REPLACING FIOS VOIP

<u>INTRODUCTION</u>

Several months ago I discovered that a considerable amount of money could be saved on my Verizon monthly bill by dropping the phone portion of my triple play FIOS. The requirements for a new telephone provider boiled down to:

- 1. Saving money,
- 2. Reliability, quality and accessibility (we have relatives overseas) were not to be compromised and,
- 3. Our physical location and arrangement of home telephones were to be unaltered.

VOIP technology appeared to be the most promising approach to accomplish this. I selected a service provider, after a cost and reliability discovery search, and proceeded to test the service. Needless to say, both my wife and I were skeptical of ending a 50 year association with Verizon POTS.

The results were spectacular and a month after starting the tests I ported my 50 year old POTS number to the new VOIP service. Not only did the service completely meet our requirements but we accrued some additional benefits that were very significant for us:

- 1. Portability and
- 2. Ease of adding and deleting new phone numbers.

REQUIREMENTS

<u>MY</u>

•REDUCED COST
•SERVICE RELIABILITY

Outages Billing

•VOICE QUALITY
•ACCESSABILITY

Problem Resolution Statistics

•EASE OF USE

Overseas Calling
Adding phone numbers

VOIP

INTERNET ACCESS (anywhere)

At least 80 kilobits/ second service Router – wireless &/or RJ45 interface

VOIP SERVICE PROVIDER ATA

SOME DEFINITIONS

- •POTS Plane Old Telephone Service.
- PSTN Public Switched Telephone Network.
 SIP Session Initiation Protocol:

SIP is an internet signaling protocol for creating, modifying and terminating sessions with one or more participants. These sessions can include Internet telephone calls, multimedia distribution, and multimedia conferences.

•VOIP - Voice Over Internet Protocol:

While traditional telephone service uses analog technology to place audio frequencies on a wire, VOIP digitizes the sound of your voice into packets of data. In milliseconds, these data packets are sent over the Internet. When the data reaches the final destination, it is converted back to sound. If VOIP is used to call someone on the traditional phone PSTN the VOIP call is converted to sound once it reaches the network and the call is routed normally.

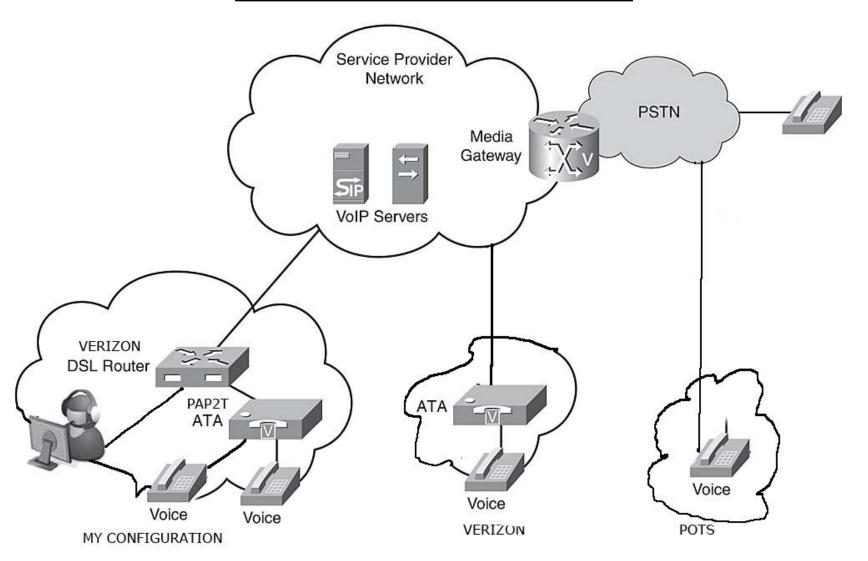
•ATA - Analog Telephone Adapter:

An ATA is a device used to connect one or more standard analog telephones to a digital telephone system. An ATA is connected between an IP network (such as a broadband connection) and an existing telephone jack in order to provide service nearly indistinguishable from PSTN providers on all the other telephone jacks in the residence.

OSI INTERNET COMMUNICATIONS MODEL

Application User interface Presentation Data formatting Session Establish & maint connect Transport TCP - Accurate data Network IP - Routers Data Link MAC - Switches Signals - Cables Physical

HOW VOIP WORKS



SELECTING A SERVICE PROVIDER

PROVIDER	INITIAL COST	COST/ COS MIN MON	M ION ^{RELIABILITY}	CALL QUALITY	COMPATIBLILITY POTS PHONEWINDOWS IOS ANDROID				UK	INDIA	
						PO13 PHO	NUBVINDOWS	103	ANDROID		
VOIP.MS	\$55.00	\$6.9)5 G	G	G	Υ	Y	Υ	Υ	\$0.008	\$0.024
VERIZON FIO	S	\$50.	00 F	G	G	Υ	N	N	N	\$0.080	\$0.280
MAGICJACK+	\$70.00	\$2.5	60 P	F to P	F to P	Υ	N	Υ	N	\$0.020	\$0.050
VONAGE		\$25.	99 G to F	G	G	Υ	N	N	N	\$0.040	\$0.150
SKYPE	\$0.00	\$0.03 \$0.0	00 P	F to P	F to P	N	Υ	Υ	Υ	\$0.026	\$0.106

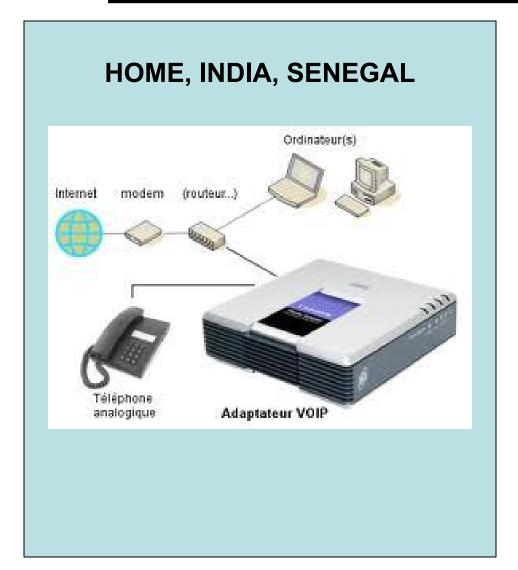
Note #1: One time portage costs are the same for all providers

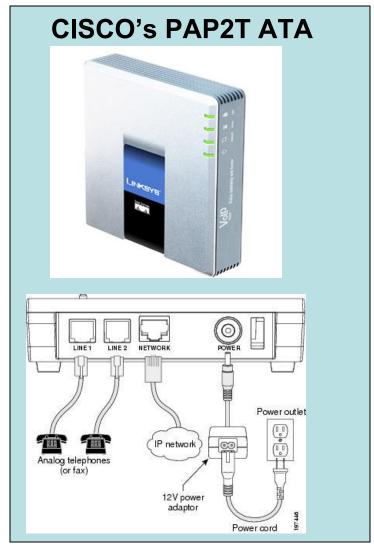
Note #2: Call services are the same for all providers

Note #3: Portability is the same for all providers except verizon

Note #4: Extension access is the same for all providers f wireless home phones are used

VOIP HARDWARE CONFIGURATION





MY RESULTS with VOIP.MS

One time costs:

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Cisco PAP2T-NA ATA ~ 30$
Porting phone number – 25$
911 registration – 1.50$
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•Monthly costs (choice of 2 plans):

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6.95$/ month 0.000 $/minute or 1.49$/month 0.015 $/minute (BE = 364 min/mo)
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- Portability for use any where in the world where internet access is available
- •Reduced telephone costs from 50\$ to 7\$ per month
- Same services quality and reliability
- One + four US phone numbers

MY CALL USAGE

Calls and Minutes - 2012-08-01 - 2012-08-31

