

# VoIP technology

VoIP is methodology and group of technologies for the delivery of voice and multimedia communications over computer networks. Initially, VoIP has been used for cheap or free calls over the Internet. The technology was used mainly by IT enthusiasts or home users because of its low cost and quality. Over time, VoIP has evolved and became available to more people. The main disadvantages of VoIP, such as low quality and unavailability disappeared with better Internet connections and advancements of telecommunication technologies.

Today, most of telecommunication equipment and telecom operators support VoIP. All telecom operators use VoIP technology as the core of telecommunications services.

Although analog and digital PBX solutions still represent the most stable communication platforms, cost, flexibility, scalability, and integration features of these solutions are no longer at the level of modern VoIP telecommunication solutions.

## Advantages of VoIP solutions

### Unified infrastructure

VoIP solutions do not require special infrastructure. They use existing computer network infrastructure, and share it for voice and data services.

### Cheap and free calls

VoIP does not need dedicated analog and digital links. Instead, it uses Internet and other computer networks that are more widespread and cheaper to use.

### Modularity and integration

VoIP telecommunication solutions easily integrate with enterprise systems and thus increase productivity and provide additional functionality to users.

### Call and feature management

Modern VoIP systems are business applications that have almost unlimited ability to manage calls, depending on the parameters of the call and the state of the caller or the called number.

### Lower maintenance costs

Standard based VoIP telecommunications systems are composed of computer components and are cheaper to maintain than proprietary systems.

Additional services such as video telephony, storage of fax and voice messages and integration with other communication systems such as e-mail and chat messages further extend the benefits of VoIP technology.

## Implementation example

This example shows the connection of two remote offices and a home office or any other remote location.

The main office is connected to the telecom operator and is used to connect the telecommunication system to the phone service. Telecommunication system is also connected to the Internet and thus available to remote locations.

The remote office is connected to the main office over the Internet and this allows free calls to the main office.

The home office is also connected to the main office over the Internet and can call all the numbers in the main and remote offices for free.

