



## Solutions Brief

# Nortel Agile Communication Environment Delivering Speed, Accuracy and Agility

In order to make the right decisions quickly and efficiently, today's businesses must connect the right people to the right information at the right time. But how is this possible in today's world, a world in which business processes are separate from the communications infrastructure that connects people and information? In which separate, multiple domains exist: enterprise, carrier, wireless and wireline? And how do we simplify business processes with speed, accuracy and agility while deriving more value from investments and improving overall productivity?

Using SOA (service-oriented architecture) and Web Services is the answer. In a Hyperconnected world every device that should be connected will be connected. And every technology from personal appliances to business systems can and will include an application with built-in communications capabilities. Using technologies such as SOA and Web Services we can create and deliver such communications-enabled applications (CEA) and business processes (CEBP) to turn the challenge of Hyperconnectivity into an opportunity.

SOA is a business-driven concept based on

an architecture that uses loosely coupled services and components to support the requirements of business processes and users. SOA is implemented through Web Services, a suite of extremely pervasive and widely adopted technologies. Using SOA and Web Services a firm can integrate communications functions with business applications and processes, increasing agility, accuracy, speed and overall productivity, along with a higher ROI. Nortel has the expertise, infrastructure, partnerships and services to deliver communications-enabled applications simply, rapidly and effectively to businesses in every industry.

### Nortel's SOA Strategy

Nortel's SOA strategy is focused on leveraging SOA and Web Services to offer rich communications-enabled applications to both enterprise and carrier customers with the goal of providing the following benefits:

- Improved business agility
  - Enables quick reactions to changes
  - Equips businesses for long-term sustainable competitive advantage
- Efficiency and accuracy
  - Improves customer and supplier relationships

- Brings goods and services to the market faster
- Reduces errors and mistakes

- Improved ROI
  - Uses fewer resources within an existing infrastructure
  - Creates new revenue opportunities
- Improved overall productivity

Nortel understands how to manage the complexity of telecommunications and provide advanced communications capabilities in an open, multi-vendor, Web Services-based environment. Nortel accelerates the delivery of communications-enabled applications and processes across multiple domains (enterprise, carrier, wireless and wireline) and turns the challenge of Hyperconnectivity into an opportunity for our customers. Our multi-vendor approach enables us to work with a wide variety of network infrastructure equipment, including PBXs and call servers (Nortel and non-Nortel), leveraging existing network infrastructures and improving ROI. This open approach also allows third parties, such as other SOA frameworks/platform vendors, independent software vendors and system integrators, to further develop and customize applications.

## **The Use of Communications Enablement Through Web Services**

Using an airline traveler's experience, the following scenario illustrates how a business, its marketing partners and the people it serves can benefit from communications enablement through Web Services. The example demonstrates how an airline's implementation of Web Services can improve its traveler itinerary management. In this case, Web Services bolster the efficiency of customer service, increase itinerary accuracy and enhance the traveler's overall satisfaction level. Furthermore, Web Services create new sources of revenues by enabling Nortel customers to leverage their core competencies into complementary business opportunities, such as mobile advertising and customer database generation. All of the offerings of Web Services from this example — mobile advertising, location-based services, alert notification messaging, identity management and third-party call control — can be applied to other, varied business scenarios.

A flight arrives one hour later than scheduled. An airline employee logs in to the flight system to update that information, and the update triggers an electronic event sequence through Web Services. As part of this sequence, all travelers with PDAs or other media-rich devices planning to connect to the delayed flight receive delay notifications via instant messaging (IM) along with updated gate information. Additionally, people who have been designated as secondary contacts by travelers and travelers-to-be receive phone calls about the flight delay.

The IM to the connecting travelers also contains a link to the airline's Web portal, a click-to-connect link to the airline's booking department and a voucher for a free beverage from the

airline's retail marketing partner. Using the first link, the traveler can learn more about the new itinerary. The next link enables the traveler to discuss car rental and hotel arrangements with a booking agent. The voucher includes a link to a map of the terminal where the traveler has arrived. When the traveler patronizes the retailer, his or her demographic information is given to the retailer via the voucher number, and the retailer is able to display advertisements customized to the traveler via a POS system's display.

### **Providing a Comprehensive Environment**

Nortel provides four key components for building a comprehensive environment for communications-enabled applications.

### **The Integration of Web Services into Key Network Platforms.**

Nortel is enabling key network platforms in our portfolio with Web Services. By leveraging Web Services Nortel is taking real-time network capabilities, such as click to connect, instant messaging and presence, and making them available for integration with other IT applications. This allows for the creation of communications-enabled applications and the integration of these applications into business processes.

### **A Foundation Environment: Nortel Agile Communication Environment.**

Nortel offers a software-based environment that facilitates the easy development of customized communications-enabled applications. The Nortel approach works with both Nortel network equipment (e.g., PBXs and soft switches) and those of other vendors. The approach is also future-proof for next-generation switches. Nortel Agile Communication

Environment can "sit" across the network infrastructure (enterprise and carrier) and interface with multiple vendors' call servers and applications servers (e.g., video), extracting and exposing communications capabilities into a Web Services environment. There, these capabilities can be integrated with other IT applications/business processes for creating communications-enabled applications and business processes.

Nortel Agile Communication Environment exposes key communications capabilities or services (as they are known in the SOA industry) such as presence, location, IM, click-to-connect and more. These services can be combined with other applications. For example, through an alliance with IBM, Nortel provides communications-enabled applications capabilities fully integrated with IBM's Lotus® Sametime® client — providing a single, simple, communications-rich GUI (graphical user interface). Nortel Agile Communication Environment is also fully integrated with IBM® WebSphere® Application Server for enabling higher performance, speed and simplicity in deploying Nortel solutions. Nortel Agile Communication Environment is also available as a toolkit and can be integrated with other leading vendors' SOA frameworks.

Another key component is Bandwidth on Demand, which treats a network infrastructure as a pool of resources that can be allocated on a just-in-time (JIT) or scheduled basis for time-critical applications. This mechanism makes businesses more agile and improves productivity. For example, using Bandwidth on Demand, a financial services firm can automatically set up a multi-site, international videoconference call based on changes in key stock prices. The call is set up quickly and without human intervention. Additionally, Nortel Agile

Communication Environment can orchestrate and mediate services among the communications and IT world in real time. Nortel Agile Communication Environment manages the complexity of the communications world to facilitate events-driven communications where the “event” can be triggered by a business process. Nortel provides the ability to locate an asset (human or physical), determine its availability and preferred communication method, and facilitate the transfer of data through voice, conference, video and so on. Nortel manages the complexity of the communications world to present these capabilities simply, with speed, accuracy and agility.

**Best-in-Breed Partnerships.**

A new ecosystem is emerging — one that allows the creation of modular building blocks (enablers) that link the communications capabilities of the network to applications in a way that can be mixed and matched to create new applications and services

quickly. Many Nortel partners, such as Microsoft and IBM, will contribute functions to that set of modular building blocks, and much of the value will come from the communications capabilities. Nortel is extending its relationships with such applications providers and others to leverage their business applications and expertise to fully utilize the power of the network.

**Nortel Global Professional Services.**

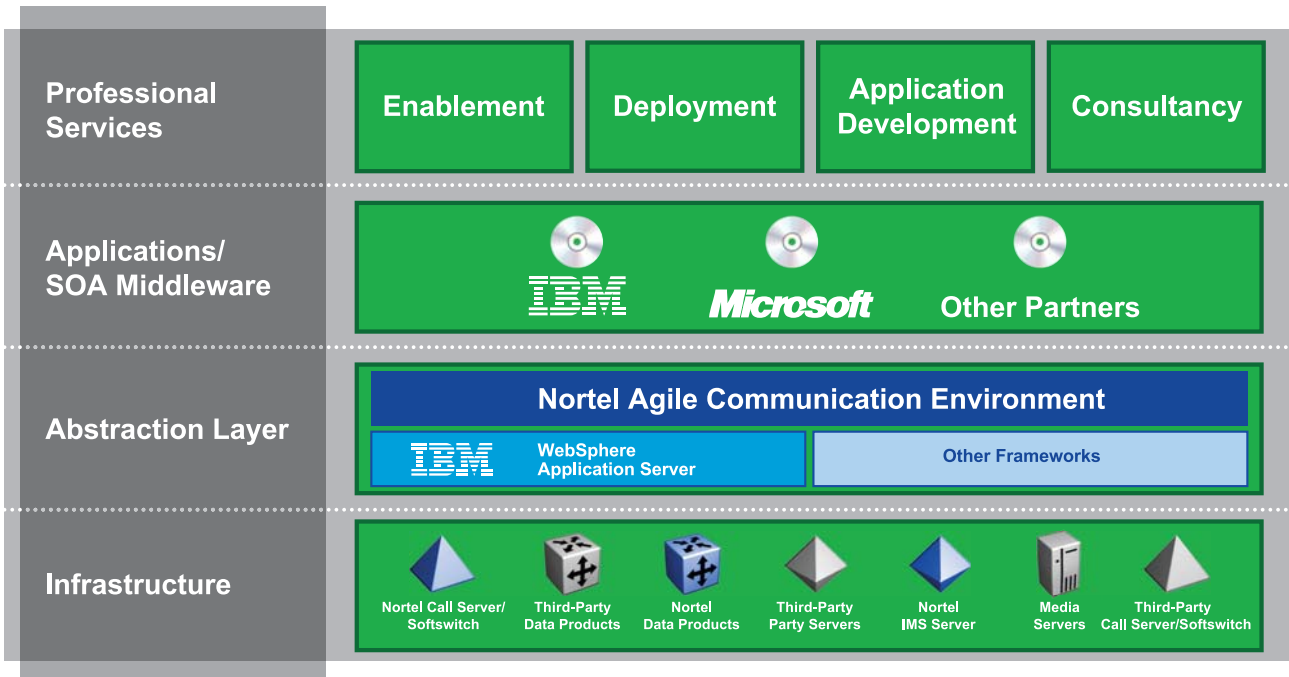
Nortel global professional services play a key role in both developing the communications-enabled applications and deploying a suite of end-to-end network application services and solutions that cater to carrier and enterprise customers. Nortel’s global professional services leverage Nortel’s Web Services expertise to consult businesses and develop/integrate applications to meet and surpass customers’ expectations — all this while driving applications’ overall speed to deployment, thus driving a higher ROI.

**Nortel Comprehensive Communications-Enabled Environment**

Combined with Nortel’s strength in providing real-time capabilities and network-oriented functions, Nortel’s expertise in wireless, wireline, carrier, enterprise, application and infrastructure arenas brings the true value of communications to businesses. Communications-enabled applications will allow greater customization, simplified interactions and automatic adaptation to users’ environments, resulting in enriched end-user communications experiences and higher business agility, accuracy, speed and ROI. Nortel is the only vendor that offers a standards-based, flexible, simple approach that allows carrier and enterprise customers to leverage their existing multi-vendor infrastructures to rapidly deploy CEA, maximizing ROI and improving overall productivity.

For more information on Nortel’s service-oriented architecture visit: [www.nortel.com/ace](http://www.nortel.com/ace).

**Nortel Portfolio Elements:**  
A Comprehensive Environment For CEA



**In the United States:**

Nortel  
35 Davis Drive  
Research Triangle Park, NC 27709 USA

**In Europe:**

Nortel  
Maidenhead Office Park, Westacott Way  
Maidenhead Berkshire SL6 3QH UK

**In Canada:**

Nortel  
195 The West Mall  
Toronto, Ontario M9C 5K1 Canada

**In Asia:**

Nortel  
United Square  
101 Thomson Road  
Singapore 307591  
Phone: (65) 6287 2877

**In Caribbean and Latin America:**

Nortel  
1500 Concorde Terrace  
Sunrise, FL 33323 USA

Nortel is a recognized leader in delivering communications capabilities that make the promise of Business Made Simple a reality for our customers. Our next-generation technologies, for both service provider and enterprise networks, support multimedia and business-critical applications. Nortel's technologies are designed to help eliminate today's barriers to efficiency, speed and performance by simplifying networks and connecting people to the information they need, when they need it. Nortel does business in more than 150 countries around the world. For more information, visit Nortel on the Web at [www.nortel.com](http://www.nortel.com). For the latest Nortel news, visit [www.nortel.com/news](http://www.nortel.com/news).

For more information, contact your Nortel representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

Nortel, the Nortel logo, Nortel Business Made Simple and the Globemark are trademarks of Nortel Networks. All other trademarks are the property of their owners.

Copyright © 2008 Nortel Networks. All rights reserved. Information in this document is subject to change without notice. Nortel assumes no responsibility for any errors that may appear in this document.

NN123284-042208



**BUSINESS MADE SIMPLE**