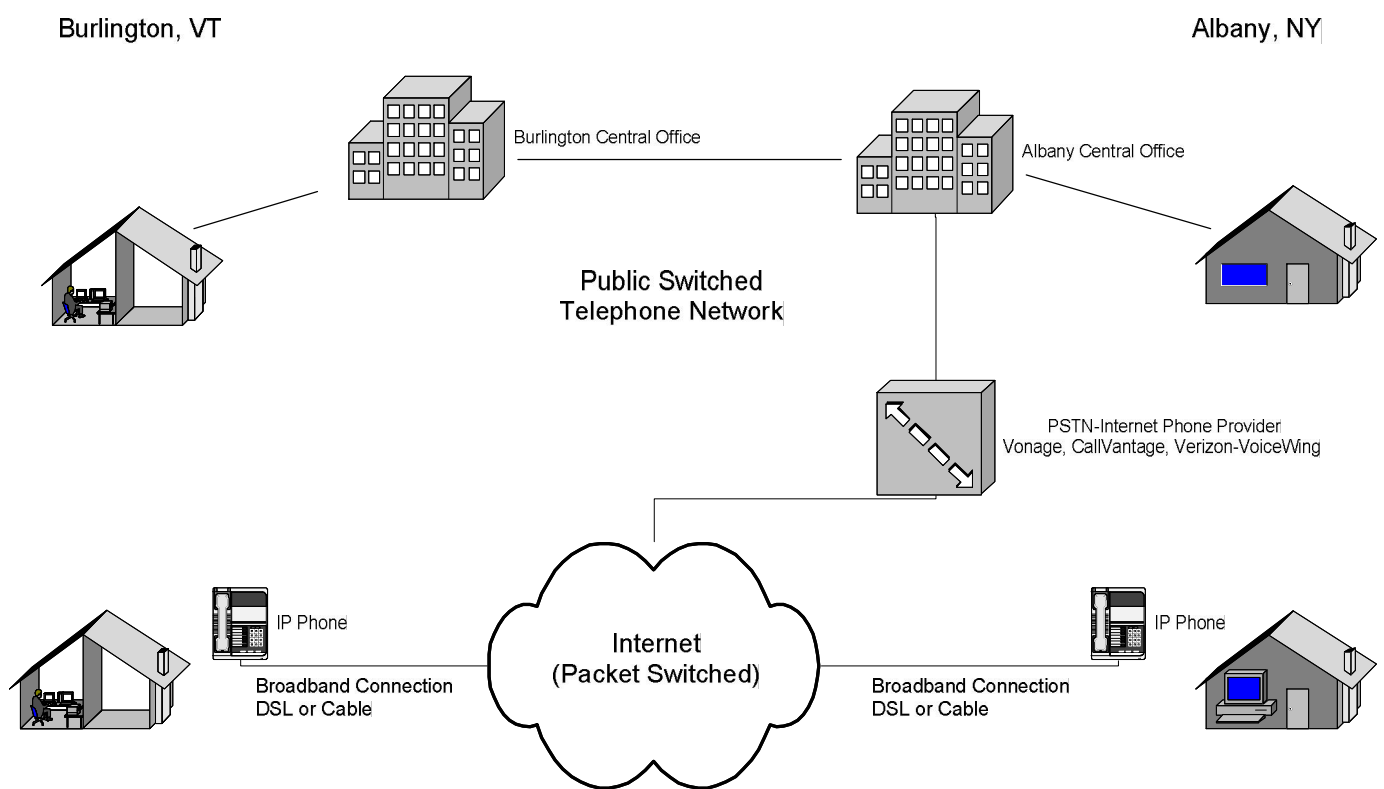


# Voice Over IP Telephones over the Internet

Larry Keyes – Microdesign Consulting Inc.

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Consumer VoIP

## ***Ideas***

The original Bell Telephone system is one of the most reliable networks ever built. It relies on:

- A smart network and dumb endpoints
- Dedicated circuits for each connection (circuit switching) that were created during each call.
- Uniquely identifies each endpoint with a telephone number

The Internet is a general purpose network:

- Relatively dumb network using smart endpoints (computers)
- Shared circuits for all kinds of data (packet switching)
- Uniquely identifies each endpoint with an IP address

## ***Advantages of IP Phones***

- Allows inexpensive or free long distance
- Allows for extra call features
- Multiple Lines
- Call Forwarding
- Take Phone Adapter with you when traveling
- Virtual Phone Numbers in any area code
- Potential for low-cost international rates U.S. - Munich \$.04

## ***Disadvantages of IP Phones***

- Variable Voice Quality
- Monthly provider charges
- Hassle of setting up
- Issues with firewalls

## ***Requirements***

- A broadband connection: DSL or Cable
- Some kind of internet phone which can be:
  - A conventional phone connected to an analog telephone adapter (ATA)
  - An IP phone such as the Grandstream phone
  - A “Software Phone” software provides phone functionality but works on a computer.

## **No-cost suggestions for trying it out.**

Check out the Sipphone service at <http://www.sipphone.com>

Check out the Xten softphone the “Ibeam” at <http://www.xten.com> The softphone can be configured for the sipphone service.



**Figure 1 XTen Softphone**

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## Resources:

The latest version of this page is located on the VCN web site at <http://www.vtconsultants.org>

### VoIP QUICK START

Updated Wednesday April 13, 2005 3:20 PM | lkeyes

#### VoIP Resource Guide

Extensive annotated list of items related to VoIP. Updated sporadically.

#### HARDWARE

##### D-Link Voice & IP Communications

D-Link hardware for VoIP connections Includes routers, and two IP phones

##### Linksys Voice Over IP

LinkSys VoIP Products: Includes VoIP routers, and a phone adapter. Require sign up with a third-party VoIP provider

#### SOFTPHONES

##### XTen Softphones

Some of the best softphones. The IBeam is was released in March 2005

##### StanaPhone

StanaPhone is a free and simple internet telephone that uses a real US phone number and enables user to make and receive free calls to and from any phone anywhere in the US, Canada, and a selection of other countries. The software is free to download and free to use. It works with all PC headsets and USB internet phones providing the same or better sound quality than a regular household phone.

##### Softphones

Softphones run on your computer (desktop, laptop or handheld), using a headset and microphone.

#### VOIP PROVIDERS

##### COMMERCIAL

##### SIPphone - Call worldwide over your broadband Internet connection with any phone

SIPphone - A free or low cost internet prvider. Provides a free softphone Also sells the D-Link 1402S router.

##### VoiceWing Home

Verizon's VoIP offering.

##### AT&T: VoIP CallVantage

Voice over IP from AT&T Note that both Verizon and AT&T have been active with VoIp for less than a year.

##### Vonage - The Broadband Phone Company

##### FREE

##### Asterisk™ - The Open Source Linux PBX

Asterisk is an Open Source telephony switching and private branch exchange.

##### Welcome to FWD!

Free-World-Dialup. A free internet phone service provider with interconnection to PSTN.