

Part No. P0606198 02
23 March 2004

Interactive Voice Response Installation and Configuration Guide

**NORTEL
NETWORKS**

Interactive Voice Response Installation and Configuration Guide

Copyright © 2004 Nortel Networks

All rights reserved. 2004.

The information in this document is subject to change without notice. The statements, configurations, technical data, and recommendations in this document are believed to be accurate and reliable, but are presented without express or implied warranty. Users must take full responsibility for their applications of any products specified in this document. The information in this document is proprietary to Nortel Networks NA Inc.

The software described in this document is furnished under a license agreement and may be used only in accordance with the terms of that license. The software license agreement is included in this document.

Trademarks

NORTEL NETWORKS is a trademark of Nortel Networks.

Microsoft, MS, MS-DOS, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

All other trademarks and registered trademarks are the property of their respective owners.

Contents

Chapter 1	
About Interactive Voice Response	5
What you need to know	5
Hardware and software requirements	5
Interactive Voice Response capacities	6
How to get help	7
Chapter 2	
Installing Interactive Voice Response	9
Overview of installing Interactive Voice Response	9
Enabling the Interactive Voice Response software authorization code	11
Making Interactive Voice Response an automatic service	12
Administering several Interactive Voice Response systems	13
About Installing PeriView	14
Before you install PeriView	14
To install PeriView	15
Adjusting the number of voice ports	24
Uploading Interactive Voice Response prompts	26
Installing the client database software	27
Databases supported on Business Communications Manager	28
Configuring host access	29
Enabling the Host Communication Access Keycode	29
Using PeriView to load and configure scripts	36
Dialing the Interactive Voice Response extension	41
Assigning lines to Interactive Voice Response	42
Viewing or changing the system fax name	44
Chapter 3	
Administering Interactive Voice Response	45
Stopping, starting or restarting Interactive Voice Response service	46
Changing how Interactive Voice Response service operates after a reboot	47
Backing up and restoring Interactive Voice Response	48
Creating Interactive Voice Response logs	49
Uninstalling PeriView	52
Considerations for uninstalling PeriView	52
Uninstalling the patch bundle	52
Uninstalling packages using PERLinstaller	52
Removing additional files and directories	53
Removing the environment variables	54
Removing Interactive Voice Response, XVision and JRE	55
Creating reports	55
Chapter 4	
Troubleshooting	57
Index	61

Chapter 1

About Interactive Voice Response

This guide leads a system administrator through installing and configuring Interactive Voice Response on a Business Communications Manager system.

Interactive Voice Response is an automated telephony application that prompts callers with a combination of recorded menus and prompts, and real-time data from databases. Users enter digits from their touch tone key pad that directs the Interactive Voice Response application to access databases and play information back to the caller.

Interactive Voice Response is a call-handling system that frees up employees to perform their jobs, and agents to make sales, rather than answer frequently asked questions. Interactive Voice Response, can distribute calls, make announcements, and give callers access to relevant information from dynamic databases 24 hours a day, 7 days a week.

This chapter contains

- [What you need to know](#)
- [Hardware and software requirements](#)
- [Interactive Voice Response capacities](#)
- [How to get help](#)

What you need to know

To install Interactive Voice Response you must know:

- how to log on to Unified Manager and use the Unified Manager interface.
Refer to the *Business Communications Manager Programming Operations Guide* for more information.
- how to log on to CallPilot Manager and use the CallPilot Manager interface.
Refer to the *CallPilot Manager Set Up and Operation Guide* for more information.
- how to use PeriView. Refer to your PeriView system documentation for more information.
- how to create shared network folders. Refer to your Windows documentation for more information.

Hardware and software requirements

- To install PeriView you must have a computer that runs Windows NT with Service Pack 6.
- You must have an Interactive Voice Response keycode.
- You must have one Client Administration Software License for the Business Communications Manager that you use to perform administration using PeriView. You need one license per system, not per Business Communications Manager.

Interactive Voice Response capacities

Maximum simultaneous calls	24 (24 voice ports)
Maximum voice ports	32
Maximum voice ports that can be allocated to voicemail	16
Maximum Interactive Voice Response fax calls	2
Maximum fax ports	2
Recording time available on Business Communications Manager for all applications (Interactive Voice Response, CallPilot and Call Center)	20 Gb disk: 325 hours

There are other restrictions that can alter the real number of Voice Ports available on a Business Communications Manager. For more information, refer to the *Business Communications Manager Programming Operations Guide*, “Configuring the MSC Resources”. Voice Ports cannot be shared between voicemail, Call Center and Interactive Voice Response.

How to get help

USA and Canada

Authorized Distributors - Technical Support

Telephone:

1-800-4NORTEL (1-800-466-7835)

If you already have a PIN Code, you can enter Express Routing Code (ERC) 196#.

If you do not yet have a PIN Code, or for general questions and first line support, you can enter ERC 338#.

Website:

<http://www.nortelnetworks.com/support>

email:

naitas@nortelnetworks.com

Presales Support (CSAN)

Telephone:

1-800-4NORTEL (1-800-466-7835)

Use Express Routing Code (ERC) 1063#

EMEA (Europe, Middle East, Africa)

Technical Support

Telephone:

00800 800 89009

Fax:

44-191-555-7980

email:

emeahelp@nortelnetworks.com

CALA (Caribbean & Latin America)

Technical Support

Telephone:

1-954-858-7777

email:

csrmgmt@nortelnetworks.com

APAC (Asia Pacific)

Technical Support

Telephone:

+61 388664627

Fax:

+61 388664644

email:

asia_support@nortelnetworks.com

Chapter 2

Installing Interactive Voice Response

This chapter contains:

- [Overview of installing Interactive Voice Response](#)
- [Enabling the Interactive Voice Response software authorization code](#)
- [Making Interactive Voice Response an automatic service](#)
- [Administering several Interactive Voice Response systems](#)
- [About Installing PeriView](#)
 - [Before you install PeriView](#)
 - [To install PeriView](#)
- [Adjusting the number of voice ports](#)
- [Uploading Interactive Voice Response prompts](#)
- [Installing the client database software](#)
 - [Databases supported on Business Communications Manager](#)
- [Configuring host access](#)
 - [Enabling the Host Communication Access Keycode](#)
- [Using PeriView to load and configure scripts](#)
- [Dialing the Interactive Voice Response extension](#)
- [Assigning lines to Interactive Voice Response](#)

Overview of installing Interactive Voice Response

To install Interactive Voice Response you:

- 1** Enable the Interactive Voice Response software authorization code.
Refer to [“Enabling the Interactive Voice Response software authorization code” on page 11.](#)
- 2** Make sure you have a Client Administration Software License for the BCM that you use to perform administration using PeriView.
- 3** Make Interactive Voice Response an automatic service.
Refer to [“Making Interactive Voice Response an automatic service” on page 12.](#)
- 4** If you are going to use Interactive Voice Response in a multi-node environment, refer to [“Administering several Interactive Voice Response systems” on page 13.](#)
- 5** Install PeriView on a Windows NT client PC.
Refer to [“About Installing PeriView” on page 14.](#)
- 6** Assign Voice Ports to Interactive Voice Response.
Refer to [“Adjusting the number of voice ports” on page 24.](#)

- 7 Upload the Interactive Voice Response prompts to Business Communications Manager. Refer to [“Uploading Interactive Voice Response prompts” on page 26](#).
- 8 Install the Client Database software using the appropriate method if your Interactive Voice Response scripts use database access. Refer to [“Installing the client database software” on page 27](#).
- 9 Configure host access if your Interactive Voice Response scripts use host access. Refer to [“Configuring host access” on page 29](#).
- 10 Use Periview’s Application Manager to load and configure the scripts. Refer to [“Using Periview to load and configure scripts” on page 36](#) and see the *Periview User’s Guide* for more details.
- 11 Verify Interactive Voice Response is working by dialing the Interactive Voice Response extension. Refer to [“Dialing the Interactive Voice Response extension” on page 41](#).
- 12 Using CallPilot Manager, assign the lines you want the Interactive Voice Response scripts to answer. Refer to [“Assigning lines to Interactive Voice Response” on page 42](#).
- 13 Back up Interactive Voice Response. Refer to [“Backing up and restoring Interactive Voice Response” on page 48](#).

Enabling the Interactive Voice Response software authorization code

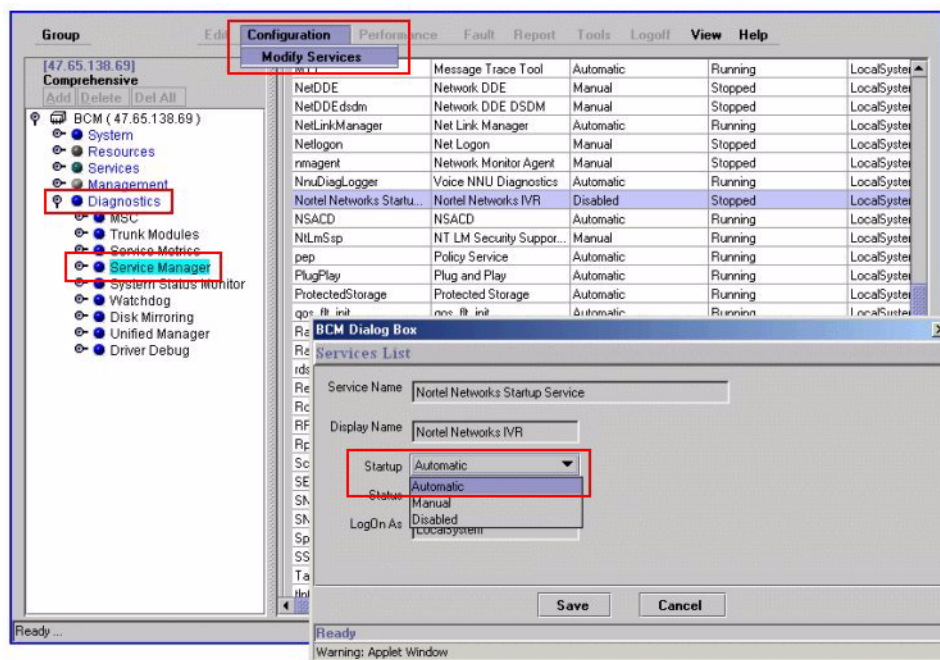
You enable Interactive Voice Response by enabling the Interactive Voice Response software authorization code on the Business Communications Manager Unified Manager.

To enable a software authorization code

- 1 Point your web browser to the URL `http://<xxxx>:6800` where <xxxx> is the domain name or IP address of Business Communications Manager. The Business Communications Manager Unified Manager screen appears.
- 2 Click the **Configure** button. The Login screen appears.
- 3 In the **User ID** and Password boxes enter your system administrator user ID and password, and click the **Login** button. The Unified Manager screen appears.
- 4 Click the **System** key.
- 5 Click the **Licensing** heading. The Licensing Setting screen appears.
- 6 On the **Configuration** menu click **Add a Keycode**. The Applied Keycodes screen appears.
- 7 In the **Keycode** box type the number of the Interactive Voice Response software authorization code.
- 8 Click the **Save** button. A message appears that says you must reboot. **Do not** reboot your system at this time.
- 9 Go to [“Making Interactive Voice Response an automatic service” on page 12.](#)

Making Interactive Voice Response an automatic service

- 1 On Unified Manager, click the **Diagnostics** key.
- 2 Click the **Service Manager** heading.
The Services List screen appears.
- 3 In the **Display Name** column select **Nortel Networks IVR**.



- 4 On the **Configuration** menu click **Modify Service**.
The Services List dialog box appears.
- 5 From the **Startup** list box select **Automatic**.
- 6 Click the **Save** button.
- 7 Log off and reboot the system. Interactive Voice Response will start automatically after you reboot.

Administering several Interactive Voice Response systems

If you want to use PeriView to administer several Interactive Voice Response systems on different Business Communications Managers, you must assign a different node number to each Interactive Voice Response system.

To change the node number

- 1** Log on to Unified Manager.
- 2** Click the **Services** key.
- 3** Click the **IVR** heading.
The Summary page displays the version, status of the service and the server number. The node number is 1 by default. The node number can be between 1 and 5000.
- 4** Press the **Tab** key to exit from this box.
A message appears that says that the Interactive Voice Response service will be temporarily stopped.
- 5** Click the **OK** button.
- 6** You must next install PeriView. Go to [“About Installing PeriView” on page 14](#).

About Installing PeriView

PeriView is the Interactive Voice Response administrative client. You use PeriView to administer Interactive Voice Response scripts on Business Communications Manager. Before you can use PeriView, you must install it on a client computer.

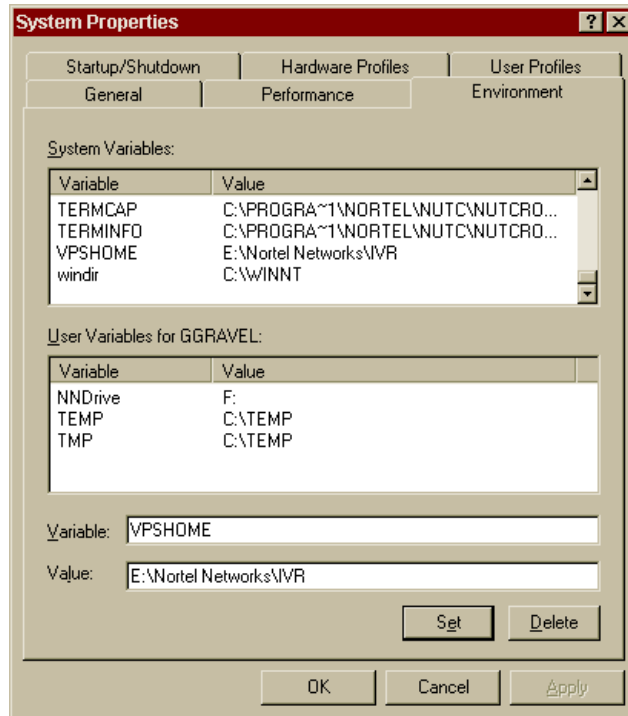
Before you install PeriView

- Make sure you install PeriView on a Windows NT PC. PeriView can be installed on Windows NT only.
- Make sure you have administrative privileges so that you can install services and update environment settings.
- Remove any versions of Perl currently installed on the workstation. PeriView uses a version of Perl specifically designed to work with PeriView. You must remove any other versions of Perl due to potential incompatibility with PeriView.
- Quit all active applications and Nortel Networks or Periphonics services.
- If Windows NT Service Pack 6A is already installed on your system and you are running the Windows Desktop Update option (Active Desktop), deactivate this option. See the Windows NT online help for instructions. Active Desktop affects color renditions in PeriView.

To install PeriView

1. Set up the environment variables

- 1 Click the Windows **Start** button, point to **Settings**, point to **Control Panel** and click **System**. The System Properties page appears.
- 2 Click the **Environment** tab.



- 3 In the **System Variables** list, select any variable. The information for the variable is displayed in the Variable and Value boxes.
- 4 Delete the information the **Variable** box, and type **VPSHOME**.
- 5 Delete the information in the **Value** box, and type the path where you want the PeriView software to be installed.
- 6 Click the **Set** button. The Apply button becomes available.
- 7 Click the **Apply** button.
- 8 In the **System Variables** list, select any variable. The information for the variable is displayed in the Variable and Value boxes.
- 9 Delete the information the **Variable** box, and type **ASEHOME**.
- 10 Delete the information in the **Value** box, and type **%VPSHOME%\PERIase**.
- 11 Click the **Set** button. The Apply button becomes available.

- 12** Click the **Apply** button.
- 13** In the **System Variables** list, select any variable.
The information for the variable is displayed in the Variable and Value boxes.
- 14** Delete the information the **Variable** box, and type **PERL5LIB**.
- 15** Delete the information in the **Value** box and type **%VPSHOME%\bin**.
- 16** Click the **Set** button.
The Apply button becomes available.
- 17** Click the **Apply** button.
- 18** In the **System Variables** list, select any variable.
The information for the variable is displayed in the Variable and Value boxes.
- 19** Delete the information the **Variable** box, and type **MAX_REAL_VPS_NUM**.
- 20** Delete the information in the **Value** box and type **5000**.
- 21** Click the **Set** button.
The Apply button becomes available.
- 22** Click the **Apply** button.
- 23** In the **System Variables** list select the **PATH** system variable.
The information for the variable is displayed in the Variable and Value boxes.
- 24** Put your cursor in the **Variable** box and go to the end of the text string.
- 25** Make sure the text string ends with a semicolon. If you do not see a semicolon, type one.
- 26** After the semicolon, type **%VPSHOME%\bin**.
- 27** Click the **Set** button.
- 28** Click the **Apply** button.
- 29** Reboot the computer.

2. Download the PeriView client software

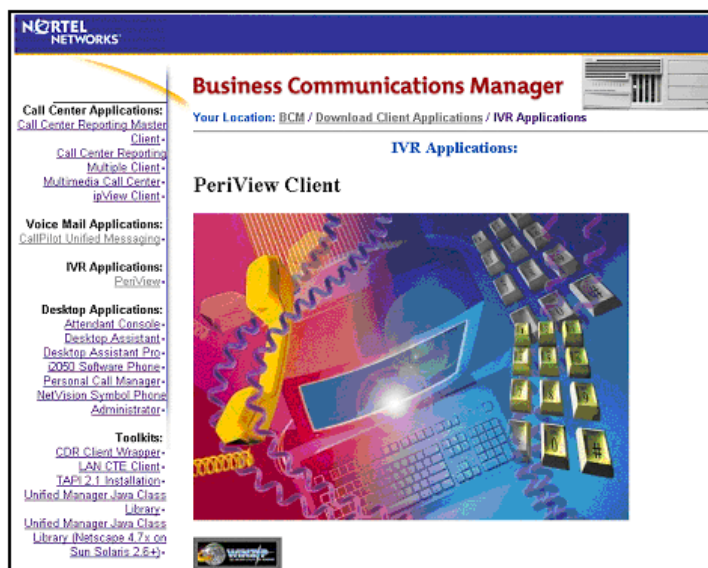
- 1 On the client computer, point the web browser to the URL
<http://<xxxx>:6800>
 where <xxxx> is the domain name or IP address of Business Communications Manager.
 The Business Communications Manager Unified Manager screen appears.



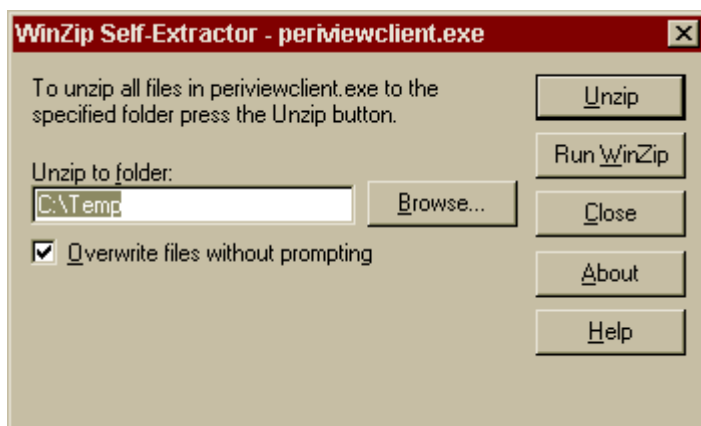
- 2 Click the **Install Clients** button.
 The Download Client Applications page appears.



- 3 In the left frame, under the **IVR Applications** heading, click the **PeriView** link. The PeriView Client page appears.



- 4 Click the **Download PeriView Client** button.
- 5 Navigate to where you want to download the file to. We recommend you download the file to **c:\temp**.
- 6 In **c:\temp**, double-click the self-extracting **PeriViewClient.exe** file. The WinZip Self-Extractor appears.



3. Install XVision

You must next install XVision. XVision acts as an X-windows environment emulator. After installation is complete, XVision must optimize itself with the display. The optimization process begins after XVision installation finishes.

For maximum use of PeriView, you must add XVision fonts to the system that may be missing, after installing all packages and before using PeriView.

To install XVision

- 1** In the **c:\temp** folder, open the **preinstall** folder, open the **XVision7** folder, and double-click **setup.exe**.
The Setup Wizard window appears.
- 2** Click the **Next** button.
The Setup Options window appears.
- 3** Choose the default class of **Typical**, then click the **Next** button.
The Setup Choices window appears.
- 4** Click the **Next** button to begin installation.
The Optimize X Server window appears.
- 5** In the **Optimize X Server** window, click the **Yes** button, then click the **Next** button.
- 6** Click the **Yes** button to complete the optimization.
The Restart the Computer window appears.
- 7** Click the **Finish** button.
After the computer reboots and you log back on, the Server Optimization screen appears.
- 8** On the **Installation Complete** window, click the **Finish** button.
This procedure can take several minutes to complete.

4. Install the Java Runtime Environment (JRE)

If you plan to run PeriReporter on this computer, you need to install the Java Runtime Environment before you can install the PERIprpt package.

- 1** In the **c:\temp** folder, open the **preinstall** folder, open the **javaRunTime** folder, and double-click **j2re-1_3_0_01-win.exe**.
The Software License Agreement window appears.
- 2** Click the **Yes** button.
The Choose Destination Location window appears.
- 3** Verify the default installation location. To install JRE to a location other than the one shown, click the **Browse** button, choose the location, and click the **OK** button. Then click the **Next** button. You do not need to reboot your system.

5. Install the PeriView Client

- 1 Close any other programs that are running, including any Nortel Networks or Periphonics services.
- 2 In the **c:\temp** folder, double-click the **PERIinstaller** folder, and double-click **setup.exe**. The Welcome window appears.
- 3 Click the **Next** button.
- 4 If any other programs are still running, click the **Cancel** button and close them. If some Nortel Networks or Periphonics components are already installed on the machine, you may see a message asking whether you want to install or uninstall. Choose **Install**. The Select Components window appears.
- 5 Click the **Typical** button, then click the **Next** button. The Confirm packages to install window appears.
- 6 Check that these packages are listed:
 - PERIperl
 - PERIgase
 - PERIplic
 - PERIfw
 - PERIcmpat
 - PERIprpt
 - PERIglobl
 - PERIview
 - PERIinvoke
 - PERIase
 - PERIgrs

If these packages are not listed, contact your Nortel Networks support personnel for additional assistance.
- 7 Click the **Yes** button to begin installation, or if the packages you want are not listed, click the **No** button, then click the **Exit Setup** button.
- 8 Respond to any messages that appear during the installation.
- 9 In the **Continue** window, click the **Yes** button.
- 10 After the final package in your selection is installed, PERIinstaller reboots your machine. Log on if necessary and respond to any messages you receive.

6. Install Patch Bundles

- 1 Close any other programs that are running, including any Nortel Networks or Periphonics services.
- 2 In the **c:\temp** folder, double-click the **PERIPatch** folder, and double-click **PERIMSPatch_Bundle_XX.exe** (where XX is the patch bundle number). The files extract and install to their appropriate locations. This can take several minutes. After the files are installed, the message “Patching is complete” or “Commit Locked Files” appears.
- 3 Click the **OK** button and reboot the system.

7. Set up XVision and TCP/IP

After you install the PeriView packages, add the compiled fonts to XVision and set up TCP/IP transport.

To add compiled fonts

- 1 To launch the XVision server, click the Windows **Start** button, click **Programs**, click **Vision**, and click **XVision Server**.
- 2 In the system tray, right-click **XV** and choose **Properties**. The Properties for XVision window appears.
- 3 Click the **Fonts** tab, then click the **Add** button. The Add New Font Path Item window appears.
- 4 Select the **Fonts Folder** option, then click the **Add** button. The Choose a folder of fonts window appears.
- 5 Select the **XView** folder, then double-click the **Open** button. This adds the C:\Program Files\Vision\Fonts\XView directory to the list in the Properties for XVision window.
- 6 Click the **Apply** button, then click the **OK** button.

To set up TCP/IP transport

For proper operation of the PeriView Software, set the UNIX TCP/IP Transports parameter to Always Enabled.

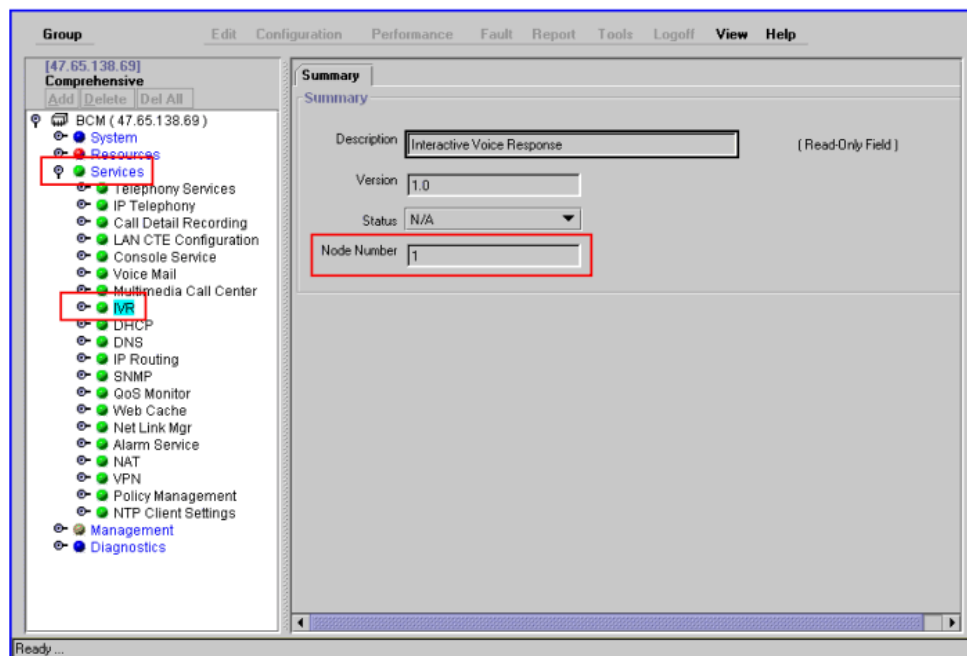
- 1 Click the Windows **Start** button, choose **Settings**, point to **Control Panel** and click the **Vision Communications** icon. The Visions Communications window appears.
- 2 Click the **Transports** tab, select **TCP-Unix**, then click the **Properties** button. The Transports Properties window appears.
- 3 Click the **Communications** tab.
- 4 Ensure the **Protocol** field contains **TCP/IP**, and the description field is labeled **TCP-Unix**. If not, set these fields to those values.

- 5 Click the **Enable this transport** button.
- 6 Click the **Apply** button, then click the **OK** button.
- 7 On the **Transports** tab of the **Visions Communications** window, click the **Apply** button, then click the **OK** button.

8. Add the Business Communications Manager node number and name to the VPSHOSTS file

You must obtain BCM node number and name from Unified Manager for each Business Communications Manager that is to be administered by this PeriView workstation and add them to the vpshosts file.

- 1 Log on to Unified Manager.
- 2 Click the **Services** key and click the **IVR** heading.
The node number of the Business Communications Manager is shown in the Node Number box.



- 3 Open WordPad and edit the vpshosts file in %VPSHOME%\common\etc. At the bottom of the file add the node number of the Business Communications Manager to be monitored, the name of the Business Communications Manager (the default name is NEEDSNEWNAME, and VPS.

For example, if I want my PeriView workstation to monitor my three Interactive Voice Response Business Communications Manager systems, I add these entries at the end of the vpshosts file:

- 1 BCM1 vps
- 2 BCM2 vps
- 3 BCM3 vps

9. Add IP information for the Business Communication Managers to the HOSTS file



Note: Do this procedure only if the Business Communications Manager names that are to be administered by this PeriView workstation cannot be resolved with DNS.

For all BCM names which cannot be resolved with DNS, update the HOSTS file.

- 1 On the workstation where you are installing PeriView, locate the HOSTS file in the folder **C:\Winnt\System32\drivers\etc**.
- 2 To make sure the HOSTS file is not read-only:
 - Right-click the **HOSTS** file and click **Properties**.
 - Clear the **READ-ONLY** box if it is selected.
- 3 Edit **c:\winnt\system32\drivers\etc\HOSTS** using Notepad: add the IP address and the BCM name for each BCM to be administered by this PeriView workstation (except the BCM names which can be resolved with DNS) at the end of the Hosts file.

For example, if PeriView needs to administer BCM1, BCM2 and BCM3, the BCM1 IP address can be obtained from a DNS server, but BCM2 and BCM3 cannot. Therefore the hosts file should have these entries:

```
127.0.0.0 loopback
47.10.10.10 BCM2
47.10.10.20 BCM3
```

- 4 Save the changes and close the file.

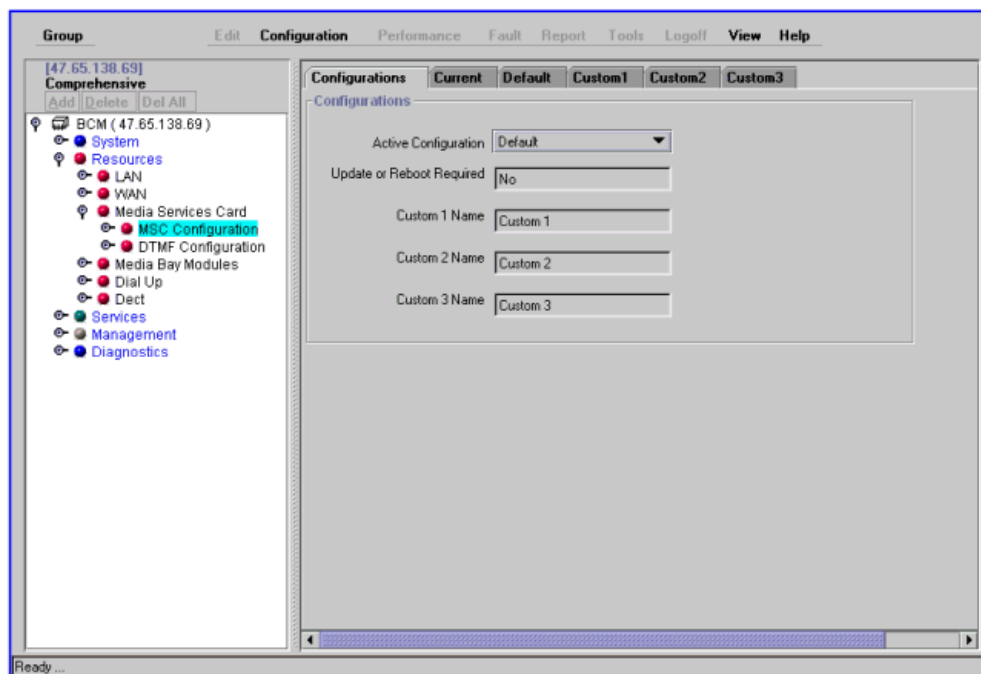
Adjusting the number of voice ports

You can adjust the minimum and maximum number of Interactive Voice Response ports. For more information about voice ports refer to the *Business Communications Manager Programming Operations Guide*.

- The combined maximum number of voice ports for Interactive Voice Response, voicemail and Call Center cannot exceed 32.
- Fax is automatically enabled for Interactive Voice Response and the maximum number of fax port is set to 2.
- The default values for Interactive Voice Response are the number of ports purchased for the maximum, and 2 for the minimum.

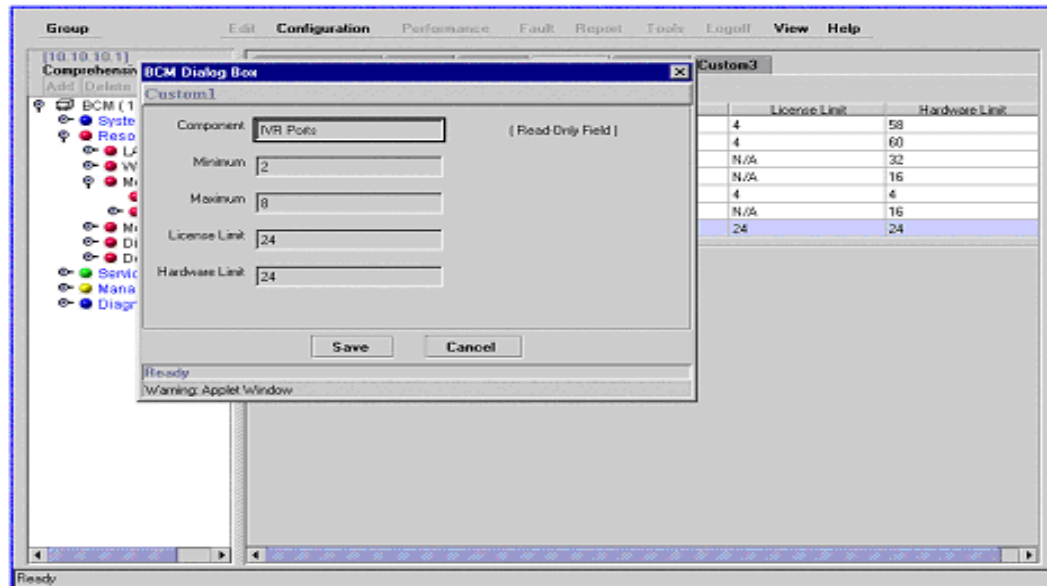
To adjust the number of voice ports

- 1 Log on to Unified Manager.
- 2 Click the **Resources** key.
- 3 Click the **Media Services Card** key.
- 4 Click the **MSC Configuration** heading.
The Configurations page appears.



- 5 To view your current setup, click the **Current** tab.

- 6 If you want to change the number of voice ports, click the tab that has the Custom configuration you want to change, Custom 1,2 or 3. These are the default names.
- 7 In the list, select the **IVR Ports** line.
- 8 On the **Configuration** menu click the name of the profile you want to adjust.



- 9 Change the values in the **Minimum** and **Maximum** boxes.
- 10 Click the **Save** button.
- 11 If you want to change the amount of fax ports, click the **Fax** line, and on the **Configuration** menu click the name of the setting you want to change.
- 12 Change the values in the **Minimum** and **Maximum** boxes.
- 13 Click the **Save** button.
- 14 Click the **Configuration** tab and from the **Active Configuration** list box, select the setting you adjusted.
- 15 On the **Configuration** menu click **Update Current Configuration**.
- 16 After you change the minimum or maximum number of Interactive Voice Response ports or fax ports you must reboot your system.
- 17 Log back on to Unified Manager. You are now ready to upload Interactive Voice Response prompts. Go to [“Uploading Interactive Voice Response prompts” on page 26](#).

Uploading Interactive Voice Response prompts

- 1 Have available the prompts that have been created for your Interactive Voice Response system.
- 2 On a computer that can be accessed on your Business Communications Manager system, create a shared public folder and copy the prompts (mmi and mmd files) to it.
- 3 In Unified Manager, click the **Services** key.
- 4 Click the **IVR** key and click the **IVR Prompts** heading.
The IVR Prompts Location Information page appears.
- 5 In the **Machine (Name or IP address)** box enter the name or IP address of the computer where the prompts are located.
- 6 In the **Shared Folder Name** box enter the name of the shared folder that contains the mmi and mmd files.
- 7 In the **Subfolder** box enter the subfolder name, if there is one.
- 8 In the **Domain name/User account** box enter the domain name or user account you need to access the shared folder.
- 9 In the **Password** box enter the password for the shared folder, if there is one.
- 10 On the **Configuration** menu click **Apply New IVR Prompts**.
Business Communications Manager uploads the mmi and mmd files from the shared folder.
A message appears that asks you to confirm your choice.
- 11 Click the **OK** button.

While the prompts are being installed Interactive Voice Response service is shut down. After the operation is complete, Interactive Voice Response Service restarts automatically.

Installing the client database software

For information about host access refer to the *Media Processor Server Series COMMGR Reference Manual* and the *BCM -IVR Integration Supplement*.

For information about reports refer to the *PeriReporter User's Guide* and the *BCM -IVR Integration Supplement*.

To find Interactive Voice Response guides

- 1** On the Unified Manager main page, click the **Documentation** button.
The Documentation, Product Overview & Tips page appears.
- 2** Click the **Documentation** button.
Adobe Acrobat starts and the Business Communications Manager documentation screen appears.
- 3** From the list, select the language you want to view documentation in.
The technical and User Documentation page appears.
- 4** Click the **Other Applications** heading.
The Other Applications page appears.
- 5** Under the **Interactive Voice Response** heading, click the link for the guide you want to access.
The pdf of the guide appears.

Databases supported on Business Communications Manager

- Oracle (native and ODBC)
- Sybase (native and ODBC)
- MS SQL Server (native and ODBC)
- DB2 (native and ODBC)
- MS Access (ODBC)

Configuring host access

To configure host access, you must:

- 1 Enable the host communication access keycode.
Refer to [“Enabling the Host Communication Access Keycode” on page 29](#).
- 2 Configure host access if your Interactive Voice Response scripts use host access.
Refer to the *Media Processing Server Series COMMGR Reference Manual* and the *BCM-IVR Integration Supplement* for how to configure host access. For how to find the guides, refer to [“To find Interactive Voice Response guides” on page 27](#).

After you complete these two procedures you are ready to use PeriView, the Interactive Voice Response administration tool, to load and configure scripts. Go to [“Using PeriView to load and configure scripts” on page 36](#).

Enabling the Host Communication Access Keycode

- 1 Retrieve the Authorization number for Host Communications from the NTKC0098 documentation kit and the order code of the feature you want to enable, (for example: geotel, iex, atte).
- 2 Record the MAC address of the Business Communications Manager. The Media Control Address (MAC address), is a hardware address that gives a unique identification to each node of a network.
 - a Log on to Unified Manager.
 - b Click the **Resources** and **LAN** keys.
 - c Select the LAN interface you will use to communicate with the external host, LAN 1, for example.
The LAN Summary page appears with the LAN Summary tab displayed.
 - d Record the information that appears in the **Physical Address** box. This is your MAC address.
- 3 Contact Nortel Support (call 1-800-4Nortel), select option 5 and then option 1.
Tell the Nortel support prime that you need assistance producing a keycode for Business Communications Manager Interactive Voice Response. You will be connected to the Level 2 Nortel Keycode support prime.
- 4 Tell the support prime that you want to produce a Business Communications Manager Host Communication keycode (license file). Tell the keycode support prime the MAC address you obtained in Step 2 and the Authorization number from the NTKC0098 documentation kit.
- 5 The Nortel support prime will generate the keycode and e-mail it to you. The file is too long to repeat over the telephone. The name of the file is *plservrc*, with no extension.
- 6 FTP the plservrc file to the Business Communications Manager, to
F:\Program Files\Nortel Networks\IVR\PERIplic\etc.

- 7 Telnet to the Business Communications Manager and use option 7 get to the command prompt.
- 8 Execute the following command to stop and start the license server. This activates the keycode on the Business Communications Manager:

```
[bcmivr]C:\TEMP> net stop "Nortel Networks License Service"
The Nortel Networks License Service service is stopping.
The Nortel Networks License Service service was stopped successfully.
```

```
[bcmivr]C:\TEMP> net start "Nortel Networks License Service"
The Nortel Networks License Service service is starting.
The Nortel Networks License Service service was started successfully.
```

- 9 Verify the HOST licenses on Business Communications Manager. In this example, host ID points to the Business Communications Manager interface used to communicate with the respective HOST.

Type the command:

```
C:\> plicmon localhost
Available Licenses from Server : localhost
Product: geotel 1.0
  Licensed to host ID: 0:a0:cc:56:71:c9
  Refresh every 360 seconds
Product: tn3270 1.0
  Licensed to host ID: 0:a0:cc:56:71:c9
  Refresh every 360 seconds
Product: atte 1.0
  Licensed to host ID: 0:a0:cc:56:71:c9
  Refresh every 360 seconds
Product: lu6.2 1.0
  Licensed to host ID: 0:a0:cc:56:71:c9
  Refresh every 360 seconds
```

- 10 Next, activate the host protocol. You can use TN3270 (TelNet 3270), which is one of the many host protocols Interactive Voice Response supports. TN3270 is a client program that uses the TCP/IP networking protocol. TN3270 is widely used to connect a desktop computer to a mainframe or main server. On Business Communications Manager, ensure that the `vpstn3270.cfg` file exists in the component's `etc.` directory. If it does not exist, copy it from the `PERIhostp/etc/componentetc` directory. Check that these files are present:

- `commgr.cfg`
- `vos.cfg`
- `vpstn3270.cfg`

```

Directory of F:\Program Files\Nortel Networks\IVR\PERIhostp\componentetc
07/14/03  12:40p  <DIR>.
07/14/03  12:40p  <DIR>..
05/14/01  02:11p  2,195  appc_cm.cfg
05/14/01  02:11p  127    atte.cfg
10/11/01  11:25a  179    atte.cfg.sample.1
05/14/01  02:11p  1,267  cca_mgr.cfg
05/14/01  02:11p  1,673  cca_serv.cfg
05/14/01  02:11p  792    geotel.cfg
05/14/01  02:11p  194    pos_serv.cfg
05/14/01  02:11p  135    vpstn3270.cfg
10/11/01  11:25a  194    vpstn3270.cfg.sample.1
11 File(s) 6,756 bytes

```

```

Directory of F:\Program Files\Nortel Networks\IVR\vps1\etc
11/06/03  01:11a  <DIR>.
11/06/03  01:11a  <DIR>..
07/01/03  05:34a  142    ase.cfg
07/01/03  05:34a  142    ase.cfg_bcm
09/10/03  07:13a  154    aselines.cfg
07/01/03  05:34a  554    bim.cfg
05/14/01  03:11p2,  903    ccm_admin.cfg
05/14/01  03:11p8,  851    ccm_phoneline.cfg
11/06/03  01:27a  1,500  commgr.cfg
09/04/03  10:49p3,  947    mxvmt.cfg_bcm
05/14/01  03:11p  820    tcad-tms.cfg
05/14/01  03:11p  764    tcad.cfg
05/14/01  03:11p  613    trip.cfg
05/14/01  03:11p  1,658  vmm-mmfm.cfg
05/14/01  03:11p  1,187  vmm.cfg
11/06/03  02:56a  154    vos.cfg
07/01/03  05:34a  107    vos.cfg_bcm
11/06/03  02:34a  111    vpstn3270.cfg

```

11 Add the entries shown in blue to vos.cfg:

```

F:\Program Files\Nortel Networks\IVR\vps1\etc\vos.cfg
#
# Example vos.cfg file.
#
# NAME  HOSTPORTPRI  COMMAND  LINE
bim     -    -    0    bim
vstat   -    -    0    vstat
commgr  -    -    0    commgr
vpstn3270  --  0    vpstn3270

```

12 Add the entries shown in blue to **vpstn3270.cfg**:

```
F:\Program Files\Nortel Networks\IVR\vps1\etc\vpstn3270.cfg
#
# vpstn3270 configuration File
#
# Example
#
maxvt 24
hostname falvmx
vt 1-24 ptelnet 1
port 23
init
```



Note: The hostname falvmx is an example of a TN2370 host.

- 13** In **vpstn3260.cfg** enter the hostname and use default port 23 to connect to the remote TN3270 host. The parameter **maxvt** refers to total licensed Interactive Voice Response lines, which are 24 on Business Communications Manager. If you have Interactive Voice Response licenses for 4 ports, set your **maxvt** parameter between 1 and 4.

- 14** In **commgr.cfg** uncomment the host protocol entries for TN3270 as shown below:

```
F:\Program Files\Nortel Networks\IVR\vps1\etc\commgr.cfg
#
# VPS TN3270 Example
#
host 1 protocol vpstn3270
host 1 svcid 1-512 unassign
host 1 svcid 1-24 sess 1
host 1 svcid 1-24 assignvt 1
```

- 15** Execute the following command to stop and start the Interactive Voice Response service. This activates host communications for TN3270 on Business Communications Manager, according to the protocol configuration files you defined.

```
[bcmivr]C:\TEMP>net stop "Nortel Networks IVR"
.
The Nortel Networks IVR service was stopped successfully.

[bcmivr]C:\TEMP>net start "Nortel Networks IVR"
The Nortel Networks IVR service is starting.
The Nortel Networks IVR service was started successfully.
```

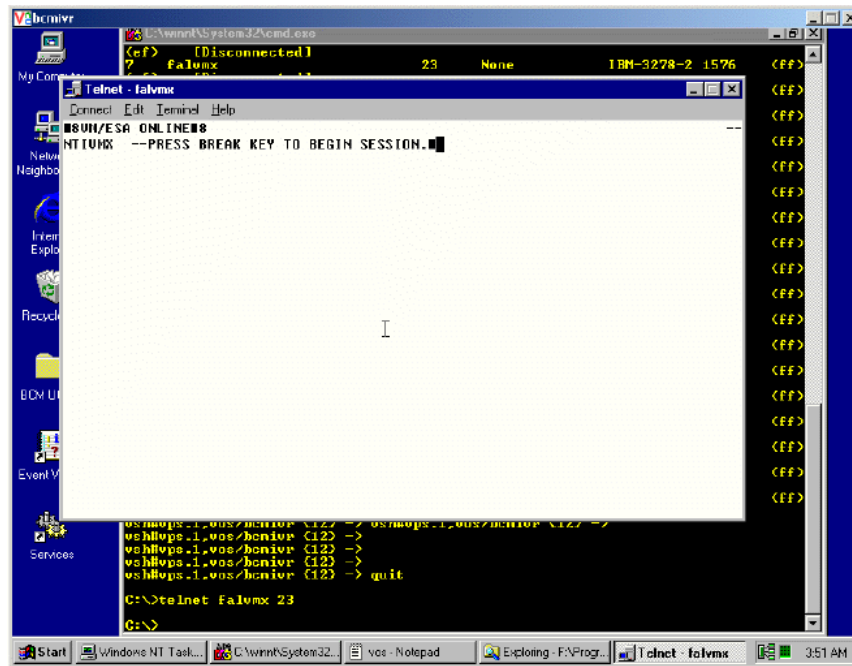

16 Verify the HOST specific processes are up and running:

```
[bcmivr]C:\TEMP>vsh
vsh#vps.1,vos/bcmivr {1} -> srp vos -status
```

NODE:PORT	USER	PID	LINE	STATE	ENTERED	STATE	FLAGS	CMDLINE
Component: #vps.1,vos/bcmivr								
bcmivr:4002	SYSTEM	1655	-	RUNNING	Nov 06 03:45:34		C bim	
bcmivr:3982	SYSTEM	2371	-	RUNNING	Nov 06 03:45:33		C vstat	
bcmivr:3998	SYSTEM	2189	-	RUNNING	Nov 06 03:45:33		C commgr	
bcmivr:3992	SYSTEM	2394	-	RUNNING	Nov 06 03:45:34		C vpstn3270	

17 At the command prompt, type > **telnet falvmx 23**.

Check that the telnet window displays that you have made a connection to the HOST.

**18** From VSH, connect line 1 to the Host and check that data can be read from remote host on connected line.

```
vsh#vps.1,vos/bcmivr {4} -> vpstn3270 status
vpstn3270 configurations:
Passinit: YES
Maxvt: 24 maxscb: 24 mode: screen (3270 terminal) autoconnect: off
Default pathname: F:\Program Files\Nortel Networks\ivr\bin\ptelnet.exe Default port
number: 23 Default host charset: tn3270-default
Default host name: falvmx
Termttype = IBM-3278-2 (24 x 80)
Field Attributes: OFF
Debug Level: 0
```

```

vsh#vps.1,vos/bcmivr {5} -> vpstn3270 connect 1
vsh#vps.1,vos/bcmivr {6} -> hl p 1 read
Read for Host 1, vt 1 ...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8
VM/ESA ONLINE
      N  N  OOO  RRRR  TTTT  EEEEE  L
      NN N O  O  R  R  T  E  L
      N N N O  O  RRR  T  EEE  L
TCPIP...  N NN O  O  R  R  T  E  L
      N  N  OOO  R  R  T  EEEEE  LLLLL
      N o r t e l N e t w o r k s
Access to this network and the information on it are lawfully available
only for approved purposes by employees of Nortel Networks and other users authorized
by Nortel Networks. If you are not an employee of Nortel
Networks or an authorized user, do not attempt to log on. Other than where prohibited
by law and subject to legal requirements, Nortel Networks
reserves the right to review any information in any form on this network at any time.
Fill in your USERID and PASSWORD and press ENTER
(Your password will not appear when you type it)
USERID ==>
PASSWORD ==>
COMMAND ==>

                                         RUNNING NTIVMX

VM/ESA ONLINE
vsh#vps.1,vos/bcmivr {7} -> vpstn3270 show-tn3270
vpstn3270 show-tn3270:
VT#   hostname      port  luname      term-type      RFC  (iac) (eor)      Status
---   -
1     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Connected cd=7, pid
= 2442]
2     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
3     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
4     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
5     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
6     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
7     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
8     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
9     falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
10    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
11    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
12    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
13    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
14    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
15    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
16    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
17    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
18    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
19    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
20    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
21    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
22    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
23    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]
24    falvmx         23    None        IBM-3278-2 1576 (ff) (ef) [Disconnected]

vsh#vps.1,vos/bcmivr {8} -> hl svcid 1 status
Host Service Id 1
-----
Acquired By : <none>
Host Control : off
Timers : er: 30 inter: 10
Aid : enter
System mode : Non Pooling
Sessioned Host: 1
VT# for Host 1: 1

```

```
VT status: Keyboard Unlocked, New input
VT up, Session, SDT
Waiting for 1 unlocks, 0 left
```

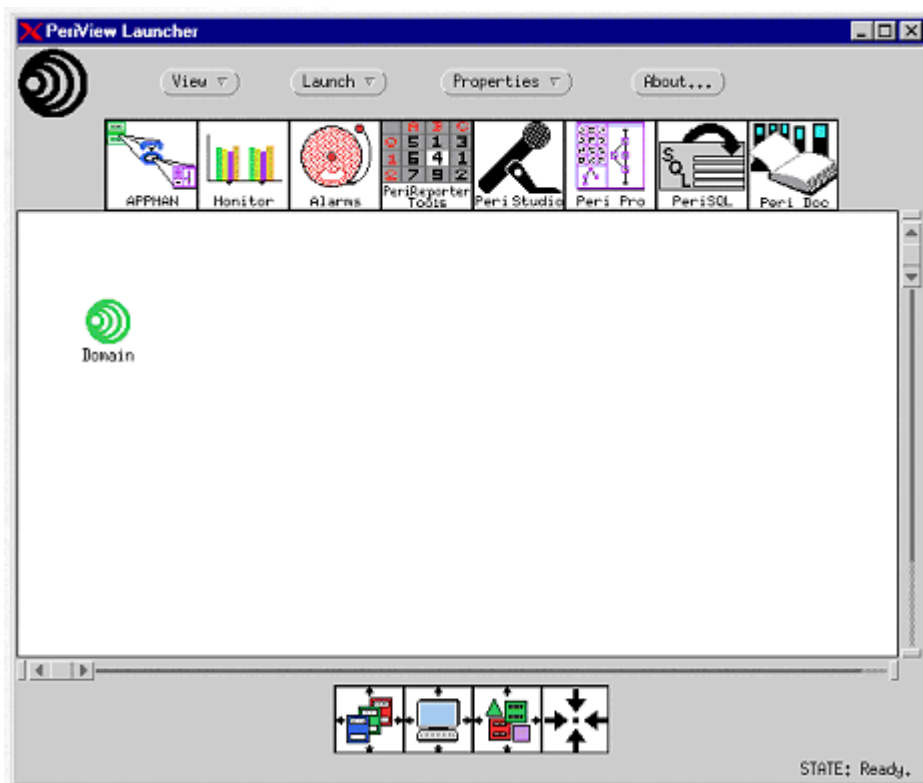
- 19** Run the command **vpstn3270 show-scb** to check that the Host connection has been made to the physical line:

```
vsh#vps.1,vos/bcmivr {3} -> vpstn3270 show-scb
vpstn3270 show-scb:
VT# cd pathname                port# hostname      iac eor
1 8 F:\Program Files\Nortel Networks\ivr\bin\ptelnet.exe 23 falvmx ff ef [Connected pid
= 903]
```

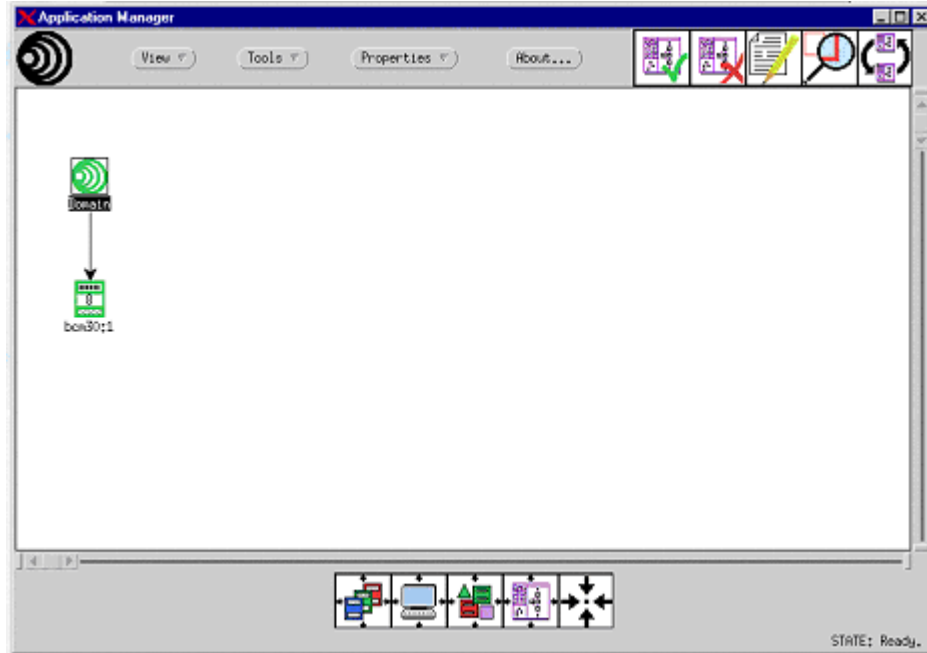
Using PeriView to load and configure scripts

After you have downloaded prompts to your Business Communications Manager system, you must assign scripts to the ports. You do this using PeriView, the Interactive Voice Response administration client.

- 1 Have available the scripts that have been created for your Interactive Voice Response system.
- 2 On the workstation where you installed PeriView software, click the Windows **Start** button, point to **Programs**, click **Nortel** and click **PeriView Launcher**.
The PeriView main page appears.
- 3 On the PeriView main page wait until you see this page.



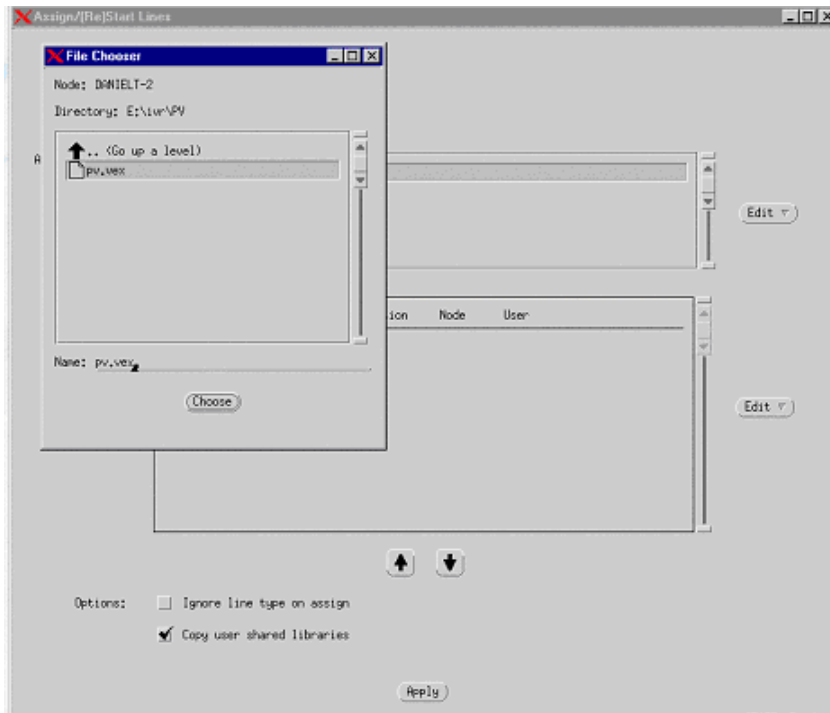
- 4 Drag the icon to the **Expand** box, the third box from the left at the bottom. This creates a BCM icon that is attached to the Domain icon. In this example, a single-node system is shown.



- 5 Drag the **BCM** icon to the **Appman** box, the first box from the left on the top. The Appman window appears. The BCM and the Domain icons appear in the Appman window.

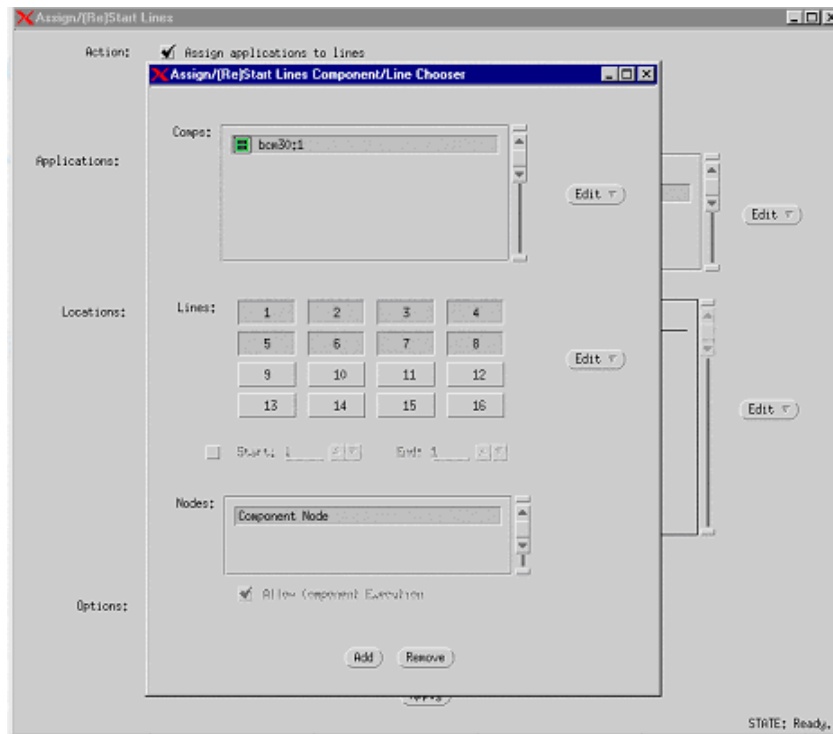
- 6 Drag the **BCM** icon to the **Assign Line** box, the first box from the left on the top with the green check mark.

The Assign Line window appears.



- 7 Select the **Assign Line** check box.
- 8 Select the **Start Line** check box.
- 9 Click the **Edit** button on the right of the first scroll menu.
- 10 On your computer, locate the script file.
It will have a .vex file extension.

- 11 Click the **Edit** button on the right of the second scroll menu.

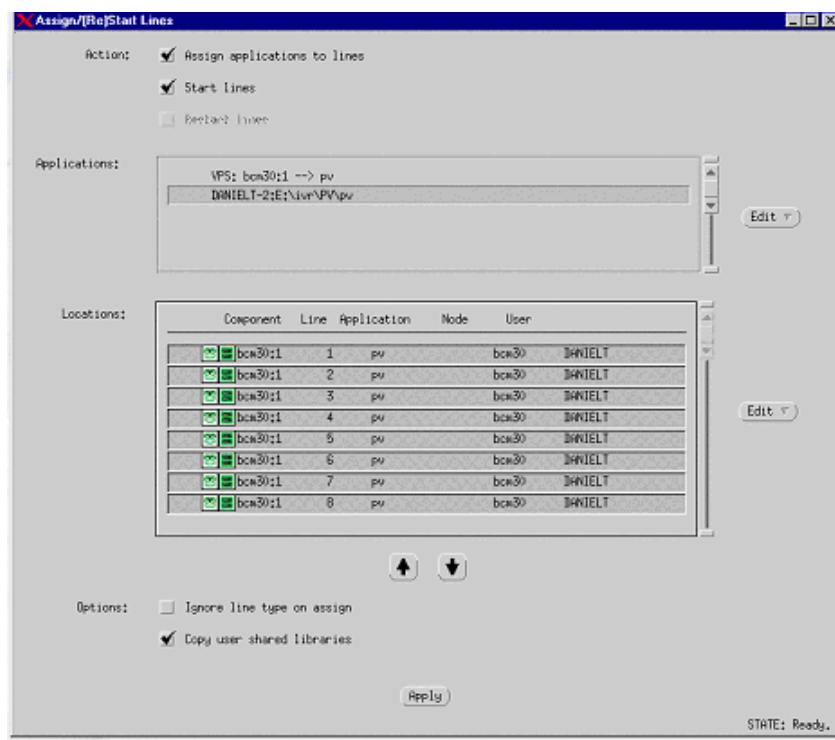


- 12 If you have between 1-16, or more than 16 Interactive Voice Response ports, double-click the **1-16** button, and click each button that represents the ports you have assigned for Interactive Voice Response

and

if you have more than 16 Interactive Voice Response ports, double-click the **17-32** button and select the ports you want. You can select up to 24. Make sure you don't have more ports selected in PeriView than you have assigned to Interactive Voice Response.

- 13 Click the **Add** button and close the window.
The Assign/(Re)Start Lines screen appears.



- 14 Click the **Apply** button.
In the Applications column the name of your script appears beside the lines you selected.
Your scripts are now “live”.
- 15 Next, go to [“Dialing the Interactive Voice Response extension” on page 41](#) and use Feature 985 to find out what the Interactive Voice Response extension is. Dial this extension to confirm that the appropriate Interactive Voice Response script answers the call.

Dialing the Interactive Voice Response extension

You can use Feature 985 to see what the Interactive Voice Response extension is. Dial this extension to confirm that the appropriate Interactive Voice Response script answers the call.

- 1** On a one-line or two-line display telephone connected to your Business Communications Manager system, press **Feature 985**.
The display shows the Voicemail extension.
- 2** Press the **NEXT** softkey or **#** to view the Interactive Voice Response extension.
The display shows the Interactive Voice Response extension.
- 3** Dial the Interactive Voice Response extension and check that the script answers the call.



Note: You can program the Interactive Voice Response extension to be any extension on Business Communications Manager, for example the prime set for trunks, ringing sets for Night Service, CFNA sets, etc.) For information about changing extensions, see “Changing telephone DNs using the Unified Manager” in the *Business Communications Manager Programming Operations Guide*.

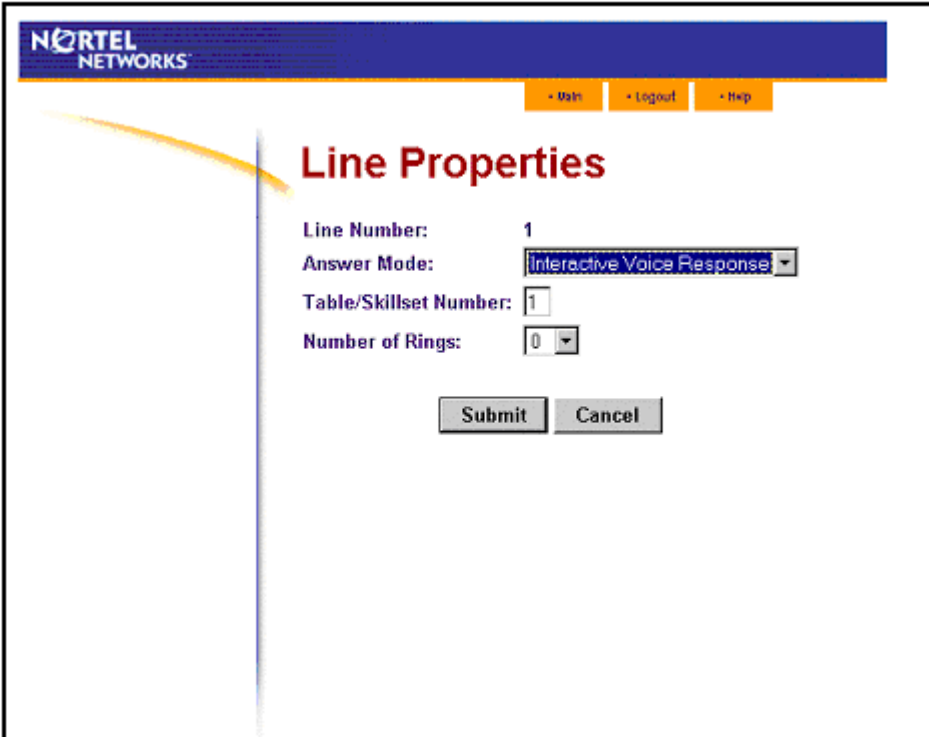
If you change the Interactive Voice Response extension, you must restart Interactive Voice Response service. For how to restart Interactive Voice Response service, see [“Stopping, starting or restarting Interactive Voice Response service” on page 46](#).

Assigning lines to Interactive Voice Response

You can assign which lines answer Interactive Voice Response calls. If you want to assign multiple lines, go to [“To assign multiple lines to Interactive Voice Response” on page 43](#).

To assign lines to Interactive Voice Response

- 1 Log on to CallPilot Manager.
- 2 Click the **Auto-Attendant** heading.
The Lines Administration page appears.
- 3 Click the **Change** link for the line you want to assign to Interactive Voice Response.
The Line Properties page appears.



NORTEL NETWORKS

Home Logout Help

Line Properties

Line Number: 1

Answer Mode: Interactive Voice Response

Table/Skillset Number: 1

Number of Rings: 0

Submit Cancel

- 4 From the **Answer Mode** list box, select **Interactive Voice Response**.
- 5 From the **Number of rings** list box select the number of rings before Interactive Voice Response answers.
You must select a number from 0 to 12. If you set the number to less than 2, Caller ID information may not be passed to Interactive Voice Response.
- 6 Press the **Submit** key.

To assign multiple lines to Interactive Voice Response

- 1 Start CallPilot Manager.
- 2 Click the **Auto-Attendant** heading.
- 3 Click the **Change Many Lines** link.
The Change Many Lines page appears.

NORTEL NETWORKS

Home Logout Help

Change Many Lines

Line Range: (1-500)
From: 20 To: 50

Answer Mode: None

Table/Skillset Number: None
Auto-Attendant
Interactive Voice Response

Number of Rings: 4

Submit Cancel

- 4 In the **From** box type the number of the first line to add.
- 5 In the **To** box type the number of the last line to add.
- 6 From the **Answer Mode** list box select **Interactive Voice Response**.
- 7 From the **Number of rings** list box select the number of rings before Interactive Voice Response answers.
You must select a number from 0 to 12. If you set the number to less than 2, Caller ID information may not be passed to Interactive Voice Response.
- 8 Click the **Submit** button.

Viewing or changing the system fax name

When Interactive Voice Response sends a fax, it uses the system fax name that is programmed in CallPilot Manager. The system name transmits to external fax machines as the station ID of the site. Many fax machines show this value when transmitting or receiving, and record it in transmission logs. If you have not entered a system name no station ID is sent.

The system name can be a maximum of 16 characters. You can use your main fax number as the system name.

To view or change the system fax name

- 1 Start CallPilot Manager.
- 2 Click the **Configuration** heading.
- 3 Click the **Fax Properties** link.
The Fax Properties page appears. This page can appear differently, depending on your system information.
- 4 If you want to change the system fax name, in the **System Name** box enter a name for your Interactive Voice Response system.
The name can be a maximum of 16 characters.

The screenshot displays the Nortel Networks Configuration interface. On the left is a navigation menu with categories: Mailbox Administration, Auto-Attendant, Custom Call Routing, Networking, Call Center, Reports, Configuration, and Operations. The Configuration category is expanded, showing links for System Properties, Dialing Translation Properties, Dialing Translation Table, Switch Properties, Access Passwords, and Fax Properties. The main content area is titled 'Configuration' and prompts the user to 'Please choose a configuration option.' Below this, the 'Fax Properties' section is visible. It includes input fields for 'System Extension' and 'System Name', a 'Number of Retries' field set to 3 (with a range of 0-99), and a 'Retry Interval' field set to 10 (with a range of 1-60 minutes). There are radio buttons for 'Default Cover Page' (selected) and 'Custom Cover Page'. Below the radio buttons is a 'Load Custom Cover Page From:' field with a 'Browse...' button. At the bottom of the section are 'Submit' and 'Cancel' buttons.

Chapter 3

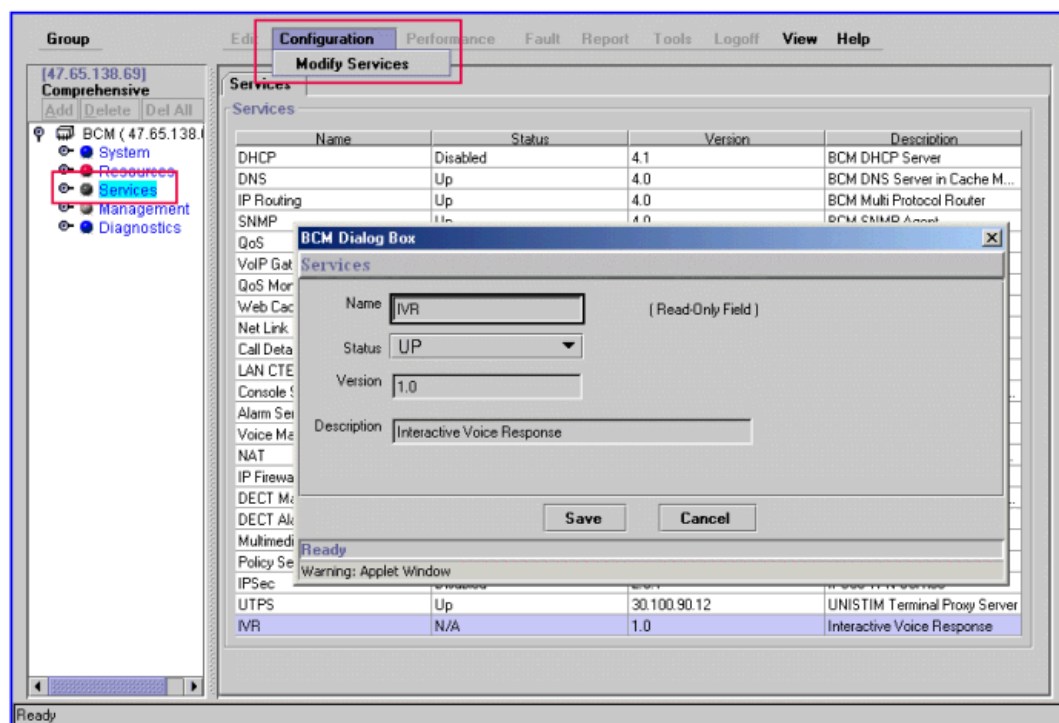
Administering Interactive Voice Response

This chapter contains

- Stopping, starting or restarting Interactive Voice Response service
- Changing how Interactive Voice Response service operates after a reboot
- Backing up and restoring Interactive Voice Response
- Creating Interactive Voice Response logs
- Uninstalling Periview
 - Considerations for uninstalling Periview
 - Uninstalling the patch bundle
 - Uninstalling packages using PERInstaller
 - Removing additional files and directories
 - Removing the environment variables
- Creating reports

Stopping, starting or restarting Interactive Voice Response service

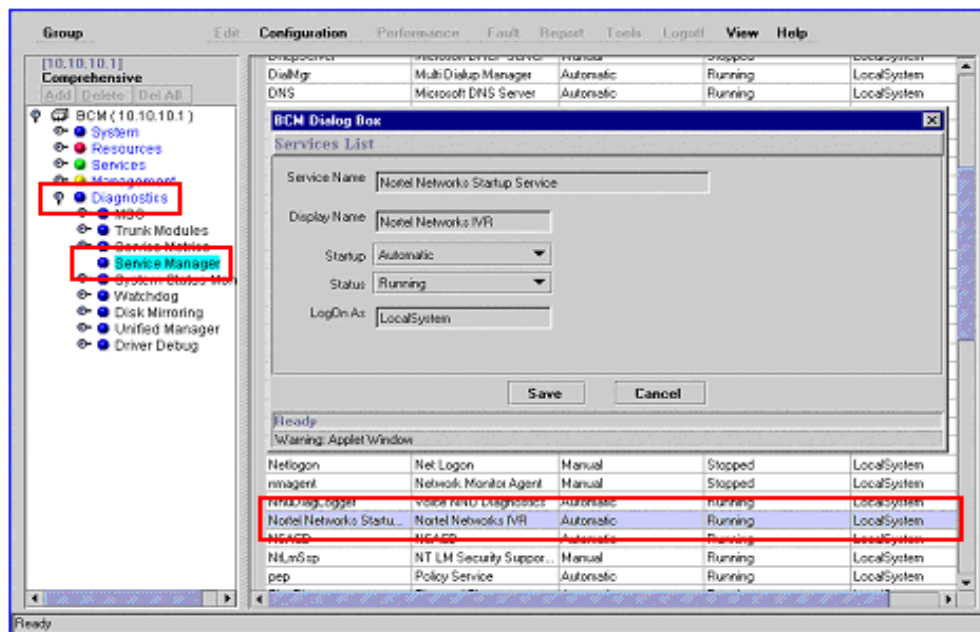
- 1 Log on to Unified Manager.
- 2 Double-click the **Services** heading.
The Services page appears.
- 3 In the list, select **IVR**.
- 4 On the **Configuration** menu click **Modify Services**.
- 5 From the **Status** list box select **Disabled** to stop Interactive Voice Response service
or
select **Enabled** to start or restart it.



- 6 Click the **Save** button.

Changing how Interactive Voice Response service operates after a reboot

- 1 Log on to Unified Manager.
- 2 Click the **Diagnostics** key.
- 3 Click the **Service Manager** heading.
The Services List page appears.



- 4 In the list select **Nortel Networks IVR**.
- 5 On the **Configuration** menu click **Modify Services**.
- 6 If you want to change the mode of Interactive Voice Response operation when you reboot Business Communications Manager, from the **Startup** list box:
 - select **Automatic** if you want Interactive Voice Response service to start automatically when Business Communications Manager reboots
 - select **Manual** if you want to select when Interactive Voice Response service starts after a reboot
 - select **Disabled** if you do not want Interactive Voice Response service to start after a reboot.
- 7 Click the **Save** button.

Backing up and restoring Interactive Voice Response

You can protect your Interactive Voice Response files by backing them up using the Backup and Restore utility (BRU). Interactive Voice Response service stops during a backup and restore.

All Interactive Voice Response voice recordings are backed up whenever you do a backup and restore.

The Backup and Restore utility modifies the Business Communications Manager configuration during the restore if Business Communications Manager is part of a multi-node environment. For example, your node number is reassigned. A multi-node Interactive Voice Response system can be managed from PeriView immediately after a Restore without having to reconfigure it.

For how to perform a backup and restore, refer to “Backup and Restore Utility (BRU)” in the *Business Communications Manager Programming Operations Guide*.



Note: After you restore, you must:

- 1** Assign the Interactive Voice Response lines to no answering while you do these other steps.
Refer to [“Assigning lines to Interactive Voice Response” on page 42](#). Instead of selecting Interactive Voice Response, set these lines to no answering.
 - 2** Reinstall and reconfigure the database client software.
Refer to [“Installing the client database software” on page 27](#).
 - 3** Redo the host configuration.
Refer to [“Configuring host access” on page 29](#).
 - 4** Verify your Interactive Voice Response prompts with Feature 985.
Refer to [“Dialing the Interactive Voice Response extension” on page 41](#).
 - 5** Reassign your Interactive Voice Response lines.
Refer to [“Assigning lines to Interactive Voice Response” on page 42](#).
-

Creating Interactive Voice Response logs

You can use the Report a Problem Wizard to collect logs for an Interactive Voice Response problem.

To create Interactive Voice Response logs

- 1 Log on to Unified Manager.
- 2 Click the **Maintenance** button.
- 3 Enter your system administrator user name and password and click the **OK** button.
The Maintenance and Support page appears.
- 4 In the left frame, click the **Archlog Explorer** link.
The Scheduled Events Manager window appears.



- 5 Click the **Report-a-Problem Wizard** link.

- 6 In the box provided, describe your problem and click the **Next** button.

The screenshot shows the 'Report a Problem Wizard: Step 1' in the Nortel Business Communications Manager. The left sidebar contains a navigation menu with categories: Support (Contacts, Diagnose Potential Problems, Report A Problem), Maintenance (Archlog Explorer, System Information, Order & Enable Optional Components, Install Optional Components, Maintenance Tools), and General (Report Settings, Archlog Settings). The main content area has a breadcrumb trail: 'Your Location: BCM / Product Maintenance & Support / Scheduled Events Manager / Report a Problem Wizard'. Below this is the title 'Report a Problem Wizard: Step 1' and a text prompt: 'Please describe your problem, including the date/time that it occurred (if possible):'. A large text input box is provided for the user. Below the box is a dropdown menu labeled 'How would you like to report this problem:' with 'Archive logs only' selected. A warning message states: 'Warning: E-mail reporting may or may not work properly, depending on the e-mail size limitations set by your Internet Service Provider. If the size of the Archlog Package is larger than the maximum allowable size of an e-mail message, you won't be able to use e-mail to report your problem.' At the bottom are 'Next' and 'Cancel' buttons.

- 7 Click either the:

Basic Application Selection button and go to step 8

or

Advanced Application Selection button and go to step 9.

The screenshot shows the 'Report a Problem Wizard: Step 2' in the Nortel Business Communications Manager. The left sidebar is identical to the previous screen. The main content area has a breadcrumb trail: 'Your Location: BCM / Product Maintenance & Support / Scheduled Events Manager / Report a Problem Wizard'. Below this is the title 'Report a Problem Wizard: Step 2' and a section titled 'Application / Log selection:'. There are two buttons: 'Basic Application Selection' and 'Advanced Log File Selection'. Below the 'Basic Application Selection' button, text explains: 'Basic application selection allows you to select which applications you are experiencing problems with. This selection method is recommended for most users.' Below the 'Advanced Log File Selection' button, text explains: 'Advanced log file selection allows you to specify exactly which log files you want to archive. This selection method is recommended for advanced users only.' At the bottom are 'Back' and 'Cancel' buttons.

- 8 Click the **Interactive Voice Response** box, and logs that pertain to Interactive Voice Response are collected and stored the same way as existing logs for your BCM system.

NORTEL NETWORKS

Business Communications Manager

Your Location: BCM / Product Maintenance & Support / Scheduled Events Manager / Report a Problem Wizard

Report a Problem Wizard: Step 3

Please select the applications you are experiencing problems with.

Applications:

- ☐ Attendant Console
- ☐ Call Center
- ☐ Call Detail Recording
- ☐ Call Center Reporting
- ☐ Desktop Assistant
- ☐ FAX
- ☐ Interactive Voice Response
- ☐ Personal Call Manager
- ☐ TAPI Applications
- ☐ Unified Messaging
- ☐ Voice Button
- ☐ Voice Mail / Call Pilot

IP Telephony:

- ☐ IP Sets (2002)
- ☐ IP Sets (2004)
- ☐ IP Soft Client (2050)
- ☐ IP Trunks
- ☐ Symbol

Digital Telephony:

- ☐ Analog Sets
- ☐ Analog Trunks
- ☐ DECT
- ☐ Digital Sets
- ☐ ISDN Networking

Data:

- ☐ Firewall
- ☐ IP SEC
- ☐ IP Routing
- ☐ IPX Routing
- ☐ Network Address Translation

Administration and Setup:

- ☐ Backup and Restore
- ☐ Key Codes
- ☐ Patch Installation / System Upgrade
- ☐ Programming Wizards
- ☐ Unified Manager

- 9 Click the **Interactive Voice Response files** box and logs that pertain to Interactive Voice Response are collected and stored the same way as existing logs for your Business Communications Manager system.
A list of the specific logs collected is displayed.

NORTEL NETWORKS

Business Communications Manager

Your Location: BCM / Product Maintenance & Support / Scheduled Events Manager / Report a Problem Wizard

Report a Problem Wizard: Step 3 (Advanced)

Please select the log files you wish to archive.

<input type="checkbox"/> All	Application / Log	Files
<input type="checkbox"/>	ACD Call State Machine Log	D:\stacdcallem.out
<input type="checkbox"/>	Application exception handler log	E:\NortelNetworks\Logs\drwn32.log
<input type="checkbox"/>	Attendant Console log	D:\Data Files\Nortel Networks\Attendant Console\ConsoleService.log
<input type="checkbox"/>	BRU Logs	C:\Program Files\Nortel Networks\BRU\Working*.*
<input type="checkbox"/>	Call Center Logs	D:\stacdagent.out D:\stacdcall.out D:\stacdcdn.out D:\stacdfmportusage.out D:\stacvbm.out
<input type="checkbox"/>	Detailed WinNT system report	
<input type="checkbox"/>	Interactive Voice Response files	E:\NortelNetworks\logs\IVR*.*
<input type="checkbox"/>	NCM Logs	E:\NortelNetworks\logs*.log
<input type="checkbox"/>	DHCP	C:\Winnt\System32\Dhcp\DhcpSrvLog.*
<input type="checkbox"/>	DNS	C:\Winnt\System32\Dns\dns.log

Uninstalling PeriView

You can remove all installed PeriView packages using PERInstaller. To completely remove all PeriView packages and related packages such as XVision, follow the complete instructions.

Considerations for uninstalling PeriView

- You must remove the Patch Bundle before you remove other PeriView software.
- Always use PeriInstaller to remove PeriView software. PeriInstaller removes software in the correct order and reboots the system when necessary.
- Do not remove PERIperl until all other PeriView packages have been removed. Other packages rely on PERIperl and may not function properly even if PERIperl is reinstalled. If you accidentally uninstall PERIperl before uninstalling a package that requires PERIperl, uninstall the reliant package, and then reinstall both PERIperl and the reliant package.
- If you later want to use this same application processor to run PeriView Client software again, you will have to completely reinstall all necessary packages according to the instructions in [“To install PeriView” on page 15](#).

Uninstalling the patch bundle

You must remove the patch bundle before you remove PeriView packages.

- 1 On the computer you want to uninstall PeriView from, click the Windows **Start** button, click **Settings**, and click **Control Panel**.
The Control Panel window opens.
- 2 Double-click the **Add/Remove Programs** icon.
- 3 Select **PERIMPSPatch Bundle X**, where X represents the pack or bundle version.
- 4 Click the **Add/Remove** button.

Uninstalling packages using PERInstaller

This procedure removes PeriView packages using PERInstaller. PERInstaller uninstalls all PeriView packages in the correct order.

- 1 Quit any programs that are running, including any Nortel Networks or Periphonics services.
- 2 Click the Windows **Start** button and click **Run**.
- 3 In the **c:\temp folder**, double-click the **PERInstaller folder**, and double-click **setup.exe**.
The Welcome window appears.
- 4 Click the **Next** button.
- 5 If any other programs are still running, click the **Cancel** button and close them.
A message appears that asks you whether you want to reinstall or uninstall PERI packages.

- 6 Choose **Uninstall**.
- 7 Respond to any messages during the uninstall.
The computer will reboot when necessary.
- 8 To verify that packages uninstalled correctly, use the Windows NT Find function to search the drives for PERI elements. (For example, search on the word “peri”.) If you are unsure if a file is used strictly by PeriView packages, either leave the file on the system or contact your Nortel Networks support personnel for additional assistance.
- 9 Be sure to reboot the system after removing the packages. Otherwise files are left queued for removal during reboot. This can cause problems with future installations.

Removing additional files and directories

Some files remain on the system if they can be used by other package versions or if they were created after a package installation. If Nortel Networks packages are no longer being run on the computer where PeriView was installed, you can regain disk space by removing these files.

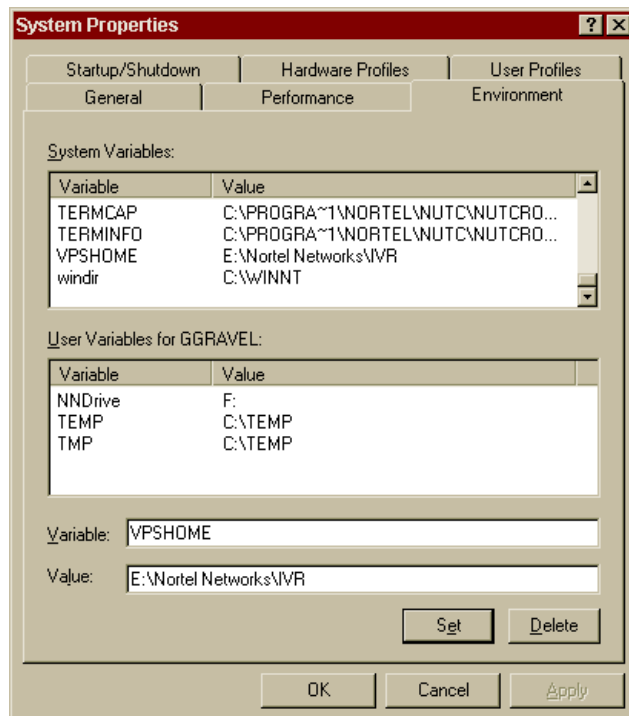
You can remove these files:

- C:\winnt\PERIinstaller
- C:\Winnt\Profiles\All Users\Start Menu\Programs\Nortel
- %VPSHOME% directory (You should be able to find this file in C:\Winnt\system32.

Before you remove %VPSHOME%, you might have to manually remove files and/or directories that were left behind during package uninstalls. To check if all elements are uninstalled, use the Windows NT Find function to search your drives for other related elements. (For instance, search on the word “peri”). If you are unsure if a file is used strictly by Nortel Networks packages, either leave the file on the system or contact your Nortel Networks support personnel for additional assistance.

Removing the environment variables

- 1 Click the Windows **Start** button, click **Settings**, and click **Control Panel**.
The Control Panel window appears.
- 2 Double-click the **System** icon.
The System Properties window appears.
- 3 Click the **Environment** tab.



- 4 In the list of system variables, select the **VPSHOME** setting, and click the **Delete** button.
- 5 Click the **Set** button.
- 6 Click the **Apply** button.
- 7 Repeat steps 4 through 6 to delete these variables:
 - ASEHOME
 - PERL5LIB
 - MAX_REAL_VPS_NUM
 - NUTROOT
 - TERM
 - TERMCAP
 - TERMINFO
 - PREPORTHOME
- 8 In the list of system variables, select **PATH**.
The variable information appears in the variable and value boxes.

- 9 Put your cursor in the value box and move your cursor to the beginning of %VPSHOME%\bin. Delete the text %VPSHOME%\bin.
- 10 Click the **Set** button.
- 11 Click the **Apply** button.
- 12 Click the **OK** button.
- 13 Repeat steps 8 through 12 to delete these variables:
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\bin\
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\bin\x11\
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\mksnt\
 - C:\PROGRA~1\Vision
 - C:\PROGRA~1\Vision\System
 - C:\PROGRA~1\COMMON~1\Vision
- 14 Click the **OK** button to close the window.

Removing Interactive Voice Response, XVision and JRE

After you uninstall PeriView and the environment variables, uninstall Interactive Voice Response, XVision and JRE from your Control Panel Add/Remove Programs window. Refer to your system documentation for how to remove programs.

Creating reports

You can create reports to monitor your Interactive Voice Response activity. For information about how to create reports refer to the *PeriReporter User's Guide* and the *BCM-IVR Integration Supplement*. For how to find the guides, refer to [“To find Interactive Voice Response guides” on page 27](#).

Chapter 4

Troubleshooting

This chapter describes problems that can occur when you operate Interactive Voice Response, and suggested solutions.

Business Communications Manager is sluggish. Response time is slow

Make sure that the number of scripts assigned to lines via PeriView matches the maximum number of Interactive Voice Response Ports in the MSC Configuration section in Unified Manager. Refer to [“Using PeriView to load and configure scripts” on page 36](#).

Interactive Voice Response is not working after I restore an Interactive Voice Response backup on a new disk

Make sure Interactive Voice Response is not disabled as a service. Refer to [“Changing how Interactive Voice Response service operates after a reboot” on page 47](#).

PeriView cannot see Business Communications Manager

- Make sure that the vpshosts file on the PeriView workstation is properly populated. Refer to [“8. Add the Business Communications Manager node number and name to the VPSHOSTS file” on page 22](#).
- Make sure that the hosts file on the PeriView workstation is properly populated. Refer to [“9. Add IP information for the Business Communication Managers to the HOSTS file” on page 23](#).
- Your PeriView workstation has to be on the same subnet as the published IP address that is programmed on your Business Communications Manager system.
- PeriView cannot access a Business Communication Manager system over a modem.

I see errors in the EventViewer on Business Communications Manager for Interactive Voice Response

Some errors can be expected if Interactive Voice Response is running as a service but you have not yet downloaded prompts or assigned scripts to lines. If you have downloaded prompts and configured scripts, check the list of Alarms and SNMP Traps for Interactive Voice Response information. This can help you analyze the problem.

To check the list of Alarms and SNMP Traps:

- 1** Start Unified Manager.
- 2** Click the **Maintenance** button.
- 3** Log on with your user name and password.
The Product Maintenance & Support page appears.
- 4** Click the **Alarms and SNMP Traps** link.
Review this information for Interactive Voice Response events. For assistance in interpreting this information, contact your next level of support.

Interactive Voice Response is not answering calls

Make sure that Interactive Voice Response is programmed to answer lines. Refer to [“Assigning lines to Interactive Voice Response”](#) on page 42.

The Interactive Voice Response call flow is not working as it should be

Contact the organization that created your Interactive Voice Response scripts.

The Interactive Voice Response prompts are too soft, too loud, or have static in them

Contact the organization that recorded your Interactive Voice Response prompts.

Interactive Voice Response doesn't answer calls

Make sure that the maximum number of Interactive Voice Response ports and the maximum number of CallPilot Call Center ports do not add up to less than 3 ports. Refer to [“Adjusting the number of voice ports”](#) on page 24.

Interactive Voice Response doesn't recognize key presses

If the call is a direct call from a Companion set, it is not supported. If the call is a call transferred from a DECT set, it is not supported.

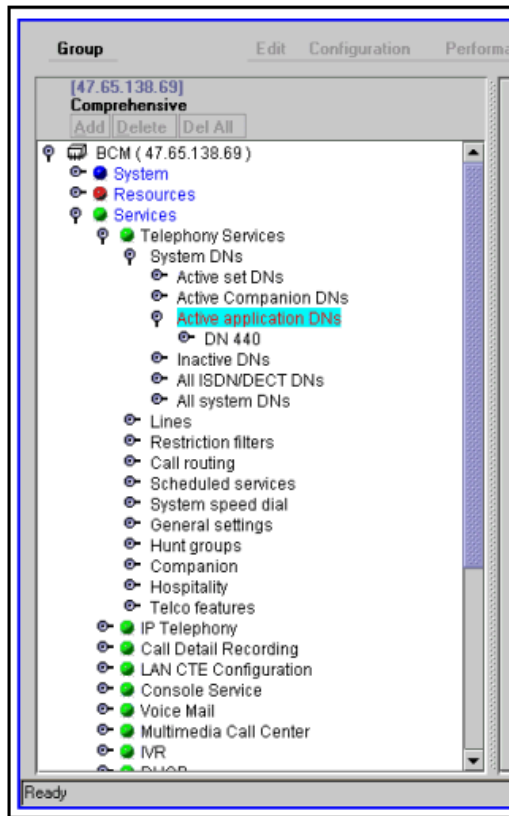
A Call Center skillset is not taking calls after I enabled Interactive Voice Response

Make sure that the skillset DN does not conflict with any active application DNs.

To see a list of active applications DNs:

- 1** Log on to Unified Manager.
- 2** Click the **Services** key.
- 3** Click the **Telephony Services** key.
- 4** Click the **System DNs** key.

- 5 Click the **Active application DNs** key.
The active application DNs appear under the Active application DNs key.



- 6 If the skillset DN appears in the list, disable the skillset, change the DN and re-enable the skillset.

When you send or receive faxes, the receiving machine shows that Voicemail is sending and receiving faxes

Make sure that you have set the System Name in the fax Properties page of CallPilot Manager. The name "Voicemail" is the default name if you do not specify a name.

For how to set the system fax name refer to [“Viewing or changing the system fax name”](#) on page 44.

Index

A

Alarms and SNMP Traps 57
Archlog Explorer 49
ASEHOME 54

B

Backup and restore 48
BRU 48
Business Communications Manager
 multiple systems 13
 node number 13

C

Capacities 6
 disk space 6
 fax 6
 recording time 6
 simultaneous calls 6
 voice ports 6
 voicemail 6

D

Disk space 6

E

Environment variables
 ASEHOME 54
 PATH 54
 PERL5LIB 54
 removing 54
 VPSHOME 54
Extension, Interactive Voice Response 41

F

Fax calls 6
Fax name 44
Fax ports 6

H

Host
 access 29
 keycode 29
Host access, configuring 29

I

Installation
 before you install 14
 host access 29
 overview 9
 software authorization code 11
 uploading prompt 26
 voice ports 24
Interactive Voice Response
 backup and restore 48
 definition 5
 enabling 11
 extension 41
 logs 49
 multiple systems 13
 removing 55
 restarting 41
 software authorization code 11
 stopping service 46
Interactive Voice Response prompt
 uploading 26

J

JRE
 removing 55

L

Line answering, assigning 42
Line answering, assigning, multiple lines 43
Logs 49

M

MAC address 29
mmd 26
mmi 26
Multiple systems 13

N

Next 30
Node number 13, 22
Number of rings, assigning 42, 43

P

Patch bundle 52

PATH

removing 54

PERInstaller, uninstalling 52

PERIperl 52

PeriView 13

scripts 36

uninstalling 52

uninstalling files and directories 53

PERL5LIB

removing 54

Prompt 26

uploading 26

R

Recording time 6

removing 54

Report a Problem Wizard 49

S

Simultaneous calls 6

Software authorization code 11

Stopping service 46

System Fax name 44

T

TN3270 30

U

Uploading prompt 26

V

Variables

removing 54

Voice ports 6, 24

Voicemail 6

Voicemail extension 41

VPSHOME, removing 54

X

XVision

removing 55