

# Symbol and Avaya Enterprise Mobility Solutions

Converged voice and data capabilities

SOLUTION BRIEF

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## Overview

Across industries, a substantial segment of today's workers spend a significant portion of the workday away from the desk, moving throughout the building or campus environment — from managers in a retail store or manufacturing floor to doctors and nurses in a hospital. Yankee Group estimates that 50 million U.S. workers — or 40 percent of the workforce — are currently considered mobile for part or all of a typical workday. And that number is expected to continue to rise to more than 72 percent of the US workforce by 2008, according to combined industry estimates.



The ability to provide voice and data capabilities in a single device keeps mobile workers available, efficient and productive.

To keep on-the-move workers productive and accessible, Symbol Technologies and Avaya have partnered to deliver comprehensive enterprise mobility applications that extend desktop phone functionality and critical business applications to a single mobile computing device. The extension of voice and data connectivity right to the point of work — from an aisle in a retail store to a patient's bedside, and more — empowers mobile workers with continuous connectivity to the people and information required to do their jobs as efficiently and effectively as possible, regardless of where in the building or campus they may travel. These solutions leverage Symbol's expertise in advanced data capture, radio frequency identification (RFID), mobile computing platforms, wireless infrastructure and mobility management software with Avaya's best in class VoIP solutions through Avaya's Windows Mobile 2003 Softphone client and communication servers.

## Solution Components

The Symbol and Avaya solution leverages the power of voice and data convergence in a single durable enterprise class device. This solution provides everything mobile employees need to remain connected as they move throughout the workday. On-board advanced data capture through scanning and imaging, coupled with the power to run rich applications enables mobile workers to access as well as collect data at the point of work, while on-board IP communications provides cost-effect portable desk phone functionality. Mobile employees remain productive and accessible, regardless of whether they are at their desks or moving throughout the building or campus.

The components of this solution include durable mobile computing devices that support voice and data, Symbol's Voice Quality Manager (VQM), the Avaya IP Softphone for Pocket PC, management tools for the entire enterprise mobility solution, the wireless local area network (WLAN), and a full suite of services to assist customers in every step of the process - from design and implementation to ongoing support.

## Mobile computing devices built for enterprise use

At the heart of the Symbol Avaya solution is the end-user device. Symbol's rugged mobile computing devices, such as Symbol's MC50 EDA (enterprise digital assistant), offer the durability required in the enterprise, combined with the power to support voice and data

applications. These durable devices are built to withstand everyday use, including the ability to tolerate multiple drops to a tile floor, and more. Enterprise features and functionality include:



- Durable design for long lasting performance and optimal return on investment (ROI)
- Optimized for VoIP communications
- Embedded Wi-Fi for easy connectivity to the WLAN

- Integrated 1D/2D bar code scanning and imaging
- Acoustic echo cancellation for superior voice clarity
- Hand strap
- Processing power to simultaneously support enterprise voice and data applications
- Superior ergonomics for voice and data convergence, providing end-users with intuitive controls for both voice and data applications

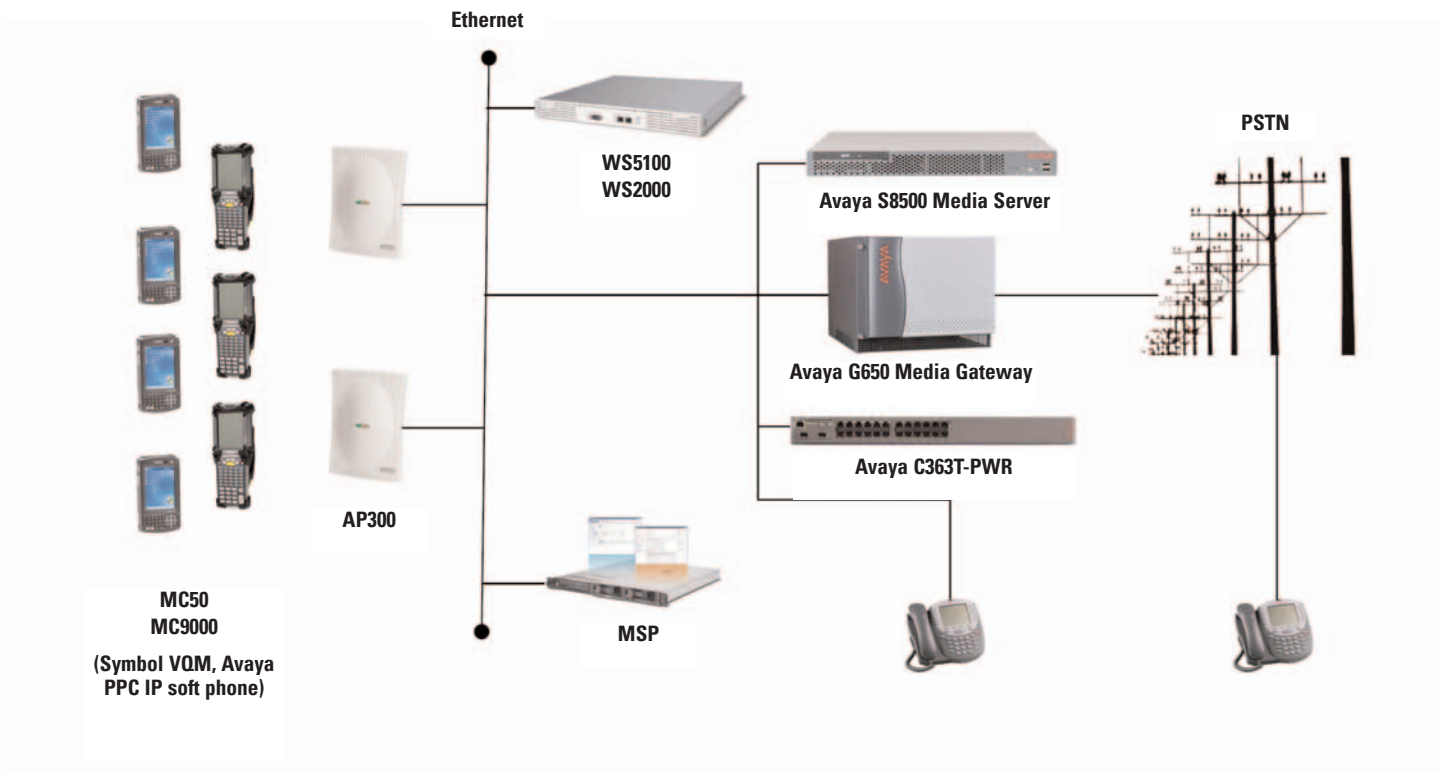
### Voice Quality Manager (VQM)

VQM delivers a superior end-user experience for Voice over Wi-Fi (VoWiFi) calls through the combination of feature richness in Avaya's PPC Softphone and the advanced voice capabilities of Symbol's mobile computing devices. VQM provides real-time intelligent provisioning of the advanced audio components of a Symbol mobile computer during various phases of a call, including managing the use of acoustic echo cancellation and voice QoS, which ensures priority treatment of voice packets on the wireless LAN. Additionally, VQM places a simple 'tap to toggle' icon on the screen that allows user to quickly switch between speakerphone and handset modes as needed.

### Avaya IP Softphone for Pocket PC

The Avaya IP Softphone for Pocket PC provides transparent access to real time voice communications and productivity enhancing features in the Avaya Communication Manager, including multiple call appearances, transfer and conference. And outstanding integration of voice and data capabilities further simplifies the end-user experience, for example, through simple point and click dialing from Microsoft Outlook contact lists or corporate directories.

## Components of the Symbol and Avaya Enterprise Mobility System



## Management tools

Symbol's Mobility Services Platform (MSP) is a single platform that allows centralized and remote management of your mobile computing devices, mobile applications and wireless network infrastructure. With MSP, hundreds or thousands of devices are easy to deploy, monitor, track and support. And end-to-end real-time monitoring capabilities provides the information to identify and resolve end-user issues remotely, as well as ensure peak performance throughout your enterprise mobility solution — from mobile computers and bar code scanners to access points, wireless switches and access ports.

And combining MSP with Avaya's Application Assurance Networking (AAN) delivers a total management solution, providing customers with:

- Accelerated deployment
- End-to-end visibility into health and performance of mobile devices
- Expedited problem resolution
- Securable access
- Extensible platform architecture

## High-performance wireless LAN

Symbol's family of next-generation wireless switches redefines the standard for enterprise class wireless networks, delivering superior security, functionality, scalability, performance, and manageability — all at a lower total cost of ownership. Centralizing intelligence that was previously distributed and duplicated in first-generation wireless LANs delivers a new level of power and control — and reduced deployment and management costs. And support for all of today's standards combines with the ability to upgrade to support new features, functionality and security protocols, future-proofing your wireless network and delivering outstanding investment protection.

Whether you have a large campus-style environment, a small branch office, retail chain store or restaurant, Symbol's family of wireless switches provide the most cost effective means to deploy the power and benefits of mobility throughout your enterprise.

## Complete services: from strategy to support

The Symbol and Avaya partnership offers customers unparalleled expertise in wireless mobility and telephony communication through a wide range of support services that offer lifecycle support — from system design, integration and deployment to maintenance and ongoing support.

## Business benefits

This enterprise voice and data mobility solution provides businesses with many benefits, including the ability to:

- Extend the value of Avaya Communication Manager to mobile computers, combining an enhanced PDA-style form factor with optimal performance for enterprise-level applications
- Enable companies to easily voice-enable mobile business applications and processes to gain competitive advantage
- Fully utilize Avaya Communication Manager capabilities such as managing multiple call appearances, setting up conference calls, call transfers, and directory dialing via an intuitive interface
- Supports the telephony needs of mobile workers over the wireless LAN network delivering cost-effective voice communications at the point of work

## Features

Superior integration of Avaya and Symbol technology enables the extension of a wide range of user features and functionality to increase productivity and deliver a superior mobile voice experience, including:

- Multiple call appearances and one-button access to frequently used features, such as Answer, Conference, Transfer, Hold, Mute, Redial, and Volume Control
- Message Waiting Indicator for visual signal of the presence of new voice mail messages
- Preprogrammed speed dialing capability for one-click dialing
- Configurable audio, visual, and vibration alert signals for use in a variety of office, commercial, and industrial environments
- Place calls from a local directory by selecting a contact name and either clicking the telephone icon or pressing the Enter button
- Track incoming and outgoing calls with the Call Log; dialing can be initiated from the call log; the Redial' button also dials the last number that was called
- Complete access to powerful desk phone functionality, such as calls in queue, call park, paging, and call appearances
- Customizable look and feel of the user interface, including button sizes, colors, shapes and positioning

## Industry Solutions

### Retail solutions

#### Mobile operator

Phone operators can now complete tasks on the retail floor while answering the phones, ensuring optimal responsiveness to customer needs as well as incoming calls. Productivity is increased through the delivery of full multi-line phone capabilities on a mobile computing device, including the ability to answer, park and transfer incoming calls .

#### Mobile manager

Retail associates can now scan, access critical business applications, and manage voice calls – all on the same device. The result is optimal productivity for store managers and associates by providing a wealth of on-the-go features and functionality, including:

- Voice communications via Avaya PBX
- Incoming call queue management
- Voicemail
- Instant Messaging (IM)
- Applications (price management, cycle counts, receiving etc.)

#### Features for improved customer service

Retail operations will enjoy improved customer service through the ability to provide on-the-spot rapid response to customer questions, including:

- Item information, such as price checks, item location details, inventory level checks, availability at other nearby store locations
- Coordination with other associates for special expertise and/or delivering products for pickup
- Handling associate coordination via IP-to-IP communications rather than PA messaging, thereby enhancing the customer shopping experience
- Mobile POS line busting
- Many combinations of in-store mobile solution offerings

### Healthcare solutions

#### Wireless communications/nurse call

Nurses typically spend 30 minutes to an hour each day tethered to a desk with a wired phone. A converged voice and data device enables nurses to perform applications and tasks such as medication administration and blood transfusion verification at the patient bedside, while still able to receive Nurse Call alerts, outside calls, or calls through the PBX from other hospital personnel.

#### Mobile physician rounding

With the ability to receive the latest up-to-date records available as they make rounds as well as adding voice communications to, physicians can:

- Reduce the need to carry multiple devices
- Enjoy full telephony functionality — just as if they were sitting at their desk
- Provide dictation capabilities

### IT solutions

#### Enterprise Asset Management

- 93% of large enterprises and IT service bureaus have implemented a call center/support solution which is the origin of the mobile work orders
- Most have not taken advantage of mobilizing this solution which leads to more closed work orders per day, per tech, increased equipment uptime which leads to increased productivity across the enterprise

### Summary

Through the partnership of Symbol Technologies and Avaya, companies are realizing the promise of true enterprise mobility. To see how you can benefit from true enterprise mobility, visit us on the web at [www.symbol.com](http://www.symbol.com) or contact us at +1.800.722.6234 or +1.631.738.2400.

## System Specifications

### System Requirements

Avaya Media Server running Avaya Call Processing (ACP) R10 or Avaya Communication Manager 1.1 or higher

G.711 Mu-Law or G.711 A-Law must be administered in the ip-codec-set on user's server

Avaya IP Softphone License (Release 3 or higher) and IP Softphone option enabled for user's extension

Avaya Softphone client for MC50 and Symbol VQM

Symbol MC50 Microsoft Windows Mobile 2003 Second Edition

Symbol WS5100 Wireless Switch and Symbol AP300 Access Ports

### Avaya Compliance Tested Symbol Software and Devices

Voice Quality Manager (VQM)

MC50 Enterprise Digital Assistant

WS5100 Wireless Switch

AP300 Access Port



## About Avaya

Avaya Inc. designs, builds and manages communications networks for more than one million businesses worldwide, including over 90 percent of the FORTUNE 500®. Focused on businesses large to small, Avaya is a world leader in secure and reliable Internet Protocol telephony systems and communications software applications and services. Driving the convergence of voice and data communications with business applications - and distinguished by comprehensive worldwide services - Avaya helps customers leverage existing and new networks to achieve superior business results. For more information visit the Avaya Web site: <http://www.avaya.com>

## About Symbol Technologies

Symbol Technologies, Inc., The Enterprise Mobility Company™, is a recognized worldwide leader in enterprise mobility, delivering products and solutions that capture, move and manage information in real time to and from the point of business activity. Symbol enterprise mobility solutions integrate advanced data capture products, radio frequency identification technology, mobile computing platforms, wireless infrastructure, mobility software and world-class services programs under the Symbol Enterprise Mobility Services brand. Symbol enterprise mobility products and solutions are proven to increase workforce productivity, reduce operating costs, drive operational efficiencies and realize competitive advantages for the world's leading companies. More information is available at [www.symbol.com](http://www.symbol.com)



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