



# Evaluating New Telephone Systems - Keys to Successful Deployment

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The telecommunications landscape has seen many changes. Like a winding road, there are twists and turns as clients look toward alternatives for deploying solid technology. Many business organizations today have similar objectives:



- Minimize expense
- Grow revenue
- Implement reliable solutions

The line can be blurred often times between acceptable products and new-age applications insofar as finding what works best for a specific business. In our experience, with the advent of so many technology options there is confusion in the marketplace. This paper will aim to provide greater clarity with respect to selecting new VoIP system technology, and why you might consider systems such as Toshiba premise based Phone Systems (IPEDGE or CIX) or our own hosted VoIP from Comtel.

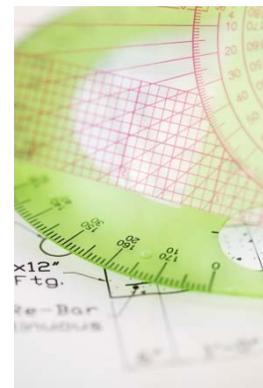
## What's all the fuss?



Today, tech terms get tossed around like they're going out of style. VoIP, Unified communications, SIP, MPLS, Cloud, the list goes on. What's worse, some of the terms are used incorrectly, and can easily be misinterpreted. In the end, the objective never changed, but the solution one expected was anything but. Our first recommendation - keep it simple. After all, that is what has always worked best. Surely, you want to invest in systems that will provide what is needed today, and you will also want to know that your investment will stand the test of time. The key is to understanding what it is you need, while wading through all the acronyms. Is a cloud based phone system or premise based PBX phone system the right fit?

## Back to the basics

Just *what is it* that you need? Bring the question down to base ideas and items. How many users do you have? What type of functionality is required? Do you need displays, speakerphones, conference calling, networking, the ability to view other user's status, PC integrated screen pops, call logs, reports, call recording, voice mail, voice messages in email, and so forth. Will your infrastructure support new VoIP? Or, does it require either re-cabling, or an alternative solution that converts standard telephone cable to VoIP signaling? Do you have adequate power for new VoIP phones such as power over Ethernet switching? Would you like to re-use existing ports like analog device ports, perhaps digital devices rather than fully upgrading your entire system? Do you require administration of the system (do it yourself), do you prefer an off-premise (cloud based) solution with a pay as you go option, or do you prefer buying outright? These are just some of the questions to consider when evaluating new systems.



## Comtel & Toshiba - Systems for all "seasons"

At Comtel, we are proud to promote our own hosted VoIP, as well as Toshiba products. We offer a redundant, secure hosting site for those clients who desire that sort of arrangement. We are also celebrating our 25th year as partners with Toshiba, and have more than 3,000 Toshiba clients in the WNY area alone. Toshiba itself has shipped more than 60,000 systems since 2011, and their corporate revenues surpassed all of the top 5 providers of VoIP systems with \$80 Billion, and ranking among the elite in the International Fortune 100. Comtel/Toshiba translates into *real choice* when new systems are being evaluated.

Through the years, our customers have found Toshiba systems to be easy to use, very functional and feature-rich, and highly reliable. Whether your needs are for "plain vanilla" operation, or extremely advanced communications, there are solutions for you. Some food for thought: About a decade or so ago, there were a tremendous influx of new business start-ups that were determined to make their own brand of phone system. Some are still around today, others are not. Time is the real "test" when analyzing products, and more importantly, vendors.



Most of these newer manufacturers built their systems from the ground-up. That means, they created software, and delivered features. With Toshiba, even though the newest systems offer enhanced VoIP, and applications-rich integrations, we have not forsaken the massive base of customers whose needs are relatively identical to how they've historically operated. One's new system was intended to bring incremental capabilities or capacities and instead it creates new challenges. Our Toshiba solutions deliver the best of both worlds as the software features our clients have come to depend on have been blended with new capabilities to ensure a smooth transition. Whether you have a dozen analog devices and/or a series of older style digital sets that you would like to use, all the while adding in new VoIP features, Toshiba will allow for this. It comes down many times to choosing between a wholly new set-up, and one that offers you that preferred ability to leverage old with new. And if your needs

are more tailored to a hosted solution - less upfront expense, interest in your vendor managing the system, and paying one price per month, then we have just the perfect fit in our Hosted VoIP.

## New Capabilities - What to Look For

If you find yourself evaluating new systems, there are a series of items that may be important to you - assuming you seek a long term solution (decade+ lifecycle). Here are some key points that we view as shopping list must-haves:



**SIP Trunking** - SIP is the new way to connect to the outside network. SIP should plug in directly to your network without modules or gateways. SIP trunks let you share facilities among multiple locations making your network more resilient. And SIP is the way disparate manufacturers and applications are now connecting. SIP trunks also cost LESS! It's the wave - catch it. Most PBX phone systems today offer SIP integration.

**Hot desking** - Today's systems should allow you to be mobile anywhere within your office, and anywhere your network extends outside of your office (i.e. a remote office, or when using a remote IP phone). Simply, your phone, and its features travel with you. It's pretty standard stuff - but be sure to ask. Mobility enhances your unified communications experience.

**Fixed Mobile Convergence** - Many products can provide cell phone twinning. Others can actually integrate those iOS, Android and Blackberry devices such that your calls are automatically moved from your wireless office network and cell network based on your location and movement. It's another "wave".

**Hosted/Premise Integration** - There are some manufacturers/providers who can deliver a premise based system, and, give you hosted services WITH THE TWO NETWORKS INTEGRATED. This enables remote workers to have direct an IP phone on a cloud based service and also have the ability to seamlessly communicate with premise based systems. Saves money, makes communications simpler. This option gives you flexibility in your VoIP phone system.

**Active Directory Integration** - A growing number of organizations are seeking the ability to integrate their directory services on the internal email network with the phone system. This eliminates the need to build separate user directories which is obviously more efficient.

**Unified Messaging** - Having the ability to get all of your messages (voice, e-mail, and fax) in a single Inbox is a tremendous improvement over most operations. Now you can get these messages in one place, play a voice mail on your smart device, and read documents that have been faxed over to you. Available for both premise, and hosted VoIP deployments.

**Survivability** - This is a huge opportunity to deliver a more resilient environment, as survivable systems are increasingly critical. When maximum uptime matters, a resilient system enables users connected to a "failed/down" system to automatically failover to an alternate location. Some systems require manual intervention (which isn't awful), but others move these calls elegantly, without user knowledge or IT staff intervention (much better).

Used in conjunction with SIP trunks, even your direct line calls can still reach your voice mail in a local outage!

Make a Long Term Decision whenever possible - Our embedded base of clients over the past several years have enjoyed the benefit that comes with products that allow “migration” as opposed to “forklift”. Being able to re-utilize equipment like desktop telephones, Polycom conference units, while upgrading to VoIP, or maybe doing simple networking to a new VoIP system with a current digital system are possible in the world of Toshiba. So, look at a manufacturer’s track record in the realm of lifecycle, how and when upgrades are needed, and their experience building “bridges between technologies as opposed to requiring full replacement.

Go Green - If you’re environmentally aware, look at products that are kind to the earth. A single server today can cost \$500.00 just to power the unit for a year. Systems (like virtual server based products) that combine applications into single servers save on hardware, power, and real estate. Some systems require multiple servers for each and every application so your maintenance costs are higher, valuable rack space is exhausted, and your power costs continue to grow. Also, some telephones can chew up 10-15 Watts of power each. Choose desktops that have 5-7 Watts of power and save money, and help our environment. A VoIP phone system can carry hidden costs - so exercise care.



These are just a small assortment of capabilities you might look for. Ask questions, prepare a matrix, and do a fair comparison. You’ll end up with a great solution, and the right set of capabilities.

### Support - Uncovering more hidden costs



Manufacturers today are updating their operating systems, delivering software revisions, bug fixes, and new releases with enough frequency that you should look at a software “assurance” program, or update service. Some of these programs can be relatively inexpensive, others can be financially unwieldy. Get the real scoop on the programs available, and those that may be mandatory (for ongoing manufacturer support). You should ask:

1. What is the annual cost of keeping my main system server/controller’s core system up to date? Hosted VoIP tends to “win” in this area as updates are usually included.
2. What costs are there to maintain applications such as unified messaging, voice mail, contact center, and other items (like Polycom conference phones, Cisco equipment).
3. Will the manufacturer/provider supply a long term program (with discount)?
4. How are updates performed?

These questions will allow you to have a better understanding of what your total cost of ownership may be expected to be. We urge you to pay close attention to this as some manufacturers look to replace main servers every 3-5 years, and/or will not offer you these programs. Also, make sure your license costs do not expire - this is another area where good attention to detail will payoff in the long run.

## Technical Support

Service and support when there are issues is really where the “rubber meets the road”. Find out what you might expect from the various companies. Ask:

- What are the hours of operation?
- Is service 24x7? Any exclusions? Any charges for after-hours?
- Does warranty and maintenance program cover 100% parts and labor on the VoIP phone system?
- How many technical field staff are available? Are they CERTIFIED on the product?

Get three references of similar size/scope as the system you are considering. Ask about process, training, responsiveness.

## The Local Partnership

In the end, in many ways this is a “human” business. While there are some firms who will gladly try to install and maintain their own systems, and provide their own user training, the reality is that most organizations like to have an element of personal interaction. Knowing the people you are dealing with, knowing they are entrenched in the community, knowing that they have a track record usually matters. The telecom world has seen many, many new firms over the last couple of decades. Too many of these organizations have failed. With the cost of products, and the need to control expenses, we recognize that we are viewed as an extension of your communications department. It is Comtel’s goal to be your “partner in communications”.



Please do not hesitate to request a complimentary analysis of your current communications environment. Your Comtel Account team is able to provide you with the best options for systems, network, and integration with other products and services. Contact Comtel at 716 874-5500.



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Cloud/Premise Telephone Systems ▪ Messaging ▪ Desktop Apps ▪ Call Recording ▪ Unified Communications ▪ Infrastructure Consultation ▪ BYOD ▪ Aastra & Mitel Phones ▪ Polycom Conference Phones ▪ Bluetooth Accessories ▪ Wireless VoIP ▪ SaaS Applications ▪ Reporting ▪ SIP Trunks ▪ Internet ▪ Fiber ▪ Wireless Solutions ▪ Data Networking ▪ Video Integration

*Additional Manufacturer's products supported: Polycom, Cisco, Netgear, and more!*

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