



Welcome to the Winter edition of Comms News. A lot has happened over the course of 2008 and 2009 is set to become rather challenging if we are to believe what the media is telling us. What has become very clear with a number of businesses that we are in contact with, is the need for assessment and evaluation. Whereas before everyone was too busy to worry too much about processes and infrastructure, it's now about taking a close look at your company and seeing where things might be tightened or streamlined and as a consequence improved.

One of the main areas in business where this can be achieved is your communications. There are a number of ways to save money and streamline but it does take a specialist, impartial eye, to notice how this can be achieved. That's where we can help. Get in contact asap and let us look at your current communications infrastructure to see if there are any improvements to be made. You could be quite surprised!

Look forward to speaking with you soon.

Mark Wilson  
Managing Director

### **Siemens HiPath 580 Phone System**



The Siemens HiPath 580 communications platform boasts a convincing and extensive range of convenient features for the small business on a tight budget.

The 580 comes with 8 digital and 4 analogue extensions. This can be increased to 16 digital

extensions by the use of slave adapters. It comes with the capacity for 2 x ISDN2 digital lines (4 B Channels) and has entry level voicemail. Overall, this is a great solution for a small business. As long as there is no need for further expansion, the HiPath 580 comes packed with all the features required by a small business.

### **New Call Recording Legislation**

From March 2009, many UK financial institutions will have to record and store telephone conversations and electronic communications relating to client orders under new regulations to be introduced by the Financial Services Authority.

The introduction of the taping programme is part of the FSA's efforts to combat market abuse, particularly insider dealing and market manipulation.

Any non-financial business that relies on taking orders or instructions over the phone would also benefit from conversation recording to avoid disagreements as to what was said.

### **Reducing costs through VoIP**

We quite often get asked about the benefits of VoIP (voice over internet protocol) as many people have heard of the acronym but do not necessarily understand what it is all about. VoIP is essentially the practice of making and receiving phone calls over a data network. For business this can be good for remote workers who want to be seen as an extension off the main system back at the office without having to be there or for companies with multi-sites which can all be linked up to create free calls between sites. We offer a number of solutions tailored towards VoIP and have a website specifically aimed at this.



Please visit [www.voipphone-systems.co.uk](http://www.voipphone-systems.co.uk)

### **SIP trunks**

SIP Trunking provides the ability to make and receive telephone calls over the internet. Within the next 10 years, 90% of telephone calls worldwide will be made over the internet. SIP is a worldwide internet protocol for establishing and maintaining multi-party, mixed media sessions over converged networks. SIP enables the creation and deployment of feature-rich services that go far beyond simple VoIP calls. It provides an open programming protocol for voice, text and video applications.



Whilst SIP trunks are what you use to connect a phone system to the internet for making and receiving calls, SIP phones can be used by remote workers with the benefit that calls between the remote worker and the office are free.

We have been trialing SIP trunks and can now offer this to all our clients. One of the immediate benefits of utilising SIP is the flexibility of being able to take your telephone number with you if you move office, even if you are on a different exchange. Please contact us for further information.

## Analysing your call traffic with TIM



TIM Professional - the pioneering call logger that set the standards on which all others are based. It is a windows-based application that uses the data output

from your telephone system, checks it, costs it and stores it automatically. From this data, complete summary or detailed management information can be sought across your whole organisation.

Features include:

**Control Costs** TIM gives department managers the information they need to control their own budgets for telephone costs. Just knowing such a system is in place can reduce general telephone abuse, allowing significant savings.

**Improve Service** TIM identifies when and where your calls are being missed. Missed calls mean lost business, and customer dissatisfaction. TIM also monitors your line usage. Do you have enough lines? Do you have too many? TIM scrutinises your telephone traffic and can readily suggest line optimisation.

**Fast and Accurate** TIM retrieves information in seconds. It works around a lightning-fast and incredibly flexible costing algorithm allowing stats to be produced within seconds of a call being made.

## QoS on your Broadband

When the internet was first created, there was no perceived need for a QoS (Quality of Service) application. So in fact the entire internet ran on a "best effort" system. There were four "type of service" bits and three "precedence" bits provided in each message, but they were largely unused. There are many things that can happen to packets as they travel from origin to destination and they result in the following problems:

**Dropped packets:** the routers might fail to deliver (drop) some packets if they arrive when their buffers are already full. Some, none, or all of the packets might be dropped, depending on the state of the network, and it is impossible to determine what happened in advance. Whilst data the packets can be resent, for voice packets this would not make sense.

**Delay:** it might take a long time for a packet to reach its destination because it gets held up in long queues or takes a less direct route to avoid congestion. Alternatively, it might follow a fast, direct route. Thus delay is very unpredictable.

**Jitter:** packets from source will reach the

destination with different delays. This variation in delay is known as jitter and can seriously affect the quality of voice.

**Out-of-order delivery:** when a collection of related packets are routed through the internet, different packets may take different routes, each resulting in a different delay. The result is that the packets arrive in a different order to the one with which they were sent. This problem necessitates special additional protocols responsible for rearranging out-of-order packets once they reach their destination.

**Error:** sometimes packets are misdirected, or combined together, or corrupted, while en route. Again for voice it is too late to correct by resending so resulting in poor quality.

## Solutions:

- A poor quality broadband line (i.e. too much loss, delay and jitter) will be unsuitable for voice whatever QoS you try to apply.
- If line quality is good then a QoS router will probably support one or two voice calls dependent on how heavy the data requirements.
- To support several voice calls you either need an uncontended SDSL service or a separate, voice only, broadband line.

## Customer News

**Peavey Electronics**, suppliers of professional musical instruments, amplification and audio products have upgraded their **Siemens HiPath**



**3550** to IP working ready for linking to their main UK premises in Corby. [www.peavey-eu.com](http://www.peavey-eu.com)

**Flowstore Systems**, specialists in storage, material handling and order picking solutions chose the all IP **Siemens HiPath OpenOffice** system for their new premises. Among other benefits, they can now seamlessly transfer sales enquiries to their remote sales staff. [www.flowstore.co.uk](http://www.flowstore.co.uk)

## DATASHARP TELECOM (Chiltern)

Linton House, The Rowans,  
Gerrards Cross, Bucks SL9 8SE  
Tel: 0845 270 0807  
Fax: 0845 270 0809  
Email: [info@dstelecom.co.uk](mailto:info@dstelecom.co.uk)  
Web: [www.dstelecom.co.uk](http://www.dstelecom.co.uk)

