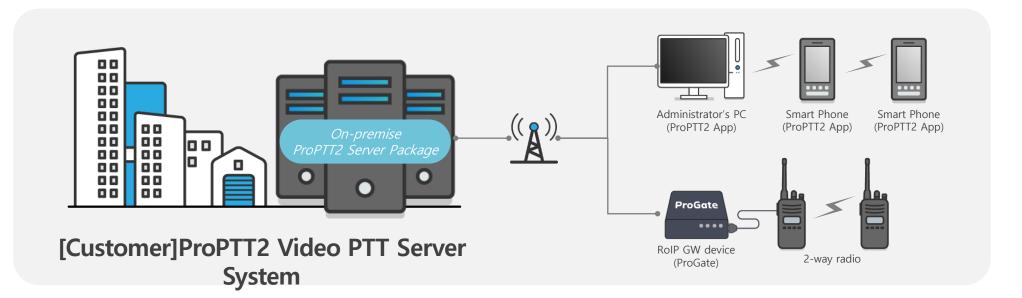
ProPTT2 Cloud Service(by monthly plan)

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)

1.On-premise server software for IP-PTT system ProPTT2 Server Package | support Windows and Linux

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

1. On-premise server software for IP-PTT system **ProPTT2 Server Package** | version

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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



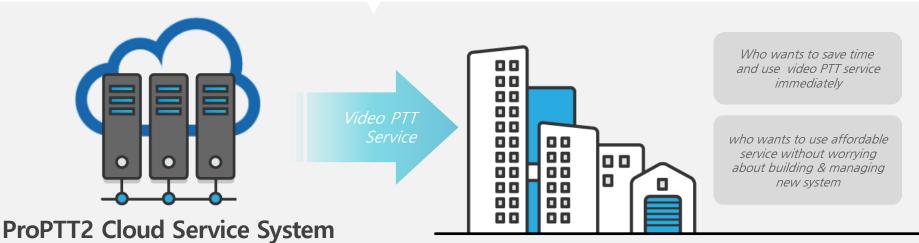
Integration with customer's system

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)			

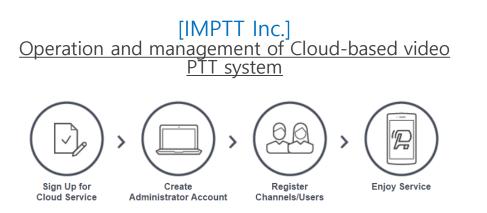
2.Sign up for video PTT Service(ASP) ProPTT2 Cloud Service

ProPTT2 | Smart Video Push-To-Talk



Global Server Farm : Asia, North America, Europe

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



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



Smart phone Smart Phone Administrator's PC (ProPTT2 App) (ProPTT2 App) (ProPTT2 App)



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)

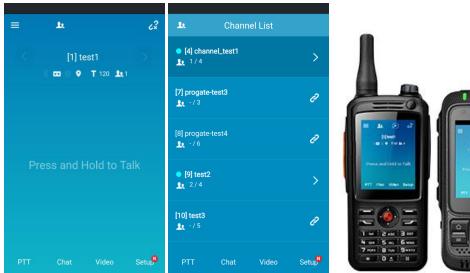
Professional video push-to-talk

- 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

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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

J.

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

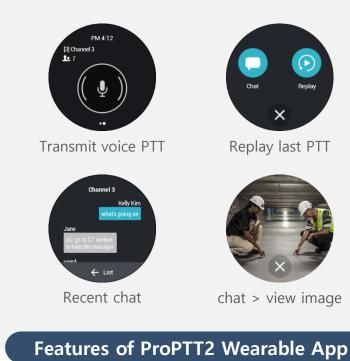
Lock your own Push-To-Talk settings to keep it not be arbitrarily changed while using the app.

3-3.Push-to-talk with your wearable devices ProPTT2 Wearable App | Apple Watch & Android Wear

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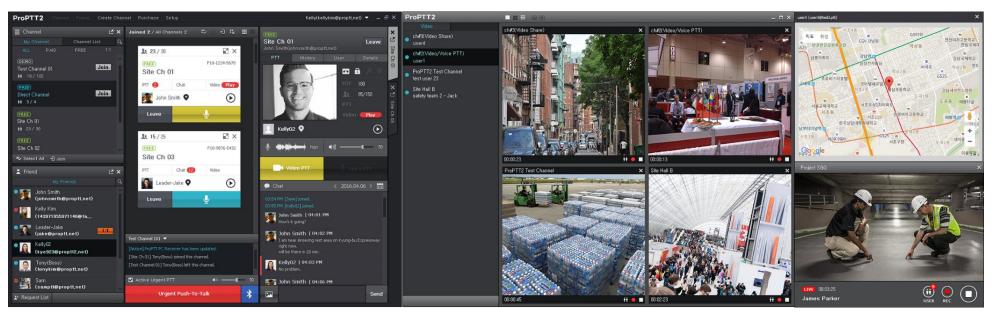
Your wearable device paired with your smartphone can be used as a PTT button via ProPTT2 Wearable App.



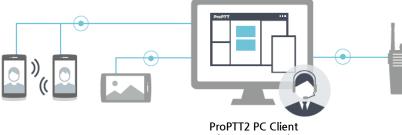
Products | 15

3-4.Administrator's video push-to-talk program **ProPTT2 PC Client** | Windows

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



(Administrator)



- 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

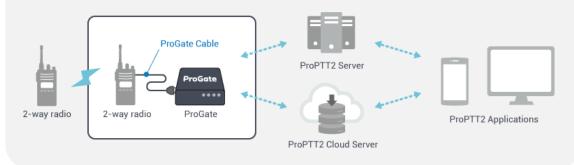
4.Compatible voice PTT with two-way radios ProGate(RoIP Gateway device)

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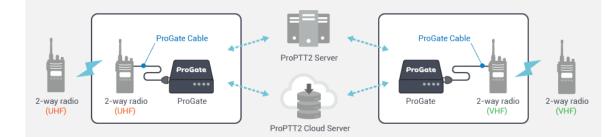
ProGate/ Radio to Smartphone

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



adio 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.



<u>Support voice PTT compatible with two-way radio</u> (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

Products | 18

5. Develop customer's own video PTT app **ProPTT2 SDK** | Software Development Kit

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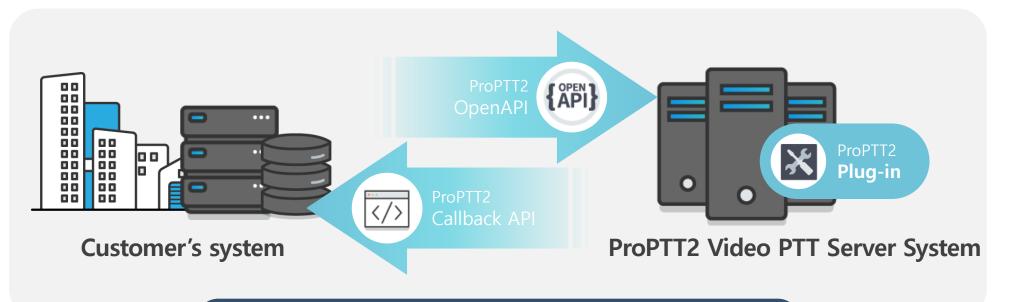
ProPTT2 provides iOS/Android/Windows SDK for free.

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.

Products | 19

6.Integration with customer's system **ProPTT2 OpenAPI**

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Support integration with other systems

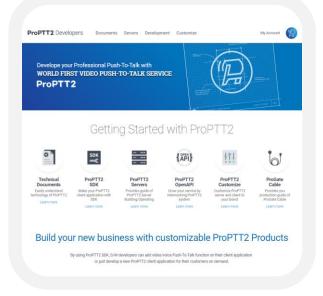
ProPTT2 OpenAPI, Callback API, Plug-in

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



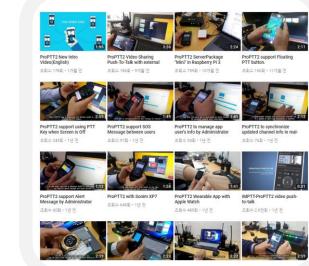


[ProPTT2 homepage] www.proptt2.com

Introduction of ProPTT2's all ProPTT2 App Download

[ProPTT2 Developers] <u>dev.proptt2.com</u>

Guide of ProPTT2 technique/development ProPTT2 SDK Download



[ProPTT2 video for demo] www.youtube.com/c/ProPTT2VideoPushToTalk

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

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Thank you.

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