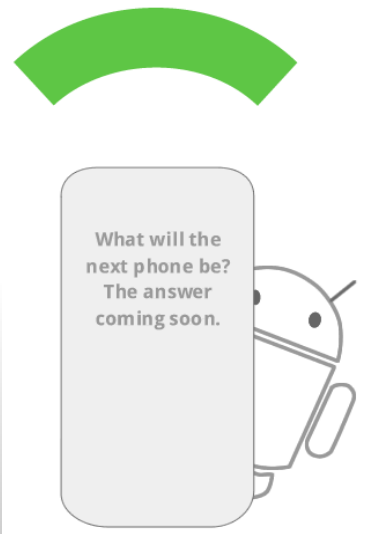




VoIP - POTS - Mobile



Phone Service Choices



Basic service choices

- VoIP - Voice over IP
 - Uses the Internet as your phone line
 - WiFi (**radio**) or Ethernet connected phones
- POTS - Plain Old Telephone Service
 - Your basic land line service over copper or fiber
 - Cordless (**radio**) & hard wired phones
 - Verizon digital calling option in some areas
- Mobile - cell (**radio**) phone technology
 - Smart phones & basic cell phones
 - GSM & CDMA core technologies
 - GSM = T-Mobile and AT&T
 - CDMA = Verizon and Sprint

Why consider ?

- My service costs before taxes & fees
 - Verizon digital land line - \$30/mo
 - Republic Wireless (Sprint / VoIP) - \$19/mo
 - Ooma VoIP - \$10/mo for premium service
 - magicJack VoIP - \$20/yr (5-year plan, \$100 up front)
 - magicJack Plus VoIP - \$20/yr (5-year plan, \$100 up front)
 - Google Voice / Talk - free
- **NOTE:** All except Verizon digital land line require me to have a broadband Internet connection, even the Republic Wireless cell phone. There are many cell phone providers that don't require a broadband connection, but they cost more.

Up front cost considerations

- My hardware & installation costs before taxes & fees
 - Verizon digital land line
 - waived w/installation of FiOS
 - Republic Wireless (Sprint / VoIP) **BETA** offering
 - First month free service
 - LG Optimus S smartphone - \$100
 - Ooma VoIP
 - Telo interface - \$180 after \$20 discount
 - magicJack VoIP
 - \$40 includes service for 1st year
 - magicJack Plus VoIP
 - \$70 includes service for 1st year
 - Google Voice / Talk - free

Other considerations

- Existing contract obligations - timing is everything
 - Porting of phone number - early termination penalty
 - Contract modification - unbundling penalty
- Service features
 - Home alarm system support & power outages
 - Service area - local, USA, North America, international
 - Connection type, quality, and security
 - 911 and GPS support – especially cell phones
 - Caller ID / Call waiting
 - Missed call recording / notification / msg transcribing
 - Call forwarding / do not disturb
 - Conference calling (not available w/FiIOS digital calling option)
 - Black list filtering (Do not call)
 - FAX support (VoIP issue, depends on optimized CODEC)

POTS service providers & issues

- Providers
 - Verizon
 - By default POTS is supplied with FiOS
 - Digital calling service is available in some FiOS areas - some savings in taxes & fees
 - Comcast
 - Cavtel (Cavalier Telephone)
- Issues
 - Cordless phones
 - Old cordless phones are insecure
 - <http://www.youtube.com/watch?v=l7nmmUrZcNY>
 - New cordless are encrypted, but was proven breakable in 2010
 - <http://www.roer.com/node/556>

GSM mobile service providers

- About GSM
 - GSM is prevalent in most of the rest of the world
 - SIM card can be easily moved between GSM phones
- T-Mobile
 - Emergency, minimum use plan
 - Prepaid - pay as you go
 - <http://www.cuttingthebills.com/2010/08/get-cell-phone-for-less-than-5-per.html>
 - <http://prepaid-phones.t-mobile.com/prepaid-plans>
- AT&T

CDMA mobile service providers

- About CDMA
 - Prevalent in North America & parts of SE Asia
 - No changeable SIM card
- Verizon
- Sprint
 - The following carriers use Sprint as the backbone service
 - Republic Wireless
 - Depends on use of VoIP to keep costs down
 - <http://www.republicwireless.com/>
 - Ting
 - Highly customizable service plan
 - <https://ting.com/>

Mobile issues

- Area coverage guide
 - <http://www.cellreception.com/>
- Battery recharge frequency - constant on, lite usage
 - Smartphone - every 1-2 days or so
 - Dumb phone - every 2-3 days or so
- Security
 - Mobile communication is encrypted
 - With effort the encryption has been broken

VoIP service providers

- Hardware based
 - Vonnage - has some business focused features
 - Republic Wireless - uniquely preconfig'd cell phone
 - Ooma -
 - *99 support for FAX
 - Supports back feed of POTS wiring - disconnect POTS service at boundary first
 - Up to 5 distinct phone numbers per Telo, one for each family member (requires premium service & handsets)
 - magicJack & magicJack Plus
- Software / app based
 - Skype
 - Google Voice
- many others

Online services management

- Verizon
 - <https://www22.verizon.com/ForYourHome/Registration/Reg/Login.aspx>
- Ooma
 - <https://my.ooma.com/home/login>
- Republic Wireless
 - https://myaccount.republicwireless.com/sign_in
- magicJack
 - <https://web05.magicjack.com/my/login.html>
- Google Voice
 - <https://www.google.com/voice#inbox>
 - Google Voice is more than VoIP
 - Ring forwarding issue
 - Changing number of rings before other services answer

Demonstrations

- Internet broadband VoIP speed & quality checks
 - <http://myspeed.visualware.com/index.php>
 - <http://www.speedtest.net/>
- Republic Wireless phone interface
- Google Voice
 - Desktop phone call
 - Ring thru
- magicJack Plus (maybe, if time)