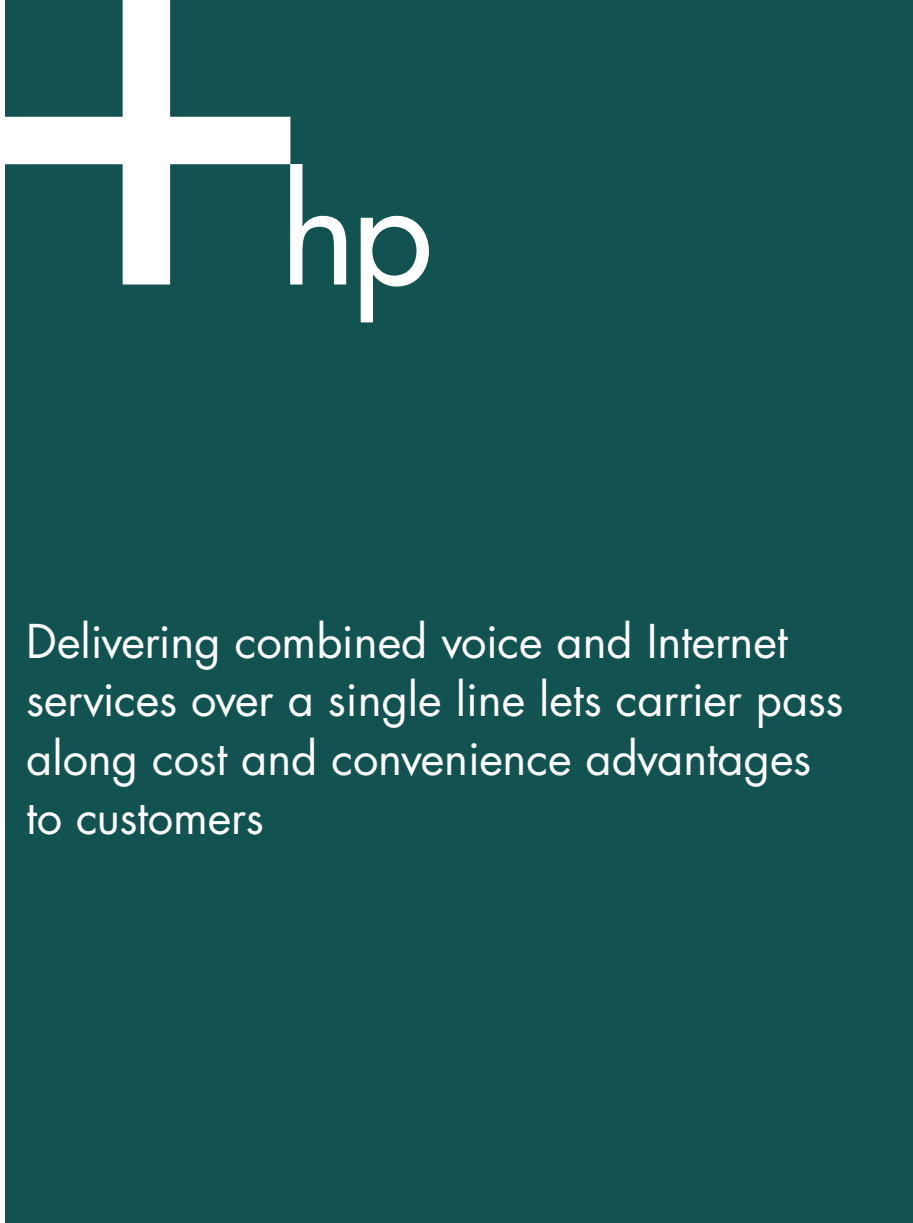


IntraConnect

A success story from HP



Delivering combined voice and Internet services over a single line lets carrier pass along cost and convenience advantages to customers

INTRACONNECT
BROADBAND TELCO SERVICES



Challenge

- Introduce combined voice and data services, using IntraConnect's own DSL network, to residential and small-to-medium size enterprise customers in the metropolitan Athens area. The company wanted to achieve five percent residential market share with its combined voice/Internet services, and eight percent of the SME market by the end of 2004.

Solution

- Working with a team of HP experts, IntraConnect designed, implemented and deployed a VoIP solution based on the scalable, reliable, open-standards-based HP OpenCall SS7 platform.

Results

- IntraConnect's HP VoIP solution enabled it to
 - Penetrate new markets with combined voice/Internet services
 - Be first to market with VoIP services in metropolitan Athens
 - Deliver cost savings and convenience advantages to its customers
 - Seamlessly interconnect with OTE's nationwide telephone infrastructure

In my 17 years of experience, [HP team members] were some of the most savvy and reliable people I've seen.

Didier Durand,
CTO, IntraConnect

Traditional telecommunications networks are undergoing a transition. High fixed costs, decreasing margins and slowing revenue growth are driving forward-looking carriers to embrace a new VoIP infrastructure and services, and pushing many smaller circuit-switched carriers out of the market. In 2000, Greek carrier IntraConnect, the first provider of generic digital subscriber line (xDSL) technology to small-to-medium enterprises (SMEs) in the Athens metropolitan area, set in motion a plan to deliver new value-added services to its customers. After assessing market conditions, the company decided to provide enhanced voice services over its DSL network.

"The advantages of VoIP, coupled with the speed at which the market is moving with new services and pushing prices down, made it clear that VoIP [running on top of the DSL network] was the best way for us to go," explained Leonidas Pantazakos, CEO, IntraConnect.

He added that cost was a big factor in shaping IntraConnect's plans for the new service. "The market was demanding cost-effective services, it was really about pricing," Pantazakos noted. "People wanted services that were less expensive than what they were currently paying—which led us to realize that we needed to get creative with our offerings."

Educating the market to the advantages of the new system proved to be the biggest business challenge IntraConnect faced as the company implemented its new VoIP solution, because Greece is a bit behind the rest of Europe in embracing technological advances. "But we soon realized that a combination of Internet and voice services over a single line would be of huge value. And we proved right, because people respond really well to our combined service bringing Internet and voice into the home or business over a single DSL line."

With its new VoIP platform in place, IntraConnect was on the road to achieving its business goals: five percent penetration of the residential market with its combined voice/Internet services, and eight percent of the SME market by the end of 2004.

Scalable, reliable signaling and media gateway controller (SMC) solution based on HP OpenCall signaling platform provides the foundation

IntraConnect's VoIP solution leverages the advantages of the HP SMC (signaling and media gateway controller) based on the HP OpenCall SS7 platform to provide a vital link between the traditional, pervasive circuit-switched network, and the emerging Internet protocol (IP).

"We were looking for a well-established solution," related Didier Durand, IntraConnect's CTO, "and we wanted a solution that could be fully integrated into our voice over IP environment. And finally, we wanted a solution that was scalable and reliable. It's an important investment, and we wanted to make sure it was protected. We'd already decided we were going to steer away from proprietary solutions, so being 100 percent based on industry standards was extremely important."

The HP SMC enables new voice, data and multimedia services to run efficiently across convergent telephony and data network infrastructures. Running on state-of-the-art HP systems—the world's leading UNIX platform—the HP OpenCall signaling platform is the ideal development environment for creating next-generation communication solutions.

In our situation—without HP—the project might have failed. But they kept everything moving, and we were able to launch the service after only a small delay.

Didier Durand, CTO, IntraConnect

VoIP service relieves customers' initial investment burden

Pantazakos said the company's enterprise customers can gain an initial cost-savings advantage by using its VoIP service for voice "like a replacement for the old switchboard," adding that IntraConnect has since introduced other value-added services such as IP-centric voice virtual private network (IP VPN).

"Let's say you're a small-to-medium enterprise just starting up—you have to buy your own PBX (private branch exchange, a telephone system within an enterprise that switches calls between enterprise users on local lines while allowing all users to share a certain number of external phone lines). But if you go through the IP-centric environment, you wouldn't need the PBX—you could just connect between your systems in our switch and start working."

The HP-NetCentrex VoIP solution for next-generation infrastructure, Pantazakos said, enables enterprise as well as residential customers to handle everyday communications. "It can serve millions of customers with integrated services like Internet, voice and data at the same time over the same lines. The provisioning is very flexible and easy to use, and management of the solution is also very effective."

Kiosks deliver cost savings and convenience advantages to voice customers

These days kiosks are a common sight in public places such as airport waiting areas, shopping centers and hotel lobbies, where they can serve a multitude of purposes—anything from dispensing newspapers or candy to providing access to e-mail and certain Internet features such as news and business information. One of IntraConnect's customers thought it would be a good idea to use kiosks to provide economical phone service over an IP network.

"These people came to us and asked 'Can you provide us with voice over IP service so we can get cheaper prices through your network?'" related Pantazakos. "The only way to do that in a short time was by deploying this service over IP—you program it, you put a phone in the kiosk, and it works for you. But you wouldn't be able to do it so fast and for so little money without the softswitch."

Softswitch technology manages voice connections between existing telephone equipment, such as PBXs and key systems, and next-generation equipment, such as IP phones, computers and other softswitches.

Pantazakos added that kiosks provide a good real-world illustration of how existing infrastructure can adapt itself to new technology. "We had to adapt our system to something people had been using for years," he explained. "These people were used to working in another way that is almost impossible through a new-generation system. But the application of the idea through a softswitch is a real success story."

Partnering with the HP team helps ensure project success

The solution design for IntraConnect is a 1 + 1 configuration based on HP SMC with HP OpenCall, telco-grade systems, and NetCentrex softswitch to provide basic call, call forward, call waiting and CLIP/CLIR (calling line identification presentation/calling line identification restriction) services. The solution enables web-based provisioning and management. In addition to hardware and software, HP also provided manufacturing and engineering services, onsite installation, training and support for interconnecting IntraConnect's VoIP service with OTE's (the Greek incumbent carrier) nationwide telephone infrastructure.

Whatever technical problems we ran into, HP was always able to provide a solution the same day or the day after.

Didier Durand, CTO, IntraConnect

Didier, who oversaw the project, describes it as “maybe my best experience. We chose HP’s VoIP solution with HP OpenCall and NetCentrex softswitch because, on the SS7 side, HP OpenCall is one of the most favored, most established platforms,” he said. “Whatever technical problems we ran into, HP was always able to provide a solution the same day or the day after. In my 17 years of experience, these were some of the most savvy and reliable people I’ve seen.

“They were very concerned, very reactive and very efficient,” Didier continued. “In our situation—without HP—the project might have failed. But they kept everything moving, and we were able to launch the service after only a small delay.”

As a result of the positive implementation and deployment experience, Didier said IntraConnect may standardize more on HP equipment as the company moves forward.

Leveraging VoIP to penetrate new markets

Although an economic downturn in Greece is slowing growth across the board in the communications industry, IntraConnect is making important headway toward its business goals.

“There’s a very pressing economic situation in Greece right now,” confirmed Pantazakos, “so at the present time we are talking about different ways of expanding our

possibilities so we can make more rapid progress toward our goals. By making a few right moves, we believe we can acquire a customer base which is not so profitable for other people—but for our system it will be profitable and lucrative.”

He explained that IntraConnect is focusing equally on both the residential and SME markets as a strategy to gain maximum revenue from its infrastructure.

“Both in the Internet world and the voice world, you can use your lines 24 hours a day,” he said. “SMEs work from 8 to 8, while residential customers work from 4 to 12. So you can have 10 lines and do the business of 16 lines—you fill up your network twice a day. So both SMEs and residential are our target market because they allow us to make money out of the same infrastructure.”

Economic realities come and go, but progress marches on. By delivering voice over IP services to the Athens metropolitan area—the telecommunications center of the wider southeastern European region—before anyone else, IntraConnect has gained first-mover advantages and aligned itself with one of the immutable laws of marketing: the first brand to establish itself in any category is almost always the first brand in people’s minds. The competition gets to play catch-up.

For more information go to www.hp.com/communications

© 2003 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

