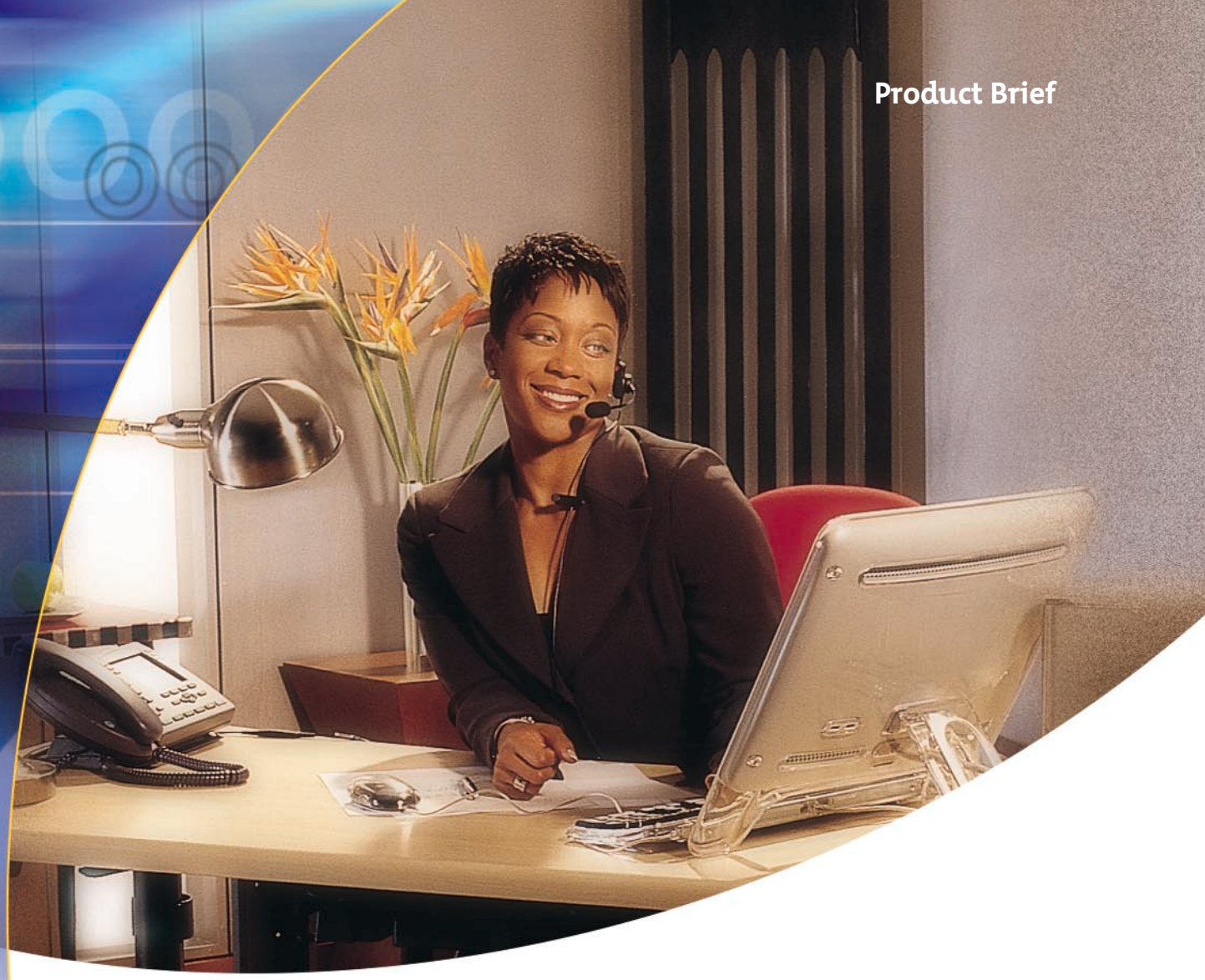
Product Brief



Succession

Communication Server for Enterprise 1000

NORTEL NETWORKS™

Succession* Communication Server for Enterprise 1000 is designed to provide a full-featured Voice over IP (VoIP) solution for the enterprise environment, and also delivers a graceful migration path for companies who have invested in Meridian 1* communication systems to create a converged digital/IP network. Succession Communication Server is a robust, IP-based platform that delivers the full range of proven telephony applications from Nortel Networks.

Succession

Communication Server for Enterprise 1000

Features and Benefits

- **Full-featured VoIP telephony for enterprise environments**
- **Distributed call and connection management**
- **Simplified, cost-effective cabling infrastructure**
- **Converged infrastructure streamlines installation and maintenance**
- **Unified management of voice and data networks**
- **Open standards support for emerging technologies**
- **Supports E911 emergency services**

Companies who are establishing a pure IP environment will benefit from the value-added capabilities that are only supported by VoIP, including a simplified and cost-effective cabling infrastructure, DHCP-enabled IP telephones that provide easier moves, adds, and changes, support for 802.11 wireless devices, as well as support of Unified Messaging, Unified Management, and Web-based Call Center applications.

The Succession Communication Server for Enterprise 1000 supports up to 640 IP terminals per server, and offers a solution capable of scaling to thousands of users as demand increases. A key advantage for large multi-site enterprises requiring transparent system networking, the Succession Communication Server for Enterprise 1000 goes beyond the basic features offered by other vendors. Nortel Networks offers a solution capable of supporting critical networking features such as a Unified Dialing Plan, Time of Day and Automatic Least Cost Routing, Network and Traveling Class of Service, and more.

In addition to creating IP-based telephony networks, the Succession Communication Server for Enterprise 1000 can be seamlessly internetworked with existing Meridian 1 and Business Communication Manager installations, creating a converged digital/IP network that preserves the viability of current hardware investments. Nortel Networks offers a full range of internetworking products that are designed to unite existing Meridian or Business Communication Manager networks with IP-based Succession environments, including the extension of IP connectivity to both branch office locations.

System Overview

The Succession Communication Server for Enterprise 1000 has several intrinsic functions and capabilities that deliver comprehensive call handling services in the enterprise environment. These include:

- Communication Server functionality
- Interfacing with the Succession Media Gateway
- LDAP Directory Management
- Unified Management capability
- Internet Telephone support
- Wireless VoIP support
- IP-based Remote Office connectivity

Communication Server

The primary task of the Succession Communication Server for Enterprise 1000 is to provide call and connection management services for the IP network. A comprehensive range of telephony features are supported, including Conference, Call Forward, Ring Again, Multiple Appearance Directory Numbers (MADNs), and Call Detail Recording. In addition, hundreds of other useful management, networking, and routing features and applications are also supported. This unparalled suite of services has been developed by Nortel Networks in close cooperation with our customers.

Succession Communication Server for Enterprise 1000 can be distributed anywhere within the IP network to provide a scalable IP telephony solution, with each server supplying service for up to 640 users. The open network infrastructure allows the use of a variety of third-party devices. However, the synergy achieved by installing Nortel Networks Succession Communication Server for Enterprise 1000 and devices such as Passport* 8600 Layer 3 switches offers a best-in-class solution for creating a converged data and voice processing and switching environment.

Based on proven telephony-grade technology from Nortel Networks, the Succession Communication Server for Enterprise 1000 brings the reliability and redundancy that is expected of digital telephony solutions to the IP environment. In addition to its rich suite of native Nortel Networks telephony applications, the solution also supports non-Nortel Networks developed applications through compliance with the industry-standard Telephony Applications Program Interface (TAPI). The TAPI interface is a client-server-based model that has been embraced by software developers who build telephony-enabled applications. Trunk-based interfaces using Q.Sig and ISDN protocols provide an additional level of flexibility.

Succession Media Gateway

Another key component of the architecture is the Succession Media Gateway. Acting as a bridge between IP and TDM-based telephony networks, such as the PSTN, the Succession Media Gateway provides a complete range of interfaces, including analog and digital trunks, as well as analog lines and tie lines for peer networking with Meridian 1 and other PBX phone systems. It is also capable of providing survivability in adverse operating conditions.

Succession Media Gateways are stand-alone devices that can either be centralized or distributed throughout the LAN, and fit into standard 19 inch racks for easy integration into existing wiring closets. Once installed, the units can be configured and managed from a central management station running Optivity Telephony Manager. This configuration enables network managers to install the Succession Communication Server for Enterprise 1000 and Succession Media Gateway into their existing data infrastructure, eliminating the need to add costly voice ports to routers.

Key features include:

- Global suite of telephony trunks: analog and digital PSTN, ISDN (PRI/BRI), T1/E1
- Hard-wired and wireless telephony interfaces
- Analog station gateways provides support for analog phone and fax machines
- Conference/tone services, and gateway functionality
- Peer networking with Meridian 1 and other standards-compliant PBX systems (Q.SIG, MCDN)
- Terminal Proxy Server

System resilience and reliability is enhanced by a survivability mechanism, which allows the Succession Media Gateway to step in and perform call processing if the connection to the Succession Communication Server is interrupted. The database used by the Succession Media Gateway during survival mode is an identical copy of the database maintained by the Succession Communication Server. This database is automatically downloaded at system startup, or can be downloaded to the Media Gateway from the Communication Server by entering an EDD command.

LDAP Directory Management

Directories have always been an intrinsic component of voice networks, and they play an equally critical role in data networks as well. Voice and data networks originally evolved independently, and until now each have had separate approaches to directory management. This schism has created major headaches for most corporations, as they attempt to enter and re-enter information into disparate, independent directories that need to be synchronized.

Succession Communication Server for Enterprise 1000 addresses this high-cost problem by integrating disparate enterprise directories through use of the Lightweight Directory Access Protocol (LDAP). Based on an X.500 directory protocol, LDAP has become an industry standard and provides a viable solution for handling directory inquiries on the Internet.

Unified System Management

Succession Communication Server for Enterprise 1000 is managed by the Optivity* Telephony Manager application, a key component of the Nortel Networks Enterprise network management suite. Optivity Telephony Manager interfaces seamlessly with Optivity* Network Management System.

The Web-based interface offers a single point of entry and centralized management capabilities, and also supports multi-user access.

Management tools reduce the cost and simplify the process of managing complex network environments, including customizable report generation, database import/export capability, event scheduling, and disaster recovery. The Telecom Billing System application provides comprehensive tracking and reporting capabilities, with dozens of pre-defined reports that feature extensive filtering capabilities.

Internet Telephone support

Nortel Networks i2004 Internet Telephone

The Nortel Networks i2004 Internet Telephone is a full-featured desktop phone that offers support for key telephony applications, including CallPilot* Unified Messaging and Symposium* Call Center services. The unit connects directly to the LAN via a modular RJ-45 connector, and supports both 10 Mbps and 100 Mbps Ethernet connections.

The i2004 Internet Telephone supports both Dynamic Host Control Protocol (DHCP) and static IP addressing, providing a flexible solution for configuration and IP address management. Once configured, the unit can easily be moved to any network node capable of supporting IP telephony without rewiring or intervention by the network manager.

Additional efficiencies are delivered through the use of accessories such as the Nortel Networks Internet Telephone Switch Module, which allows a desktop PC and the i2004 Internet Telephone to share a single Ethernet connection. This innovative device snaps into the base of the desktop phone, and prioritizes telephony traffic over data traffic from the PC. Sharing a single connection simplifies the network wiring system and ensures optimum telephony performance.

Enhanced levels of reliability can be achieved by installing an Power Inline Patch Panel into the wiring closet, which provides power to the i2004 phone over the network's cabling system. When equipped with a redundant power supply, this device adds another layer of mission-critical reliability to the system. This also eliminates the need to connect each telephone to a local AC power outlet.

Nortel Networks i2050 Software Phone

The Nortel Networks i2050 Software Phone is a Windows-based software application that transforms desktop or laptop computers into powerful tools for unified voice, data, and video communications. This solution provides the same services and capabilities as the i2004 Internet Telephone, plus powerful directory capabilities. Directories can either be stored locally on the PC, or external LDAP, Outlook, or ACT directories can be accessed remotely. Obtaining full telephony capabilities is as simple as plugging an optional headset into the PC's USB port.

e-mobility* Voice over Wireless IP Solutions

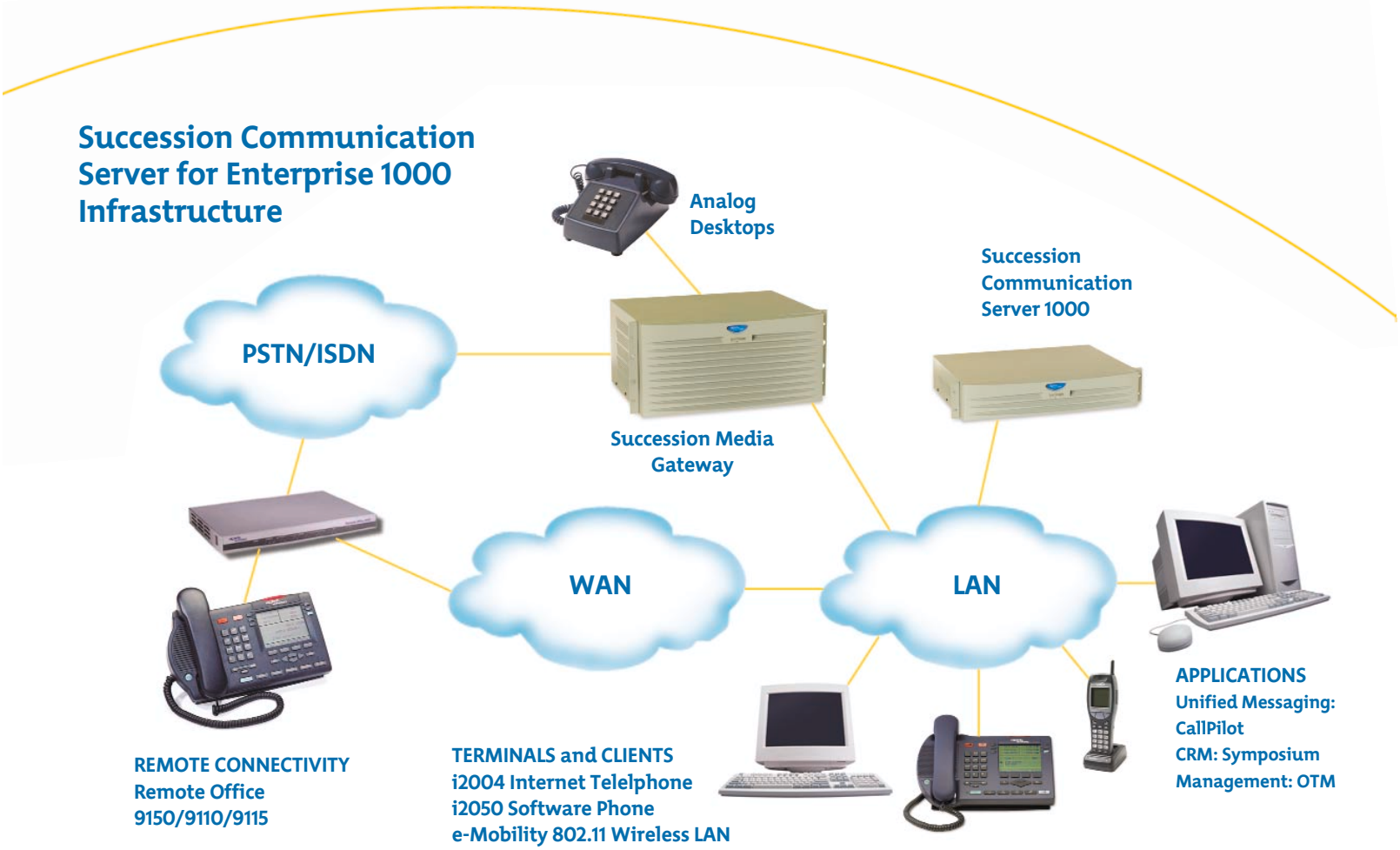
The Nortel Networks e-mobility 802.11b product portfolio delivers wireless phone connectivity over IP networks. Ideal for mobile employees in the retail, medical, and many other business sectors, the wireless IP solutions offer users more freedom and flexibility than ever before. By connecting the Nortel Networks Access Point device to the LAN, connectivity is extended to mobile users using wireless phones, scanners, and other devices. Wireless connectivity can even be extended to laptops, offering users fully mobile access to the Web.

Survivable WAN Gateways for Remote Offices

Companies that need to extend connectivity to small branch offices or home offices over IP-based wide-area networks (WANs) can easily do so by adding either the Remote Office 9150, the Remote Office 9110, or the Remote Office 9115 device to the network. This approach delivers the simplicity of four-digit dialing to extensions at the remote site, as well as full support of key business applications such as CallPilot Unified Messaging and Symposium Call Center Server.

To ensure maximum reliability, Nortel Networks has developed and patented a groundbreaking technology called Quality of Service (QoS) Transitioning. Remote Office uses QoS Transitioning to provide two viable communication paths between the remote and main sites: one over the IP WAN, and the other over the circuit-switched network. Primary connectivity can be established over either path for increased flexibility and optimized performance. When the IP WAN route is used, it is closely monitored to ensure voice quality. If voice quality begins to degrade, calls can be automatically shifted over to a circuit-switched connection. This is a seamless transition that is not detectable by the end-user, and provides business-critical reliability to IP telephony installations. Remote Office is fully survivable, supporting BRI trunk connections for inbound and outbound calling in the event the remote unit loses contact with the main site. It also provides a "local presence" for branch offices, allowing local calls to be placed directly through the local telephone company, reducing toll charges and providing direct dialing for local E911 services.

To connect small branch offices of up to 32 users, network managers should select the Nortel Networks Remote Office 9150. For home offices with either DSL or cable modem connectivity, either the Remote Office 9110 or Remote Office 9115 devices can be installed. All three solutions provide a cost-effective method of extending connectivity to remote Call Center personnel, telecommuters, and other remote users.



By bringing voice capabilities to the new, high-performance Internet, Nortel Networks is helping companies like yours create a better experience for customers and employees alike. Internet telephony, powerful new IP-based applications, and advanced wireless technologies can improve customer service and increase internal efficiency, enabling your company to achieve a strategic edge over its competitors. Whether you're creating a new IP-based voice/data network, or integrating powerful IP solutions into your existing digital telephony environment, Nortel Networks has the experience and complete range of solutions needed to help ensure your success.

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For more information, please contact your local Nortel Networks account representative or call 1-800-4 NORTEL (1-800-466-7835) or 1-506-674-5470

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