

Infrastructure

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Architecture

The following diagram illustrates the flow of IP telephony communications. The service can be accessed through different devices, including conventional telephones, smartphone apps, IP phones, and laptop softphones.

Conventional telephones connect through an **ATA (Analog Telephone Adapter)**, which converts the analog signal into digital format. All traffic is routed through the customer's **network/router**, where a **firewall or on-premises PBX** may be present, and then reaches the Internet through a **WISP or other network connection**.

The **Telephony as a Service (TaaS)** platform manages the **SIP trunk** and telephone lines, enabling call termination to the end user through the public telephone network.

Technical Requirements – On-Premises

Network

To deploy a PBX on an on-premises server, the following minimum requirements must be met:

- Dedicated physical space for server installation in a telecommunications room with restricted access and climate control.
- One regulated and protected power outlet.
- One network port.
- One static public IP address.
- SIP traffic enabled on port 5060.
- VPN for remote access (optional).

Server

- **Processor:** Intel® Xeon® E7-8893 v4, 3.2 GHz
 - **Memory:** 16 GB RAM
 - **Storage:** 1 TB (RAID 1), 10K RPM (recommended) or higher
 - **Controller:** Software RAID 0/1/10
 - **LAN:** 100/1000 Mbps (Dual)
 - **Operating System:** Compatible with Ubuntu Linux
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