



UNIFIED COMMUNICATIONS

WHITEPAPER

# A CIOs Guide

## Unlocking constraints of traditional telephony.

Voice adds value and is still the most efficient and intuitive method of communication. Voice capabilities exist within many enterprise business applications, while IP telephony has many cost and management advantages.

# The most efficient and intuitive method of communication

In most organisations voice (the phone call) is still the dominant means of communicating for staff wanting to engage with each other or with groups of colleagues. There are many reasons for this but most significantly, making a phone call and talking to someone is a natural behaviour we have all grown up with.

In an age of digital working, new behavioural patterns are emerging through the adoption of new technologies in business and by the entrance into the workplace of a new generation of employees who have been brought up in a technology based environment and only ever worked in a digital environment.

However, when you are knee-deep in email, text messaging and have five simultaneous chat sessions open on your screen it is all too easy to forget that voice communications, and how you can use voiced based technology, has developed and changed significantly as well in recent times.

Today, voice communications for business has become an integral part of a communication platform designed to meld together all or most of the voice and data applications we use to form a coherent and rounded solution.

This is not technology for the sake of technology. The development of these integrated or 'converged' communications actually mirrors and then supports modern management behaviour in abandoning silo based company structures that do not engender a culture of innovation through collaboration.

The communications applications equivalent of this enlightened management ethos is to bring together the hitherto disparate and physically separate voice and data communication components to form a single communications system that will work for the organisation rather than against it.

Many technological developments have come together in the last 10-15 years to enable this transformational opportunity. We consider three of these developments to be key.

1. A global transition to an IP based networking protocol that is open rather than the closed proprietary legacy solutions.
2. The ubiquitous availability of robust, fast, flexible and cost effective connectivity solutions with which to connect IP networking applications.
3. The rise of the data centre – an ecologically sound and secure means of locating communication resources.

These three developments now form the fundamental building blocks for 'The Cloud', the ability to use highly scalable and flexible business applications, including voice communications, delivered by service providers not through expensive on site customer premises equipment but from a remote data centre over resilient IP based networks.

Today, 1 in 5 organisations within the EU28 use cloud-based applications and voice is one of those applications and often referred to as voice over IP or VoIP.





# Legacy Problems

To better understand the benefits for users in deploying VoIP it is worth reminding ourselves of the limitations and pain points associated with traditional legacy solutions.

1. High up front capital equipment (CAPEX) costs or long term, locked in financed lease deals – typically 5 to 7 years.
2. Long supplier deployment lead times for delivery, installation and user training.
3. Costly supplier vans roll every time you need adds, moves and changes to the original configuration.
4. Expensive on-going and fixed maintenance contracts for 5 to 7 years based on the size of the system installed rather than the actual equipment you are using.
5. Chargeable system software upgrades throughout the life of the phone system to keep it up to date and current.
6. Proprietary PBX telephony systems are silos; to enable them to 'talk' to or integrate with other parts of a

communications infrastructure is either impossible or very expensive.

## Benefits of VoIP

The reason for the prevalence of VoIP is that it gives significant benefits compared to these legacy phone systems.

The benefits of VoIP range from greater connectivity and scalability to improved collaboration efforts internally between employees and externally with clients. The key benefits are as follows:

**Scalability:** VoIP phone systems offer incredible scalability. Because VoIP systems connect via Internet Protocol (IP) and requires only an Ethernet cable to access the network, there is no need to run new telephone wiring or install new access points at workstations throughout the office. And because the system is hosted in a data centre - no expensive on site equipment is needed - the upper limit on the number of users you can have is almost limitless.

**Work anywhere:** The way people work is changing all the time and modern

## WHAT IS WebRTC?

WebRTC (Web Based Real Time Comms) is a browser-based technology that makes it possible to create secure network-based peer-to-peer applications which can share media content such as audio calling, video calling, document sharing and messaging.

It is one of the enabling technologies that development communities have been waiting for, for a very long time.



“  
integration with  
customer  
relationship  
management  
(CRM)  
applications  
such as  
Salesforce.com  
provides users  
with the ability  
to have  
customer or  
contact details  
automatically  
displayed on a  
computer  
screen.  
”

organisations that want to stay at the top of their game need to alter their processes to match. VoIP telephone solutions fit directly into this scenario and provide businesses with the flexibility and freedom to work anywhere, without sacrificing features and functionality.

You can hot desk, work from home and connect to your business telephone system wherever there is an Internet connection, meaning that you're always in the know, regardless. It's a win-win situation - productivity can improve alongside achieving a better work life balance.

**Security & Reliability:** Most VoIP suppliers operate fully redundant systems and operate mirrored solutions located in multiple data centres for security and reliability.

**Cost Control:** VoIP systems are generally available on a 'per user, per month' basis. This means that you are only charged for the number of users you have and the services they

'consume'. The benefits are obvious. Instead of paying for a fixed size configuration you only pay for what you use. If you run a seasonal business or relocate staff elsewhere or anticipate growth the flexibility in both supply and costs are much better.

#### **VoIP in Action...**

These business benefits are augmented by user experience and business process benefits – especially when VoIP is used in association with Unified Communications (UCaaS).

Here the telephony forms an integral part of a complete set of business applications designed to improve communications with colleagues, suppliers and clients.

For example, integration with customer relationship management (CRM) applications such as Salesforce.com provides users with the ability to have customer or contact details automatically displayed on a computer screen. Selecting a phone number in the contact records can initiate a phone call to that contact, a display of previous phone call



# A CIO is first and foremost a business leader

records, playing back call recording or even a complete history of any engagement your company has had with a person or company. All of a sudden productivity soars.

Likewise the opportunities for increased collaboration between in or out of office colleagues, clients and suppliers is opened up and finding an expert to answer a customer query is no longer the problem it used to be.

## Self Service

VoIP management systems are provided to help improve the way in which the telephone system is used to enhance the productivity and competitiveness of the business.

The significant factor here is that users can control and manage their own communications resources themselves without constant and costly referrals to their original suppliers.

This ability to stay in control of your own system is normally provided in the form of portal, a browser based application that delivers multi-level access for configuration of applications as well as the provisioning of new services required and deletion of old services no longer needed.

Access to the portal is secured and multi-layered. For example, an IT team may have access to the entire system on a company wide basis whereas individuals may be restricted to just their own applications. The important thing is – you choose.

In addition, users can see their accounts online and in real time. This means no surprises of bill shock.

User management systems also extend to monitoring both incoming and outgoing calls and it is even possible to track calls from cradle to grave across an organisation – for example, where they originated, who spoke to the caller and the call durations. With this information it is possible to control costs, identify training needs and improve customer service levels.

A CIO is first and foremost a business leader, rather than an IT specialist. Developing a view on what is happening in the business with regard to overall strategy and the business environment is a key performance indicator and one where VoIP and UCaaS can play a pivotal role.

Speak the language of business – Conversations in the C-Suite should never be about technology! Talking about technology risks alienating a CIO and confirming the stereotype that they are not close to business. Avoid jargon and talk about business impacts.

## WHAT ARE SIP Trunks?

SIP trunking is a Voice over Internet Protocol (VoIP) and streaming media service based on the Session Initiation Protocol (SIP). SIP trunks allow multiple simultaneous streams of VoIP calls to be routed through a carrier's network and delivered to an organisation as voice packets.

Increasingly SIP Trunks are replacing traditional ISDN as a means of voice connectivity. They are cheaper, more flexible and offer features such as:

**Flexibility with phone numbers:** SIP trunking enables you to move office and keep the same geographic number without any on-going call-forwarding costs or those associated with producing new company stationery.

**Business continuity:** If your office has to be temporarily relocated in an emergency, this can be achieved quickly and cost-effectively with SIP trunking to keep your business working.

### **About Colt**

Colt provides network, voice, and data centre services to thousands of businesses around the world, allowing them to focus on delivering their business goals instead of the underlying infrastructure. Customers include 18 of the top 25 bank and diversified financial groups and 19 out of the top 25 companies in both global media and telecoms industries (Forbes 2000 list, 2014). In addition, Colt works with over 50 exchange venues and 13 European central banks.

Colt operates across Europe, Asia and North America with connections into over 200 cities globally. It recently completed the acquisition of KVH – which now operates under the Colt brand - an integrated data centre and communications services business, with headquarters in Tokyo and operations in Hong Kong, Seoul and Singapore.

**[www.colt.net](http://www.colt.net)**

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