

THE GENERAL'S LINE

GENERAL COMMUNICATIONS

781-756-5100

www.generalcom.com

Spring 2008

MESSAGE FROM THE PRESIDENT



April 2008 marks the beginning of our 29th year. I can never say enough about how our employees have helped make our success possible. Their efforts to achieve customer satisfaction have allowed our customers to become truly a part of our family. Through the years, our customers have helped us grow, and our efficient, affordable telephone systems along with our reliable service have helped our customers grow their businesses. I wish to thank all of our employees and customers for their loyalty and business.

This year also marks the 20th year that General Communications has been a tenant of Cummings Properties. Like our loyal customers, I am loyal to the businesses and people that I have faith in. Our Cummings property managers have always responded professionally to our needs, thus Cummings Properties is a valued partner in our years of success. If you need a convenient location and great service, give me a call and I can put you in touch with our leasing manager. We would love to have you as a neighbor, and we will give you \$250 toward the move of your current phone system or new telephone sale/installation. **Paul F. Denaro**, President

TeleTOPICS

TOSHIBA INTRODUCES THE 5000 SERIES SETS FOR THE STRATA CiX



DP-5122-SDL

It's no secret that TOSHIBA has a reputation for building rock-solid phone systems with good programming flexibility and well thought out ergonomics. However, the phone sets have never had that "gotta-have-it" look. TOSHIBA's EKT and later the digital DKT series date back to 1985. The look was freshened up through the years with

minor changes like larger keys, wider displays, and some aluminum trim, but it was time to finally make a break from tradition, and a big break it is.

The new 5000 series takes a sizable step forward in design. It's just my guess that TOSHIBA asked the same team that designed the cabinetry for their attractive REGZA line of LCD TVs to perform the same magic on the new sets. The result is quite a welcome departure from the past. The traditional rounded-edge, triangle body has been replaced by a sleek black console resting on an ingenious, aluminum-like, arched



DP-5132-SD

Thinking about Voice over IP?

Delivering a high quality voice service takes more than just buying the latest IP telephony equipment.

Before deciding upon a VoIP telephone system, it is extremely important to understand that successful implementation of VoIP depends upon understanding the requirements for delivering toll-quality voice over your company's data network. A thorough network assessment is a key factor in determining the readiness of your company's data network to support a VoIP solution. Network assessments will determine if a data network will deliver sufficient throughput to support a desired maximum number of concurrent VoIP calls.

Specifically, the factors that must be measured are latency, jitter and packet loss. Latency is the time delay measured from when a packet is transmitted from its starting point to its destination. Typically, a voice packet's latency must not exceed 100ms in order to achieve toll-quality voice. Jitter is defined as the variation in latency time periods. Excessive jitter can cause voice packets to arrive at their destination in uneven patterns resulting in degraded voice quality. Packet loss is the destruction of a voice packet at some point during its journey to its destination. Packet loss for voice packets must be less than one percent to avoid voice quality degradation.

SIP Trunking...

What you need to know.

Today many carriers are offering a new service, "Dynamic T-1." This is similar to a traditional integrated T-1 in which both digital voice trunks and Internet bandwidth exist on the same circuit. With integrated circuits, the amounts of voice and bandwidth are fixed. "Dynamic T-1" allows any unused voice paths to increase the data bandwidth. As more voice paths are required, the data pipe is reduced on demand. Some carriers can now bond multiple T-1s together to form a larger dynamic circuit, providing 3.0 or higher Mbs bandwidth. Now what does all of this have to do with SIP trunking?

The behind the scenes change that allows Dynamic T-1s is SIP trunking. The circuit you receive from your carrier is actually a pure data T-1, and the voice is sent to your location as SIP data. A gateway device (almost always a Cisco router) translates the SIP data back into traditional voice T-1 signaling for your phone system to use. The newest IP-based phone systems (such as ShoreTel and Tadiran) can actually receive their voice trunks directly as SIP without the need for conversion.

So why should you care about any of this? Well, many carriers today are pushing these Dynamic T-1s as a better, lower cost way to get the benefits of T-1 level voice trunks. Currently, these circuits are not charged the host of fees and taxes from the FCC that traditional voice T-1s are. What they don't discuss is the potential negative impacts of using these new circuits.

First, most of these circuits provide fewer voice paths than traditional ones. A traditional voice T-1 provides 24 voice paths (23+1 Data channel for PRI) — each path consuming 64Kb worth of bandwidth. With SIP trunks, each voice path consumes about 80Kb when uncompressed. That means that on a 1540Kb (1.54Mb) circuit, you have at most 18 voice paths. Carriers can compensate for this by compressing the SIP data to consume less bandwidth, but noticeable reductions in voice quality are likely. Remember that cost savings for using Dynamic T-1s? Well, compressing the SIP data usually incurs an additional monthly fee that negates the potential savings.

Secondly, the equipment needed on

your premises to convert the SIP data from the carrier to something your PBX can use must either be rented for a monthly fee or purchased outright. These Cisco routers run in the thousands of dollars. By the time you add up the extra hardware and monthly recurring fees, most times, you are actually paying more per month or seeing a break-even longer than 36 months.

Lastly is a reduction of feature set when using direct SIP trunking. Many advanced solutions like Bridged ringing with call supervision (Flexicall, External Extension Assignment) cannot function using direct SIP trunks. The issue lies in the limited command set of the SIP language, not simply hardware incompatibility.

If you are considering Dynamic T-1, give us a call at 781-756-5100 — we can review your requirements and make recommendations based on what is best suited for your business.

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swivel base. Pressing the button on the back of the base allows the main panel to swivel from an almost vertical position (80 degrees) to a more traditional 15-degree angle from the desktop. Even more impressive is when you swivel the base to its final position, it becomes a wall-mount. It's a very clean look from every angle.

There are other outstanding attributes to mention. First, the sets can be ordered with back-lit displays that glow with an almost paper-white fluorescence and provide excellent readability in any dim or brightly lit environment. The displays have been enlarged with a minimum of four character lines and the higher-end models have all-LCD (paperless) feature-key labels. Change a feature or function and there's no paper label to modify. Also available is an all-LCD expansion module that adds 10 programmable keys to any set. Finally, the sets are pre-equipped with separate jacks and circuits for almost any headset and external speaker tap. Both circuits were previously options and required labor-intensive field upgrades.

These new 5000 series sets are available today for new system sales, expansions and upgrades.

GCC Referral Program

GCC will pay cash rewards for referrals that lead to a sale of a new telephone system. Rewards are based on the size of the system sold.

4 – 10 phones	\$ 50	41 – 50 phones	\$250
11 – 20 phones	100	51 – 60 phones	300
21 – 30 phones	150	61+ phones	500
31 – 40 phones	200		

Referring Party Name: _____ Date: _____

Phone: _____

Address: _____ Email: _____

Referring Prospect

Company: _____ Contact/Title: _____

Phone: _____ E-mail: _____ App.#of Phones: _____

Additional Info: (Reason for referral, moving date, best time to call, etc.)

Note: All payments will be made on an IRS 1099 tax basis and do not imply employment by GCC. GCC may request a W-9 form to be filled out before any cash reward is given.

Duncan Galvanizing



Talking about the latest innovations in telecommunications are (from l to r): Paul Denaro, President, Michaela Sterling, Vice President, GCC, and Richard Brooks, CEO, Dan Beaver, CFO, and Abby Brooks, President of Duncan Galvanizing.

Duncan Galvanizing is a family-owned business that has been on the cutting edge of metal corrosion protection since its founding more than a century ago.

From galvanizing milk containers in the late 1890s to creating a patented process for painting galvanized steel, the firm provides hot dip galvanizing and high-tech architectural finishes for any metal substrate.

Their products provide corrosion protection for metals that are used in a wide range of structures including buildings, bridges, ships, fencing, railings, and signage.

When the Everett, MA-based firm wanted to modernize its telecommunications system in 1981, it chose GCC because of its knowledgeable sales force and technical staff and its exceptional service.

Over the years, GCC has worked with Duncan Galvanizing to ensure that their phone systems have met their current needs and facilitated the firm's growth.

Today, Duncan Galvanizing has a Tadiran system with close to 50 phones.

When asked about the Tadiran system and how it impacts his business, Richard Brooks, CEO, stated proudly, "I love my phone system. My sales people and I can receive calls at headquarters, when we're traveling, or at home. This has absolutely boosted our sales and reduced customer-service response time. I can resolve issues quickly by being able to bring customers and vendors into a conference bridge without prescheduling. The Tadiran phone system is the best I could ever imagine."

When asked what he likes about working with GCC, he replied, "I trust them and they do a terrific job in responding to our needs. And they show up when you call them...you can't beat that!"

Steve Flagg Celebrates 15 Years at GCC



In this day and age, it's rare to find a company where a high percentage of its employees have been with the firm for more than 10 years.

In the last issue, we wrote about Michaela Sterling and Bruce Kamin celebrating 25 years with GCC, and in this issue, we are congratulating Steve Flagg for his 15 years with GCC.

As Technical Director, Steve is the "go-to guy" for advanced telecom applications such as VoIP and call centers. He works closely with the sales and engineering teams, and he is also a project manager, handling the implementation of large telecom systems.

A graduate of Northeastern University with a degree in Electrical Engineering, Steve had gained telecom experience at GTE and had considerable computer expertise before joining GCC.

When he started with the firm, integrating telephone systems with PCs was still in its infancy. He worked with GCC clients to integrate computer-based voicemail with telephone systems.

In the past few years, the technology has advanced tremendously, and today, he and his team are working with clients so they can take full advantage of the Internet and VoIP features that are now available.

"GCC is a wonderful company to work for," Steve said. "The people are great, we have long-term partnerships with our clients, and I enjoy keeping up with the new technologies and being involved in all facets of the business."

VoIP, continued from page 1

Having the correct network assessment tools to thoroughly measure the above mentioned factors will mean the difference between a properly installed VoIP solution and a poorly implemented VoIP product with unacceptable voice quality.

General Communications has the network assessment tools and expertise to simulate VoIP traffic on an existing data network to determine if any infrastructure changes are necessary to handle VoIP.

Adopting VoIP in your organization can bring cost savings, productivity gains, and advanced integrations to your business but installing the latest VoIP product without proper planning and a network assessment will often result in a very expensive and unsatisfactory outcome.

GCC's Products & Services

Digital Systems
VoIP Systems
Auto Attendant/
Voicemail
Unified Messaging
Voice and Data
Cabling
Call Center
Solutions
Call Logging/
Reporting
Call Accounting
IVR/CTI
Wireless Office
Systems
Paging Systems
24/7 Emergency
Service
Remote Service
Demo Center
Service Plans
User Training

781-756-5100

TOSHIBA's NETPHONE

Converge Your Phone Set with Your PC

Merging your telephone set and PC is becoming increasingly popular. Computer Telephony Integration (CTI) has been available for years but it was costly and complex. Today, almost all of our phone systems have CTI packages as a standard feature or available as an option. Today's offerings are more powerful and less expensive. CTI functions can be divided into the following categories:

- **CALL CONTROL** — using your PC to place, receive and manage calls.
- **PRESENCE** — seeing the status of your colleagues telephone sets in a PC window. The Status Window will show at a glance whether a set is busy, in use or call forwarded.
- **CONTACT CALLING** — using Outlook or other compliant software to place calls to a contact using a mouse click or simple command.
- **SCREEN POP** — using Caller-ID to query your contact software or database to present a contact's record before answering the call.
- **STATUS** — automatically routing personal calls according to your status selection. *In a meeting or out of the office* are examples. Status can be changed with a mouse click.

NetPHONE is TOSHIBA's version of CTI. All of the standard features are included plus more!

- **CALL CENTER INTEGRATION** — TOSHIBA's call center software shows callers in queue, longest caller in queue and scrolls supervisor-driven messages.
- **INSTANT MESSAGING** — one NetPHONE user can text chat with another user — it's especially useful to convey an important message to a busy extension.
- **CALLER-ID ROUTING** — routes callers to different destinations based on Caller-ID. For instance, certain clients will be forwarded to your cell phone but others will not.
- **Call NOTES** — allows you to attach a memo to a call record that will be passed to the next caller upon transfer.
- **Call LOG** — keeps a detailed record of all incoming and outgoing calls made by you for review at any time.

There's so much more to NetPHONE so ask your GCC representative for an on-line demonstration.

GCC's New Referral Program
GCC will pay cash for any referral that leads to a sale of a new telephone system. Simply fill out the form on page 2 and fax to 781.932.0540 or email to referral@generalcom.com.
Questions: call Michaela Sterling at 781-756-5100

**Special
CASH\$ REWARDS!**