Kiloview Intercom Server Pro

Voice Intercom Server

Professional Edition

Deployment Manual V1. 4

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Chapter 1 System Introduction

1.1. System Introduction

Kiloview Intercom Server Pro (KIS Pro for short) is a multi-party voice call system that was developed to make large-scale multi-person collaboration scenarios more efficient. It is a simple and practical multi-party voice call platform that can be logged in through a variety of methods (Kiloview codec, Kiloview voice panel, mobile phone/Pad, web page, handheld terminal).

When users need to participate in work, they can use KIS Pro to achieve a more efficient and convenient call experience. It can conduct multi-party voice calls across the Internet, and users can participate in it from any location and multiple devices.

Compared with the previous generation of products, KIS Pro has a clearer operating interface, more flexible multi-party call quantity, more efficient channel management, and more accurate member search function. It is an excellent software that can truly help you solve all multi-party voice call problems.

1.2. System Features

KIS Pro is a multi-party voice call system with the characteristics of low cost, multi-terminal, cross-Internet, and IP voice calls.

Chapter 2 Product Parameters

2.1. Authorization Matrix

Product Parameters	Before authorization	After authorization
Number of calls	No restrictions	No restrictions
Multi-party call	support	support
Call Management	support	support
Channel Management	support	support
One-touch mute Unmute	support	support
Disable Members	support	support
Membership Management	support	support
Operation log	support	support
Tag Management	support	support
Version Upgrade	Support any version upgrade	Support any version upgrade
Call Terminal	LinkDeck/Encoder/ Decoder/NDI Encoder/Decoder/PC/Pad	LinkDeck/Encoder/ Decoder/NDI Encoder/Decoder/PC/Pad
Language Switching	Simplified Chinese/English	Simplified Chinese/English
Trial duration	30-day trial	Authorization payment [controlled by authorization]

2.2. Hardware Configuration

Minimum system requirements:

CPU	Intel Core i5+
harddisk	40G SSD +
Memory	4GB+

2.3. System parameters

System version	Ubuntu 20.04.6 LTS (recommended)
Kernel version	Linux ubuntu 5.15.0-107-generic (recommended)
Codename	focal

2.4. Software Environment

Docker	**Docker version:** **Client:** Version: 24.0.5 API version: 1.43 Go version: go1.20.3 **Server:** Engine: Version: 24.0.5 API version: 1.43 (minimum version 1.12) Go version: go1.20.3 Container: Version: 1.7.2 **Run:** Version: 1.1.7-0ubuntu1~20.04.2 Docker init: Version: 0.19.0
ufw	**sudo ufw enable** **#TCP** sudo ufw allow 8443:8443/tcp sudo ufw allow 81:81/tcp #sudo ufw allow Customized Port : Customized Port /tcp **#UDP** sudo ufw allow 2000:40000/udp sudo ufw allow 16000:17000/udp #sudo ufw allow Customized Port : Customized Port /udp **sudo ufw commit** **Tip:** you need enable ufw and commit the rule ,otherwise no effection

2.5. Port Description

TIP1: In the network of the cloud service provider, the corresponding service ports need to be opened in the security group (firewall).

TIP2: The following service ports need to be opened on the ECS server

Static port range

Port range [static]	protocol	effect
8443:8443	TCP	KIS Pro Web Access (HTTPS)
81:81	TCP	KIS Link Device external access

Dynamic port range

Port Range [dynamic]	protocol	effect
16000:17000 (default)	UDP	Audio data communication port range
2000:40000	UDP	Max audio data communication port range

2.6. Network Description

TIP: If all the communication devices are within the same local area network as KIS Pro, then the KIS Pro voice intercom server does not require a public IP address. Otherwise, KIS Pro needs a public IP address.

Taking into account the hardware and maintenance costs of the server, it is recommended to rent an ECS with a public EIP from a cloud service provider. Cloud service providers such as Alibaba Cloud, Tencent Cloud, Huawei Cloud, AWS, etc.

According to the number of simultaneous call users, the bandwidth requirements of several scales are listed below

Number of simultaneous users	Bandwidth requirement (Mbps)
10	8
20	16
30	24

Chapter 3 Installation and Deployment

If you have purchased and configured an ECS cloud server with Ubuntu 20.04 LTS system pre-installed according to the requirements in "Chapter 2 Product Parameters", and correctly installed the Docker runtime environment according to the requirements in "Software Environment Parameters", please refer to the official Docker installation method to install the Docker runtime environment:

Install Docker Engine on Ubuntu | Docker Docs

https://docs.docker.com/engine/install/ubuntu/#install-from-a-package

After deploying the Docker environment, start deploying KIS Pro

#TIP: Before installing KIS Pro, the following three steps must be checked and executed in the operating system.

1. Log in to the system using XShell first, and grant the ordinary user the sudo permission to execute the installation in the operating system.

2. Use the command "sudo systemctl enable docker.service" to set the docker service to start automatically.

Get Docker Image Method One

```
# docker pull kiloview/kis-image
```

Or with version Tag:

```
# docker pull kiloview/kis-image:1.10.0025
```

Get Docker Image Method Two

1. Download the image file

```
# wget https://www.kiloview.com/downloads/Firmware/Kiloview-Intercom-Server-Pro/kiloview_kis_image_<kis_version_id>.tar
#Example:
wget https://download.kiloview.com/Kiloview-Intercom-Server-Pro/kiloview_kis_image_1.10.0025.tar
```

2. Unzip and load the voice intercom image into Docker

```
# docker load -i kiloview_kis_image_<kis_version_id>.tar
#Example:
docker load -i kiloview_kis_image_1.10.0025.tar
```

Create and run the KIS Pro container image

```
#Run the container image

docker run --name=KisServer --log-driver=none -idt --network host --privileged=true --restart=always -v /usr/local/bin/kis_db/:/usr/local/bin/kis/KisServer/db/ -v /etc/localtime:/etc/localtime:ro kiloview/kis-image:1.10.0025 /usr/local/bin/kis/start.sh
```

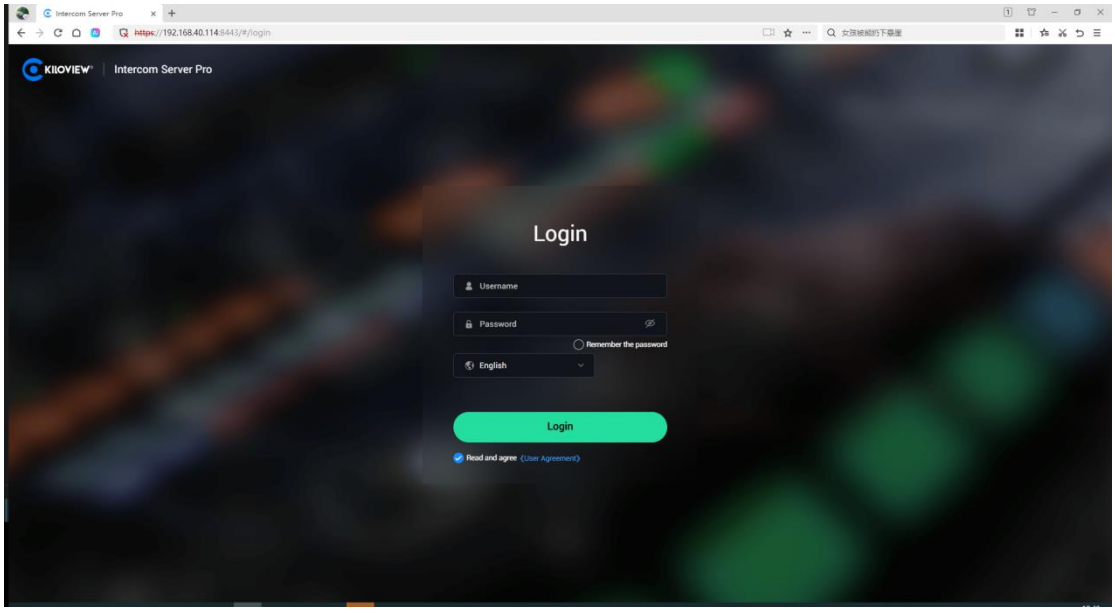
Log in to KIS Pro server

```
https://SERVER_IP:8443

Username: admin

Password: admin
```

As shown in the following figure:



Thanks for reading!

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