



Application Brief

# Nortel Networks Business Communications Manager Voice Portal Solutions— Self-Service IVR

## **Benefits:**

- Reduces costs and improves service by extending customer access to 7x24 and offloading routine inquiries and service requests through IVR functionality built into the BCM
- Delivers mission-critical reliability, high-performance voice services, and scales to the needs of a growing enterprise
- Provides award-winning development and management tools, including network administration for maximum control and an experienced Professional Services organization
- Leverages and extends your investment by integrating IVR capability with existing Business Communications Manager features and platform
- A single-source provider minimizes integration issues—Nortel Networks provides full application testing prior to delivery and insulates component reliability from ripple impacts
- Ensures future development capabilities through an open modular design that delivers a smooth transition path to new technologies
- Protects your investment with an exhaustive list of standard and optional features to support almost any voice response needs
- Has the lowest total cost of ownership and an incredibly fast ROI

## **Delivering the value of self-service for your exact market needs**

Nortel Networks\* has been described by Gartner Dataquest and InfoTech as the leader in contact center solutions for enterprises. With such experience and insight into the market, Nortel Networks is seeing firms relying more and more on their communications delivery methods as critical focal points for managing and building customer relationships.

Firms large and small are focusing on the quality of interactions with customers and view relationship building as more than mere call completion. This trend, along with an evolutionary inclusion of communications capabilities into the

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overall corporate strategy, demands the use of advanced features to intelligently route customers to knowledge workers, handle multi-channel interactions, and link separate data marts to enhance and support the interaction. The Business Communications Manager with IVR self-service functionality adds the next logical level of customer service to the business enterprise with multiple sites.

### Focus on multi-site needs

Nortel Networks empowers enterprises with multi-site needs, from the small and medium-sized business to the highly replicated enterprise branch, through a cost-effective and fully converged voice and data solution. With an industry-leading and proven Interactive Voice Response (IVR) run time engine built in, the Business Communications Manager delivers the power of an enterprise-wide contact center to the branch or local office in a flexible, feature-rich, and scalable solution.

The addition of IVR functionality embedded in the Business Communications Manager provides a cost-effective, all-in-one solution for end users to offload routine inquiries, handle transaction requests, and service customer needs 24 hours a day, 365

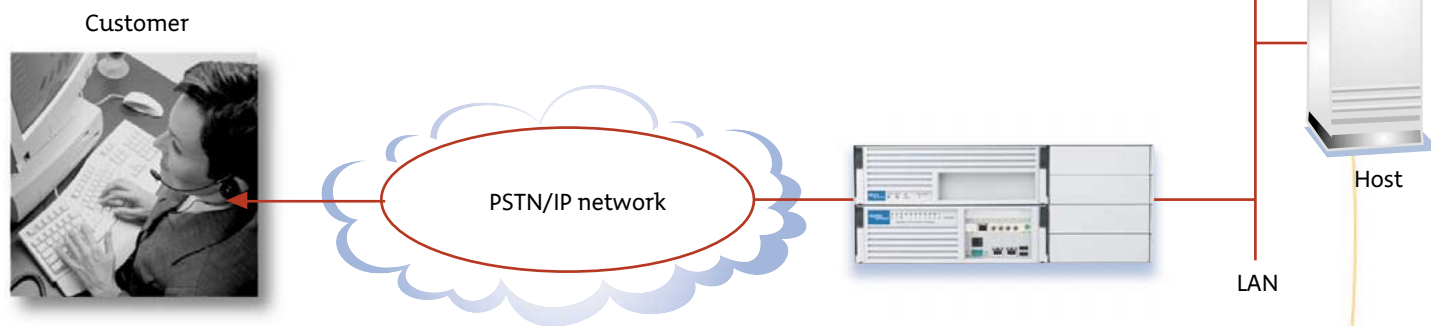


**Figure 1. Business Communications Manager**

days a year. Callers can access a broad range of information and initiate transactions or other interactions simply by responding to a series of prompts.

IVR is one of the newest applications on the Business Communications Manager, but is not new to Nortel Networks. Many analysts consistently rank Nortel Networks Voice Portal Solutions IVR portfolio as a leader in completeness of vision and ability to execute. Nortel Networks is leveraging this proven and industry-recognized experience with the introduction of IVR pre-installed on the Business Communications Manager.

A full suite of development and management tools are available to empower local or remote application control. Nortel Networks Professional Services or third-party providers can also be utilized for application creation.



**Figure 2. BCM with integrated MPS100 IVR functionality**

By leveraging the Business Communications Manager platform, IVR functionality can be fully integrated with existing Business Communications Manager features, eliminating the need for extra dedicated hardware resources. This completeness of solution delivers superior price performance, scalability, and the lowest cost of ownership.

## Applications to match your market need

The specific needs of organizations serving their customers can vary dramatically from one market to another. The multi-store **pharmacy**, an **auto parts** dealer, or even an **educational** institution, each—while seemingly diverse—has a similar single thread: the opportunity for a Business Communications Manager Self-Service application to extend their service delivery to 7x24 and offload routine interactions. Let us show you how it works for them and how it can work for you.

### Retail pharmacy

The retail drug store market is one that has a number of very large national players as well as lots of smaller regional or local market operators who have extended the size of their product lines and number of outlets to garner an ever-increasing customer base.

While businesses and their resultant revenues have grown, the challenge to deliver effective, high-quality service that was the purview of small local shops seems to evade many of their outlets. This challenge is intensified by tight margins and the difficulty to secure sufficient staff for all the roles needed. The Business Communications Manager, enhanced with a Self-Service application, can make a tremendous difference in the actual level and perceived indication of service delivered.

Why have your pharmacist (your highest-paid employee) constantly on the phone taking Rx renewal requests, or checking into insurance pharmacy coverage, when these functions might be automated?

By adding IVR functionality to the Business Communications Manager platform, a whole array of routine and revenue-based interactions can be automated through the telephone, freeing up your staff to perform the value-added functions. The IVR easily allows the building of automated interactions that can automate prescription renewals; provide the status of filled prescriptions; verify pharmacy insurance coverage; initiate a delivery request; launch refill reminder paging for a date in the future; and provide medication indications, side effects, and even generic substitutes and pricing. Consider using the automated system to provide information about current advertised specials, store location and hours, and even frequent buyer programs and photo finishing notification. Let your business dictate how you use Business Communications Manager's Self-Service feature; it might be the right prescription to extend your delivery options.

### Automotive after-market

#### Auto parts

The automotive after-market industry—which consists of replacement parts, maintenance items, and accessories—compete for both DIY (“Do-It-Yourself”) and DIFM (“Do-It-For-Me”) customers. Many of these local auto parts stores—linked to a much larger organization—typically carry an inventory of thousands of items and sell both over the counter to the DIY buyer as well as support many repair or DIFM providers. Delivering on the competitive differentiation of superb



customer service and keeping track of such a diverse inventory with a limited staff can be daunting. However, Business Communications Manager installed with a Self-Service application does just that with ease.

Why not consider automating many of the routine inquiries and requests that come in by phone, enabling your store employees to focus on serving those at the counter. One possible scenario might allow callers to locate a specific part, check its price and inventory availability, and order it for pick-up or later delivery. Use the IVR to check the status of a pending order or back order, secure shipping information, or arrange pick-up and delivery to remote customer sites. This is all in addition to location information, hours of operation, employment opportunities, and details concerning in-store specials and services like testing, recycling, installation, and rebate programs. Let Business Communications Manager add an edge to your operation with advanced Self-Service from Nortel Networks.

## **Education**

### **Local school districts**

Nothing is more important than the education of our youth. Local school districts are extensions of our local infrastructure, responsive to the voters, and designed to deliver a specific service to a diverse constituency. Since they are generally funded by tax dollars, there is seldom room for excess spending, but a lot of attention is given to how they perform both in and outside of the classroom. These typical multi-site operations have

something in common with the entities previously described—the need to communicate with many and a desire to cost-effectively deliver efficient, reliable service.

Business Communications Manager can be just the solution in this setting. When you analyze the number and variety of calls coming into a particular school or district office, it becomes clear that a large percentage of them are to either secure or deliver some information. Let Business Communications Manager off-load the routine to an automated application, and let your professionals focus on the activities that raise expectations and horizons of their charges.

A customized application on the Business Communications Manager IVR solution might automate absence reporting of students and staff, and provide information about school calendar events, Board meetings and locations, and athletic events. Use the system to schedule parent-teacher interviews and meetings with administrators or determine office hours of psychologists and counselors. Add a feature to detail bus schedules or changes due to weather. Allow callers to purchase a ticket to school events. Let Business Communications Manager teach your school district a thing or two about effective communications. Nortel Networks Self-Service solutions are at the head of their class and can save a lot of valuable dollars for teaching the important ones—our kids.

## **Healthcare**

The delivery of health-related services is always changing, with multi-site and group practice providers constantly looking for cost-effective and responsive approaches to serving their market, their professional staff, and the community where they practice.

You might start with a locations and hours option in your IVR menu to let your patients know where and when to find you. Then comes finding and routing to the right specialist depending on the caller's need. Let an automated feature facilitate and speed the process. Often special announcements are appropriate, such as the offer of new services, additions to staff, or complementary screenings and public workshops. Assist the caller to learn what insurance programs are supported, aid the delivery of routine lab results, and appointment setting or changing. Interaction with a billing system can be added that provides current status of payments received, insurance reimbursements, and balance due. For those affiliated with larger institutions or teaching hospitals, there might be clinical studies under way seeking volunteers, which the system can announce, screen, and link prospective participants. Those special events offered can also benefit from automated service with sign-up options for stop-smoking clinics, weight control classes, and other events.

When it comes to offering a healthy approach to business communications, the Nortel Networks Business Communications Manager Self-Service solution becomes the clear prescription for quality care.

## Business Communications Manager—the converged branch office solution

The Business Communications Manager delivers small and medium-sized businesses and branch offices a converged voice/data solution, providing customers with a choice of either an IP-enabled or pure-IP strategy. With IVR self-service, unified messaging, multimedia call center, and wireless e-mobility capabilities, the Business Communications Manager enables you to easily and cost-effectively implement applications as your business needs evolve and provide users mobile flexibility.

### IVR technical description

IVR consists of two components: the IVR run time engine (RTE) and the application.

#### The run time engine

The run time engine is the application enabler that provides the basic functionality required by all IVR applications. It must be able to:

- Understand and execute the IVR applications
- Interface with the telephony services. Provide instructions and receiving and processing input (e.g., DTMF)
- Provide database access
- Access and process information for other media (e.g., fax)

The Business Communications Manager IVR RTE will:

- Answer calls from the Voice Mail Auto Attendant
- Speak pre-recorded prompts
- Collect input via DTMF
- Retrieve customer information from commercial databases
- Speak results back to the caller using pre-recorded prompts

Business Communications Manager (release 3.0 and above) has the IVR RTE pre-installed on its hard drive. It is a key-coded option that is sold in channel or port increments with a maximum capacity of 24 IVR channels/ports.

#### The application

The application is the second building block of an IVR solution. It turns the run time engine functionality into the features and functionality that the customer uses. The application is developed for the specific customer needs and in many cases is integrated with databases to enable real-time queries and updates. Several applications were described above.

The IVR application will be a separate development activity for the specific customer. To facilitate the application development, we are leveraging Nortel Networks Portal Solutions Professional Services Organization. This group has significant experience having developed applications in virtually every vertical segment. To supplement this, there is a suite of application development tools and training available. The application development and system management tools provide a totally graphical environment for the entire life cycle of the system, including design, implementation, test, operation, and modification.

### Application development tools

**PeriProducer (run time)**—Graphical application development environment

**PeriStudio\***—GUI-based prompt/speech recording and development facility

### System management tools

**PeriView\***—GUI-based tools for administration, monitoring, and control of application, ports, and nodes. This feature includes a host of separate but integrated applications for viewing and controlling individual or multiple systems. They include:

- *Application Manager*—distribute and activate applications
- *Activity Monitor*—for applications and circuits
- *Alarm Viewer*—system and application alarms
- *PeriReporter*—statistical data reporting tools

### Telephony features

As the IVR is an integrated application on the Business Communications Manager, it has access to and benefits from all the telephony, call center, messaging, and data features of the Business Communications Manager. The Business Communications Manager provides network connectivity to:

- Digital (T1) interfaces
- Analog interfaces
- Digital signal generation for call progress and other precision tones
- Multiple signaling protocols for digital trunks
- DNIS and in-band ANI (or CLID) support
- ISDN PRI support for North America—NI2, ATT (TR41459)





### Media processing features

- Virtually unlimited prompt and/or message length
- Optimized/minimum concatenation for speech output
- Prompts/messages may be recorded in a studio, or locally, or over the phone
- Caller message recording with random message retrieval
- Call simulator for volume testing and capacity planning

### Database connectivity features

The following databases are generally supported by IVR on Business Communications Manager. However, due to the dynamic nature of software, database compatibility should be confirmed through Nortel Networks Professional Services Organization.

- Oracle
- Sybase
- MS SQL Server
- MS Access
- DB2

Both ODBC access and native access are supported for the above databases. In addition, the IVR software will support host access via TN3270 or TNVT100 terminal emulation.

Nortel Networks Professional Services Organization can do and has done other integrations based on Tuxedo, Corba, and even PDX.

Interactive Voice Response dramatically increases the value of the Business Communications Manager as a branch office solution in small or large corporate networks. This new capability enables cost reductions and increased revenues to lower the overall cost of ownership. One Platform. One Network. The Customer's Single Solution for Integrated Voice and Data Communications.

#### In the United States:

Nortel Networks  
35 Davis Drive  
Research Triangle Park, NC 27709  
USA

#### In Canada:

Nortel Networks  
8200 Dixie Road,  
Suite 100  
Brampton, Ontario L6T 5P6  
Canada

#### In Caribbean and Latin America:

Nortel Networks  
1500 Concorde Terrace  
Sunrise, FL 33323  
USA

#### In Europe:

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

#### In Asia:

Nortel Networks  
6/F Cityplaza 4,  
Taikooshing,  
12 Taikoo Wan Road,  
Hong Kong  
Tel: (852)21002888



*Nortel Networks is an industry leader and innovator focused on transforming how the world communicates and exchanges information. The company is supplying its service provider and enterprise customers with communications technology and infrastructure to enable value-added IP data, voice and multimedia services spanning Wireless Networks, Wireline Networks, Enterprise Networks, and Optical Networks. As a global company, Nortel Networks does business in more than 150 countries. More information about Nortel Networks can be found on the Web at:*

**[www.nortelnetworks.com](http://www.nortelnetworks.com)**

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

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