



Enhance collaboration  
and communication  
through VoIP

CounterPath and Intel team up on mobility



# Collaborative effort delivers on the promise of VoIP

In today's fast-paced global environment, employees need to communicate and collaborate wherever their work takes them. Voice over Internet Protocol (VoIP) makes this possible by enabling dispersed individuals to operate as cohesive teams—using their PCs to send and receive calls and share applications and information. Intel® Centrino® Duo mobile technology was designed to enable the highest level of voice clarity, reliability, and performance on VoIP networks.<sup>+</sup> CounterPath,\* a developer of carrier-grade VoIP softphones, has optimized its eyeBeam\* softphone for Intel® Centrino® Duo mobile technology-based laptops. Together CounterPath and Intel increase the quality of voice over networks to enable new mobile computing experiences.

## Mobile workers are everywhere—even at work

According to the Yankee Group,<sup>1</sup> 50 million U.S. workers, or 40 percent of the workforce, are currently considered mobile for part or all of a typical workday. Combined industry estimates forecast that by 2008 this number will increase to more than 72 percent. When you combine the features of VoIP with wireless Internet connectivity, you get spontaneous, real-time business collaboration any place, any time in Wi-Fi hotspots, in employees' homes, and even throughout your offices.

## Key benefits of VoIP

Integrating voice and data over VoIP unifies management of all communications and business applications (voice, text, video, e-mail, instant messaging, etc.) across all devices (notebooks, PDAs, cell phones) on both wired and wireless networks. This encourages teamwork and efficiency while eliminating time wasted on unproductive back-and-forth trips to traditional telephones, computer terminals, record rooms, and storage facilities.

You can derive long-term cost benefits from VoIP, including significant reductions in cellular and conferencing costs through the elimination or reduction of charges for phone accounts, long-distance calls, and roaming. Further, managing a single, packet-based network and consolidating equipment lowers overhead.

As with any emerging technology, VoIP is an investment that involves a degree of risk. You can address the risk by carefully preplanning and managing your implementation using any of a variety of solutions. Choosing best-in-class IP solutions like those from CounterPath and Intel helps ensure that you derive substantial value from your VoIP implementation today.

## A new era of business communications

CounterPath IP softphones and Intel® Centrino® Duo mobile technology-based laptops provide mainstream enterprises with a viable way to benefit today from IP telephony. This includes:

- Seamless collaboration in the office through integration of communications with business applications on employees' notebooks and through intelligent roaming and improved QoS.
- Enhanced mobility on the road through the use of notebooks and broadband connections, as well as intelligent roaming and wideband codecs for greater sound clarity.

## CounterPath eyeBeam softphone

Supporting open standards for VoIP, CounterPath Solutions' eyeBeam SIP (session initiated protocol) softphone, a software-based VoIP client for use on client PCs, offers traditional telephony features plus video over IP, instant messaging, and Presence functionality.

The CounterPath eyeBeam solution is optimized for Intel® Centrino® Duo mobile technology-based laptops. This enables the softphone to confluence packet prioritization, bandwidth reservation, and call admission control, thus

providing more consistent quality of service (QoS) across wired and wireless networks using industry standards such as 802.11e. As a result, whether users are checking e-mail or downloading large files, the QoS is not compromised and doesn't affect performance. The chart on this page demonstrates how eyeBeam improves quality regardless of the number of callers on a line.

### Intel® Centrino® Duo mobile technology

The latest Intel® Centrino® Duo mobile technology-based laptops with dual-core capabilities built in provide advanced performance, great battery life, and expanded connectivity,<sup>+</sup> so your employees can communicate and compute in more and new ways to help your business succeed. This platform enables users to enjoy enhanced softphone performance when running multiple programs simultaneously, sending and receiving calls, and accessing features and directories from computing devices both in and out of the office.

On the Intel® Centrino® Duo platform, VoIP delivers the highest level of voice clarity, quality connection, reliability, and performance<sup>+</sup> by:

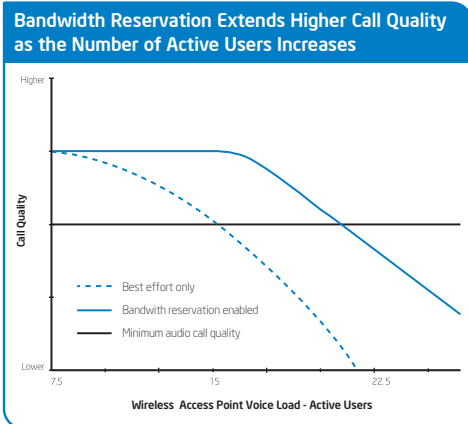
- Effectively combining packet prioritization, bandwidth reservation, and call admission control capabilities.
- Enabling end-to-end consistent QoS across both wired and wireless networks, with support for the 802.11e standard and Diffserv. This includes assigning priorities to voice traffic so that the voice comes through smoothly with a high level of audio fidelity.
- Supporting 802.11e QoS via prioritized traffic and transmission scheduling for delivery of VoIP and other real-time applications over a wireless link.
- Enabling users to connect to leading industry standards-based WLANs with improved performance through a dual-core processor with next-generation Noise Interference Filter.<sup>±</sup>
- Monitoring the network QoS for jitter, packet loss, and latency over WLANs.

### Voice over wired IP—in action at Intel

Using wireless as the primary enterprise network offers compelling potential benefits.<sup>+</sup> In an early analysis based on Intel's own VoIP implementation, the Intel IT organization estimated the solution reduced capital costs by 40 to 50 percent (equipment consolidation and more effective use of infrastructure) and lowered operating costs by 20 to 30 percent (equipment reduction).

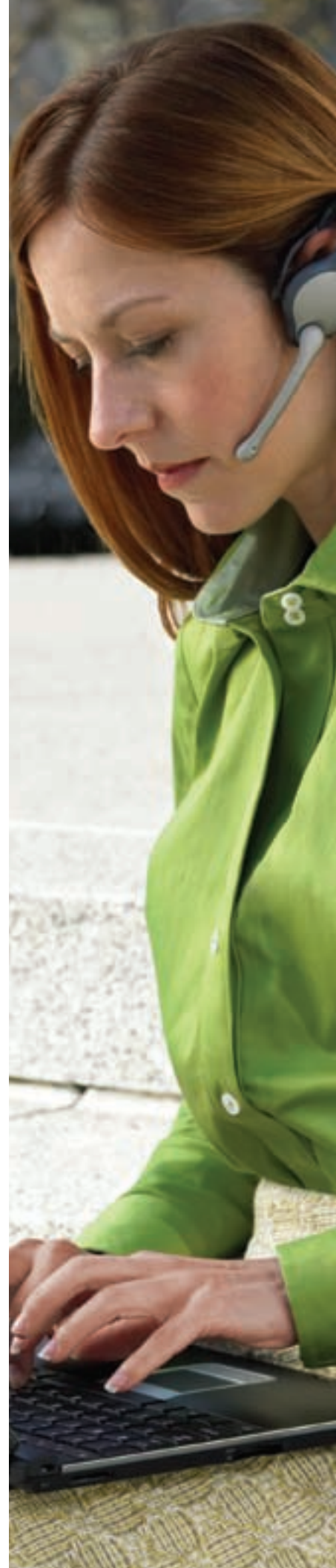
To help enhance the reliability and security of WLANs for businesses deploying laptops on their networks, Intel is a lead collaborator on the Cisco\* Compatible Extension program and is working jointly with Cisco on the creation of a Business Class Wireless Suite.<sup>□</sup>

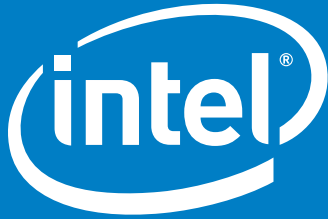
Designed for companies using Cisco's Unified Wireless Architecture and Intel® Centrino® Duo mobile technology, the Business Class Wireless Suite provides enhanced capabilities that make wireless LANs more robust for the enterprise, such as optimal access point selection technology, which improves client and network performance by proactively roaming to the most optimal access point. The end result is load balancing and enhanced VoIP quality technology.



This chart compares estimated call quality on CounterPath eyeBeam softphones with and without bandwidth reservation. When bandwidth reservation is enabled, call quality is preserved for a greater number of active users.

Note: This chart is for illustration only.





## Enabling seamless collaboration in the digital office

VoIP enables a new level of collaboration—reducing the time it takes to connect with individuals and access information and providing a single interface for managing communications in real time. While it's been widely understood that the special requirements of voice must be accommodated when sharing a data network, CounterPath and Intel are working to extend that concept to laptop PCs, enabling you to optimize your VoIP solution in terms of both performance and reliability.

Intel will continue to work internally and with industry leaders to develop new products and technologies that more deeply integrate voice, data, and video to enable seamless, real-time collaboration.

### For more information, please contact:

- CounterPath at [www.counterpath.com](http://www.counterpath.com)
- Intel at [www.intel.com/go/voip](http://www.intel.com/go/voip)

+ System performance, battery life, high-definition quality and functionality, and wireless performance and functionality will vary depending on your specific operating system, hardware, and software configurations. References to enhanced performance as measured by SYSMark\* 2004, PCMark\* 2005, and 3DMark\* 2005 refer to comparisons with previous generation Intel® Centrino® mobile technology platforms. References to improved battery life as measured by MobileMark\* 2005, if applicable, refer to previous generation Intel Centrino mobile technology platforms. Wireless connectivity and some features may require you to purchase additional software, services, or external hardware. Availability of public wireless LAN access points may vary by country, and some hotspots may not support Linux-based Intel® Centrino® mobile technology systems. See [www.intel.com/products/centrino/more\\_info](http://www.intel.com/products/centrino/more_info) for more information.

± Throughput will vary depending on specific hardware and software configurations, usage and environment.

□ Only available on selected systems. Some features may require additional hardware and software as well as specific Cisco\* wireless LAN infrastructure support, and an optimized soft-phone application. Check with your PC manufacturer for details. See [http://www.intel.com/products/centrino/more\\_info](http://www.intel.com/products/centrino/more_info) for more information.

1 Yankee Group, June 2005

Copyright © 2006 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel. Leap ahead. and Intel. Leap ahead. logo, Centrino, and the Centrino logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

\* Other names and brands may be claimed as the property of their respective owners.