

Phones that serve themselves

PBXs, IP PBXs and Hosted Voice (aka Centrex) are client-server models. Bob Emmerson checks out a 21st century alternative based on a distributed architecture and embedded call-processing software. Don't confuse it with Skype - and don't ignore it.



Bob Emmerson is a freelance writer who lives in The Netherlands.

Email: b.emmerson@electric-words.org.

Web: www.electric-words.org

Phones used to be dumb or thin-client devices served either by PBXs, IP PBXs, or a Centrex-type service. IP phones are powerful data devices that live on IP networks, so why not take the centralised intelligence and distribute it to the phones, i.e. use embedded peer-to-peer call-processing software. IP phones then become smart devices that recognise other terminals on the network and instantly form a trusted network having the ability to interact with its peers, as well as connect to the PSTN or any WAN VoIP channel.

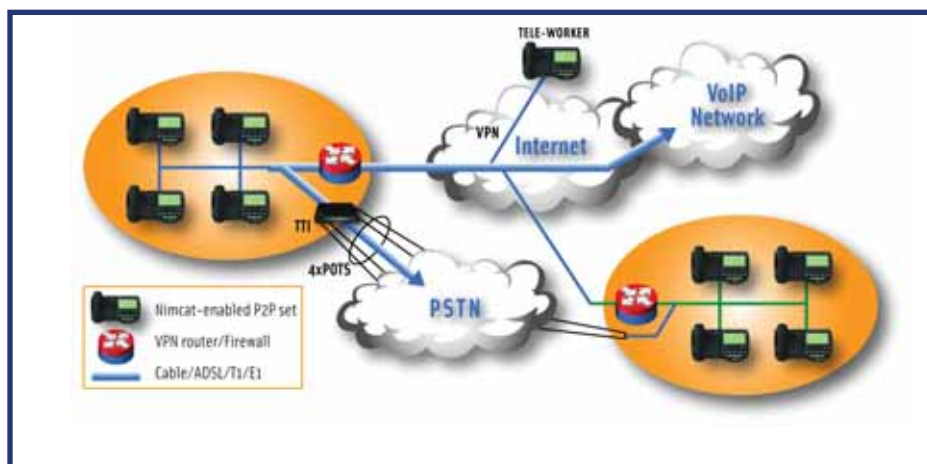
Plain vanilla VoIP isn't a marketable proposition, so you'd have to embed PBX functionality, e.g. voice mail and auto attendant. And since this sounds like dream-on time, why not introduce automatic configuration? When new phones are added they'd get the next free number and identify themselves to all the other phones. And functionality that allowed numbers to be changed after connection to the LAN, e.g. given the equivalent of a DDI extension, would be needed.

This is a seriously disruptive concept. No more servers means no more IP PBXs and no need for hosted voice services. It's also a concept that seems to be too good to be true, but it's been done by Nimcat Networks and at least one other company. More vendors are set to follow, but Nimcat has a shipping product that looks exactly right for SMBs.

OFF-THE-SHELF: LITERALLY

You can take these phones out of the box, plug them into the LAN and create an IP Telephony network in minutes. I did it myself at the Fall VON in Boston. So, no manuals, no training and no reason why you shouldn't be buying these devices from a high street store. In US parlance this is a 'drop-ship' product: there are no truck rolls.

The traditional issue of adds, moves and changes disappears - literally. The phones even



Serverless IP Telephony leverages the processing power of IP phones and the ability to embed call procession functionality.

back each other up, so if one goes down a replacement picks up the original number. And the Web browser on the user's PC can point to the IP address of the phone. Thus, you get a softphone having features such as click to call and conference.

Since we're clearly into never-never land let's throw in auto attendance, voice mail, voice mail identification (nice), instant messaging, unified messaging and personal assistant. You can even download ring tones, which is useful in a crowded office.

But there's more. The teleworker option allows users to connect to their office network over a VPN connection and do extension dialing and make external calls. Users can move from one telephone set to a second set and retrieve their profile. At that point, the second set behaves like their own and users can access their personal directory, receive calls sent to their specific extension, and access their voice mail directory.

And there's a wireless encore waiting in the wings. Nimcat is going to port all this stuff to IP terminals that support 802.11. Product availability is scheduled for Q1 2005. At this point you have to ask, where are they getting their money from? And there, nestling amongst some other noteworthy investors mentioned on their web site is - Siemens.

HARD TO BELIEVE

Serverless peer-to-peer telephony is not an easy concept to take on board. Moving from TDM PBXs to IP PBXs is disruptive, but kind of logical. Eliminating the need for centralised intelligence is something else.

It's hard to believe that it works at all, let alone in such an effortless way, but think about mobile phones. The ability of one wireless phone to find another anywhere in the world is clearly a dream-on concept. As is playing music over a laser beam inside a portable device.

Check it all out at www.nimcatnetworks.com.