



Technical Training and Consultancy to the NEW Communications Era

## e-News Letter (April 2003)

### Forward:

Throughout these newsletters, we have discussed many individual benefits of IP Telephony and onward, pushing Convergence with new applications far beyond the constraints of regular TDM based telephony.

However good these 'individual' instances may be and sound, many don't meet with a universal requirement from the potential customer base. As a result, it is often a 'collective' of instances that is often pushed towards the customer as reasons to migrate from old, or implement new.

Convergence is a 'Brainer'..... we have said it before, and now again. More than ever, respective sales communities selling convergence have got to be wise with what's possible, what's not and what's coming.

One instance that we have not covered, and is beginning to win general and universal praise is 'Business Continuity'. As we see the world battle through recent events & turmoil – it seems that businesses are ever more thoughtful about loss of service and function, and their overall commercial continuity.

See below and inside for further details.

Note: These letters focus on the reality that now is, for VoIP and Convergence related technologies. The information and details contained within the letters, are intended for use as reference and knowledge bases, with many links to internet sites not under the control of VOiCOM. Whilst every effort is made to confirm the accuracy of any external links and information sources, found within these letters, please respect that VOiCOM cannot be held responsible for any in-accuracies discovered.

VOiCOM hope that you enjoy these letters, and find them informative and useful as information bases for your business or personal knowledge update. Please feel free to copy or forward to any other interested individuals or businesses.

Ian Fitzpatrick, Director IPNewMedia,  
VOiCOM Limited

### April Focus

- Convergence & Business Continuity
- IP Telephony & Security
- Vendor Spotlight
  - 3-Com
- VOiCOM Update

IP Telephony

Convergence  
VoIP



#### Did You know?

Instant Messaging and 3G - Mobile instant messaging promises to extend desktop instant messaging to wireless devices. The current generation of mobile IM technology is not very sophisticated, But with the advent of 3G, this should change soon. Ericsson, Nokia, Motorola and other companies are the prime movers behind making this happen.

- News & Events
- Hot News & Reviews.....

<http://www.nwfusion.com/news/2003/0428lucent.html>

Three years after spinning off its enterprise operations into a new company called Avaya, Lucent is looking to re-engage with corporations through partnerships and indirect channels.

<http://www.nwfusion.com/edge/news/2003/0424nortprofit.html>

Thursday posted its first profit in 13 quarters on first quarter 2003 results that surpassed analyst expectations. Revenues were \$2.40 billion compared to \$2.91 billion in the same period in 2002. Analysts expected revenue of \$2.3 billion, according to Thomson First Call

<http://www.nwfusion.com/news/2003/0423attrings.html>

Weathering competition from wireless and Internet service providers as well as an overall decline in calling rates, AT&T reported solid first quarter earnings of \$571 million, or \$0.73 per share, after losing \$975 million or \$1.32 per share in the first quarter of 2002.

- Upcoming Telephony & VoIP related Events

- Voice On the Net (VON) Europe – London, UK – June 9/12<sup>th</sup>
  - <http://www.von.com/>
- Networks for Business – Birmingham, UK – June 24/26<sup>th</sup>
  - <http://www.networksforbusiness.com/>
- Global Messaging - London, UK - May 13 14: 2003
  - <http://www.ibctelecoms.com/globalmessaging/?src=CR1643-sipf>
  -



Exploiting the Mobile Messaging Mix - From 160 Characters to Multimedia Content  
13th & 14th May 2003, Olympia Conference Centre, London  
- SMS - EMS - MMS - MOBILE IM -



### Did You Know?

Gartner says 85 percent of Global 2000 enterprises have established a disaster recovery plan for core technology and infrastructure, but only 15 percent have a full-fledged business continuity plan. In another report Gartner projects that by 2005 more than 70 percent of large enterprises will have invested in business continuity planning compared to fewer than 25 percent today.

- **Business Continuity**

Increasingly, Business Continuity and contingency planning are becoming essential and unavoidable tasks. However, the creation of a sound business continuity and contingency plan is a complex undertaking, involving a number of stages and discrete activities.

For example, you must understand the underlying risks and the potential impacts of a disaster before you can start to identify what measures need to be taken. A Business Continuity plan can be both complex and potentially expensive and will undoubtedly take a considerable amount of time to create...but it does of course not end there – to serve its purpose it must be ready for use at all times which therefore means there are the maintenance and testing phases, to ensure that the plan remains current. Even having arranged all these matters there is audit to consider – it goes on!



- **Business Continuity and Convergence**

We understand that the scope and consideration within business continuity extends further than it's businesses communications solutions – however communications continuity for health and safety and commercial impact are hugely important, and are at the very top of any business continuity plan/list.

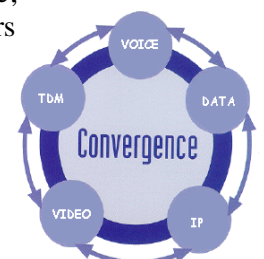
Turning towards IP Telephony and Convergence based solutions, sees a rethink to the communications and business landscape, from network design and utilisation to real-estate, working patterns and even location based communities – home and small office working.

IP Telephony can offer a very cost-effective approach to ensuring that business communications stay up and running in multi-site networks at the time they are needed most - even when a primary location or the Wide Area Network (WAN) goes down.

Example:

You have a company with two sites, with one of the sites having 100 employees, running a flexible IP telephony solution allowing approx 50% (50 people) to telecommute, working from their homes & client sites etc...

Disaster strikes and this site has a severe fire causing the loss of local network and supporting server functions. Provisioned correctly, the IP telecommuters have the ability to switch their service access point to the other site, maintaining their continuity of communications. Similarly, the 'site' workers can be provided with alternate service access in the same way.





- **Business Continuity – Data and Telephony Networks vendors**

Business and communications continuity is nothing new – telephony and data vendors have provisioned services to allow for varying levels of resilience and continuity in the case of disaster.

Data vendors, infrastructure and server applications have had an easier ride. These mainly ‘time tolerant’ services, with duplication of network topologies and business applications are and have been common practice for some time (duplicated email, web and bespoke servers – duplicated routing and networking topologies).

Voice vendors on the other hand have been very restricted with the constraints of ‘time dependent’ traffic / voice, and the good old TDM design to their solutions / PBX’s. Sure duplication of a PBX processor is good and helps general MTBF figures, but most (if not all) PBX processor duplication is based within the same cabinet, and does very little for the loss of the room or building.

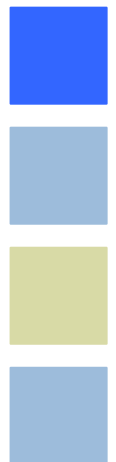


- **Business Continuity and Disaster Recovery (DR)**

From a telephony perspective, vendors and customers have relied heavily on Disaster Recovery plans to enable timely restoration of telephony communications. Effectively these plans are ‘working copies’ of customer premise PBX’s, supplied by a third party, which are rolled in, connected to any available infrastructure to provide some level of service.

To be successful, customer and DR supplier interaction is extremely important, with regular reviews to maintain a high level of contingency. With this high intergradations and labour interaction, historically these DR solutions have not been cheap, and have often been seen as an expensive ‘insurance’ premium by customers.

However, IP telephony can ‘soften’ the disaster impact by enabling duplication of processing between sites and buildings – allowing virtual service access points and even duplication of database information to many different locations.



- **Business Continuity, times are changing.....**



According to the META Group, 80 percent of Global 2000 organizations have some form of disaster recovery or business continuity plan in place, but only 60 percent of these plans are reasonably complete and actionable i.e. they adequately address sufficient coverage of resources and can be successfully executed by the owning organizations.

The above may be true, but with a heightened awareness to potential risk and with solutions becoming more sensitive to loss and disaster, VOiCOM have seen some significant advances from the industry to help promote and implement continuity plans / solutions.



- **IP Telephony and security**

One of the most persistent - and, perhaps most misunderstood and misrepresented - questions raised with respect to voice over IP is whether VoIP is sufficiently secure for corporate communications.

"Perspective" is the key word for evaluating VoIP security. Having a secure network is not a binary "secure/not-secure" choice. Rather, it's a continuum of balancing the trouble of providing security with the value of the information. So long as the cost to hackers of obtaining confidential information far outweighs the value of the information itself, the odds of having this information compromised are quite low.

As a first step in providing security for VoIP, it's useful to divide the task into two major categories. The first of these is the security of the voice network infrastructure. This involves protecting the servers from attack so that the voice network itself remains intact. Just as you don't want your internal data servers hacked, you don't want your servers that happen to be IP PBXs hacked. The good news here, though, is that you hopefully already have a good security infrastructure for your "data" servers, and your IP-PBX equipment will simply become a part of this infrastructure.

The second step is protecting the voice conversation content. There seems to be a widespread misconception that conversations that are transported over IP are less secure than traditional telephony conversations. In reality, the opposite is true. As a rule, it's tougher to hack into VoIP content than it is to tap a traditional telephony conversation.

Ultimately, the comparison has to come down to comparing VoIP with traditional telephony. And VoIP is going to score quite well in most areas.

Src: Network Fusion April 2003

**Did You know?**

A large survey by advisory firm TeleConsultants shows more than half of enterprise respondents are planning an IP telephony implementation in the next 12 months

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[http://www.voicom.co.uk/subscribe\\_form.htm](http://www.voicom.co.uk/subscribe_form.htm)



## 3Com NBX Platforms

3Com entered the telephony market with a new IP PBX geared completely towards IP telephony but with the options to support Analogue endpoints and E1's to the PSTN.

3Com offer two basic models differentiated by capacity. At the lower end is the **3Com NBX 100 Communications System**, with a capacity of 200 devices, including 100 CO trunks, and the larger **3Com NBX SuperStack 3 Network Telephony**, with a capacity of 1500 devices which can include a mix of up to 1000 end users and 720 CO trunks.

The platforms are based on WindRiver VX works providing the Call Server functionality and a series of plug in modules that provide E1 and analogue interfaces and LAN/WAN connectivity.

Each platform is very much a stand alone solution, whereby all telephones are connected via the LAN / WAN – even Analogue terminals are connected via an Analogue converter box.

In terms of remote sites there are 2 options – each site has its own NBX platform which can be connected via an IP trunk, or remote workers can register IP phones from any geographical location.

A modest feature set includes most basic telephony options including internal vmail and the ability to connect to standards based 3<sup>rd</sup> party Call Centre, CRM and CTI packages.

3Com do offer a basic Call Centre solution that sits on an external Windows platform which will support up to 25 agents and 2 supervisors.

NBX telephones come in 3 flavours - NBX 2102, 1102, 2101 – All with similar functionality and appearances providing IP switched connectivity supporting QoS 802.1p.

There is also the NBX PcXset – a softphone client for pure PC telephony users.

All the phones support 3Coms proprietary Power Over LAN layer 2 switch.



**3Com NBX SuperStack  
3 Network Telephony**



**3Com NBX 100  
Communications System**

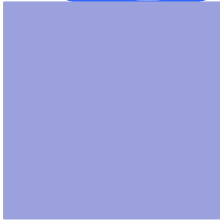


**3Com Power over the Lan switch**



**3Com Analogue converter**

# VOiCOM



3Com NBX phones and Attendant Console a

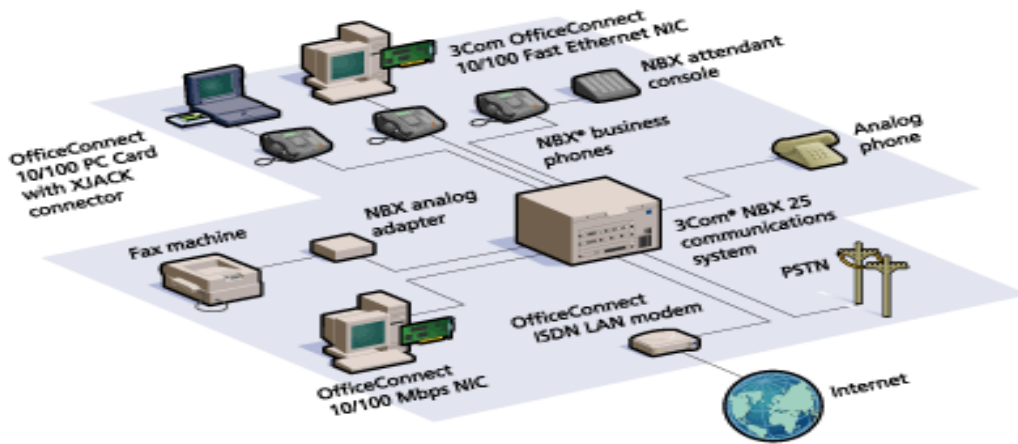
- 3Com also have a ConneXtions Gateway H.323 software which sits on a Windows platform, allowing the integration and connectivity of other compliant H.323 devices, and connectivity of users and NBX platforms across multiple locations.



3Com PcXset - softphone

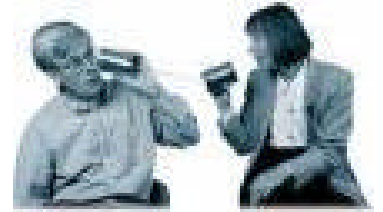
## Business Telephone Systems

Networked telephony solutions provide voice and data communications



### • VOiCOM Opinion

The NBX platforms are IP PBX's developed for the new IP telephony market by a traditional Data manufacturer. Naturally it does not offer any digital phones but is geared towards the pure IP market with the capability to connect to traditional PSTN and analogue endpoints. Though its has a modest feature set and geographical saleability capabilities, compared to other traditional voice and data manufacturers, it is a credible option from the pure IP side of the market and ensures the market remains competitive.



• **VOiCOM Update**

Now that we are well in to Q2 of the year, VOiCOM are looking to continue a very successful start to this fiscal and calendar year.

We have delivered a number of vendor specific and generic training courses so far this year with clear indications that the demand for generic training is increasing.

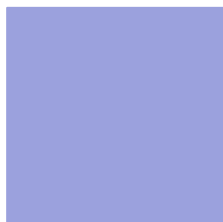
Our Consultancy services are also attracting more interest as our independent approach to Convergence and network assessment is encouraging customers to look at moving into the VoIP world without the biased hard sell of most of the big manufacturers.



**Want to know more ? why not visit us.....**

VOiCOM Training Services - [http://www.voicom.co.uk/Services\\_Training.htm](http://www.voicom.co.uk/Services_Training.htm)

VOiCOM Consultancy Services - [http://www.voicom.co.uk/Services\\_Consultancy.htm](http://www.voicom.co.uk/Services_Consultancy.htm)



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