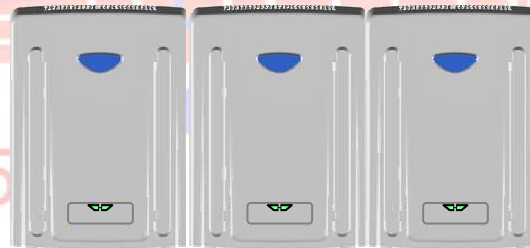


## The Nortel BCM 50 Platform: Flexibility & Functionality

- > Compact main unit (8.5 X 12 )
  - BCM50, BCM50e with Ethernet router, BCVM50a with ADSL router
- > Add BCM50 Expansion Unit for more capacity
  - Up to 2 Expansion Units supported.
  - Each houses one BCM MBM

### BCM 50 Main Unit

- >max 4 analog trunks
- >max 12 digital stations
- >max 4 analog stations
- >max 32 IP stations
- >max 12 IP trunks
- >3 RJ-45 LAN ports
- >Dedicated OA&M port



### BCM50 Expansion Unit

- >Digital stations
- >Digital trunking
- >Analog trunking
- >Analog stations

### MBMs Supported

- >4x16 Combo
- >ASM8
- >DTM
- >BRI
- >DSM16
- >DSM32
- >DDIM
- >GATM4
- >GATM8

# The Evolution of BCM

- > Hundreds of Telephony features
- > Voice Mail, Unified messaging, Auto Attendant and Customer Controlled Routing
- > Call Center and CTI
- > IP Telephony Stations and Trunks
- > Centralized Management

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BCM 400



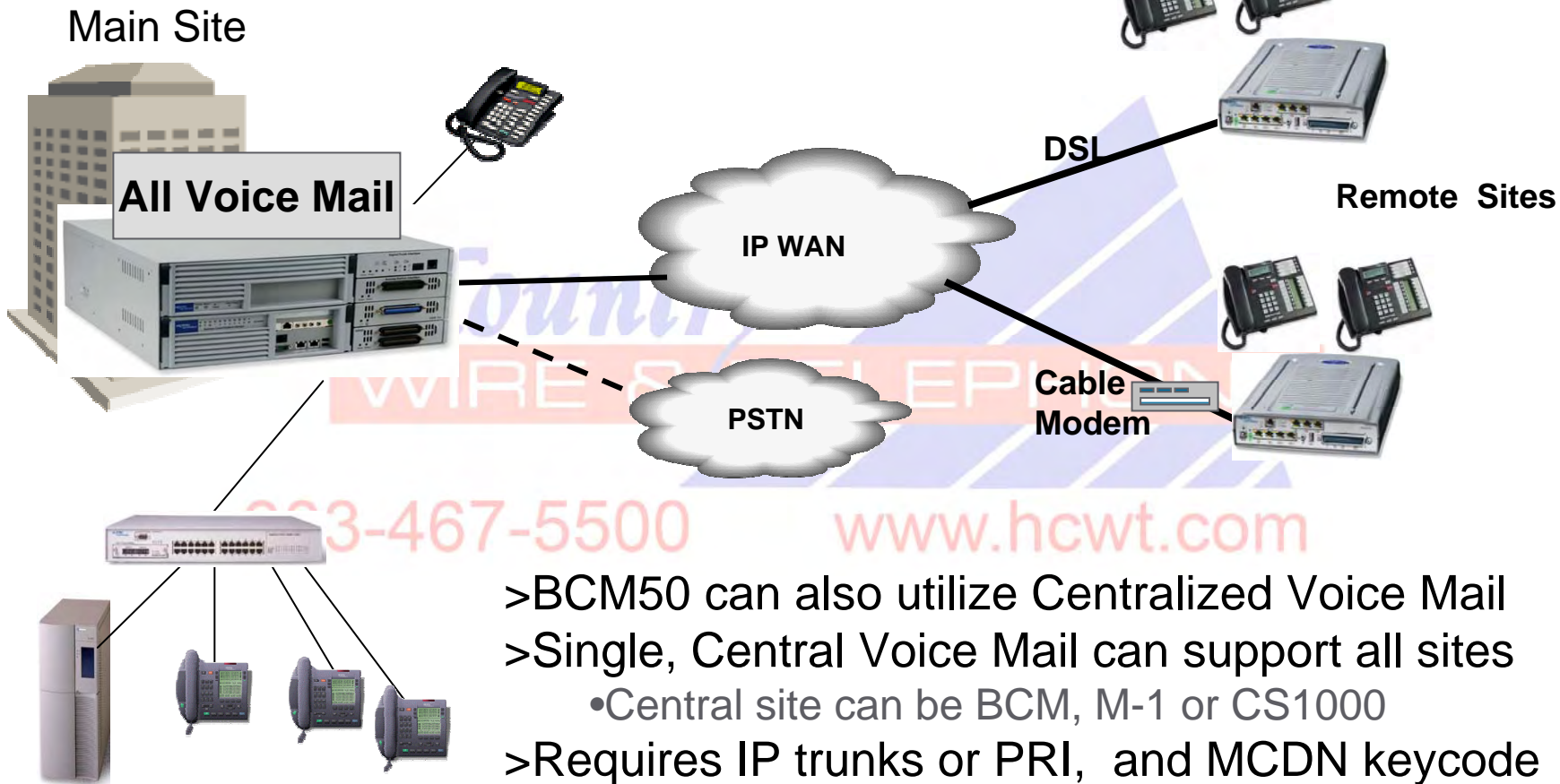
BCM 200



BCM50

**And delivered on a platform for the very small site!**

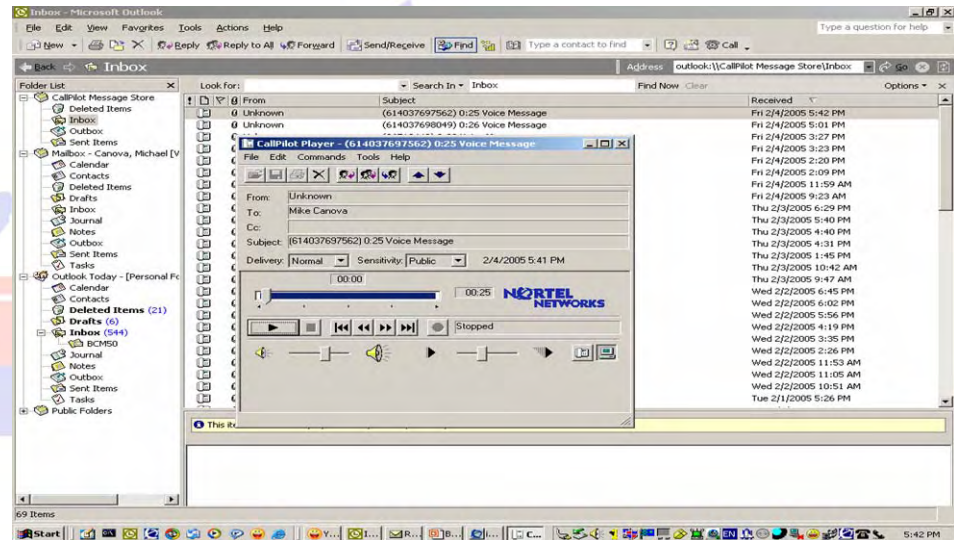
# BCM Voice Processing: Central Voice Mail



- >BCM50 can also utilize Centralized Voice Mail
- >Single, Central Voice Mail can support all sites
  - Central site can be BCM, M-1 or CS1000
- >Requires IP trunks or PRI, and MCDN keycode
- >Full Functionality
  - Message Waiting,
  - Personal greetings
  - Dial pad commands

# BCM Voice Processing: Unified Messaging

- > Voice mail msg's displayed in email application
- > Can view and select based on header info
- > Listen to message through PC or set
- > Does not impact e-mail server
- > Optional keycode to enable
- > Optional Fax Messaging keycode also available



## > Supported on

- Microsoft Outlook 2000
- Microsoft Outlook 98 in corporate mode
- Novell Groupwise 5.5
- Lotus Notes 4.5, 4.6, and 5.0
- Qualcomm Eudora Pro 4.02, 4.2

# BCM50 Voice Processing

- > BCM50 includes a sophisticated voice mail engine, including: 10 ports, 100 hours, up to 1000 mailboxes,
  - One Mailbox comes standard (System);
  - Enable Keycodes to add additional Voice Mail boxes as required
  - “Informational” mail boxes free
- > BCM50 Voice Mail is “Full” featured (*not “voice mail lite”*)
- > Integrated Softkey support – Easy to use
- > Features available from mailbox include:
  - Multiple Greetings; Off Premise Notification; External transfer from mailbox; 3 ext. per mailbox; Personalized greetings (3) by CLID; Interrupt a call; Record a call with warning; Park and Page from mailbox;
- > Unified Messaging integrates Voice messaging into e-mail interface
- > Voice Mail networking (VPIM and AMIS) supported via keycode

# BCM Voice Processing

- > Auto Attendant (4 greeting tables) with time of day, day of week greetings and routing, 100 greetings, CLID routing,
  - Dial by name and dial by number directory
  - Call Screening lets you know who is calling
  - Fax switch standard (detects incoming fax and routes to fax machine)
  - Holiday greetings
- > BCM50 can support Multiple languages: Any 2 of:
  - English-NA, English-Canadian, French-Canadian, Spanish-NA, Norwegian, Swedish, Dutch, English UK, Danish, Portuguese-Brazilian, English-Australian, Italian, German, French-Euro, Spanish-Euro, Hebrew, Arabic, Russian, Cantonese, Mandarin-Taiwan, Mandarin-Chinese
- > Custom Controlled Routing (8 trees, each tree can be 8 wide X 10 deep)
  - Menus, Mailbox, Internal/External Transfer, Park and Page,
- > Reports on mailbox, CCR, port usage, etc.

# BCM50 Telephones: Digital Telephone Portfolio

## > T7100

- Programmable Memory button and a 16-character display



T7100

## > T7208

- Eight memory buttons and a 16-character display



T7208

## > T7316E

- Full-featured, expandable, multi-line, with 3 context sensitive soft keys



T7316E

## > T7316E + T24 Central Answering Position

- Centralizes and efficiently distributes calls



## > Norstar (M7000 Series sets) also supported

## > T7406 Cordless

- 2 base stations per system
- 3 handsets per base stations
- Each handset requires 1 digital station port



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# BCM50 Telephones: IP Telephone Portfolio

BCM supports a full range of flexible IP client solutions, including:

>IP Phone 2001    >IP Phone 2002    >IP Phone 2004    >2050 Software Phone



Single Line



4 button



6 button



6 button

>Up to 32 IP telephones supported

- DCHP server included for ease of IP set deployment

>LAN switch with QoS necessary for quality voice

- Baystack 460 supports Power over Ethernet (POE)-no set transformer needed
- Baystack 325 is economical non-POE alternative

# Traditional Voice + VoIP



- > Complete telephony feature set from BCM 3.6
  - All legacy digital telephone sets!
  - Investment protection for existing Norstar and BCM customers



- > 3 x 10/100 Ethernet LAN ports

- > Up to 32 IP telephones

- IP Phones 2004, 2002 and 2001
- Software Phone 2050
- DHCP server included for management of IP sets



- > Up to 12 IP trunks

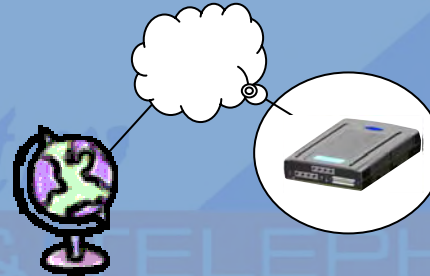
- H.323 V4
- Internal H.323 routing table or external gatekeeper
- G711 A law, G729,A,B
- T.38 fax
- G.168 echo cancellation

# BCM50 with Integrated Router



- > BCM50 without router
- > BCM50e with Ethernet Router
  - based on VPN Router 221 (Contivity 221)
- > BCM50a with ADSL Router (annex a)
  - based on VPN Router 251 (Contivity 251)
- > Both router models support
  - IP Sec VPN (5 tunnels) with Triple DES encryption
  - firewall with content blocking
  - DHCP and NAT

## Internet Access



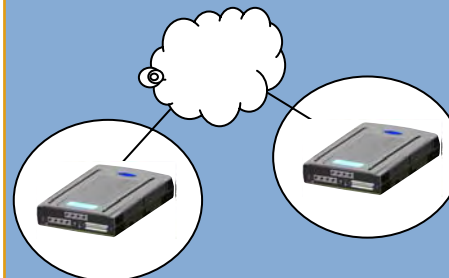
## Wide Area VoIP Solutions

- Remote users, Network Access

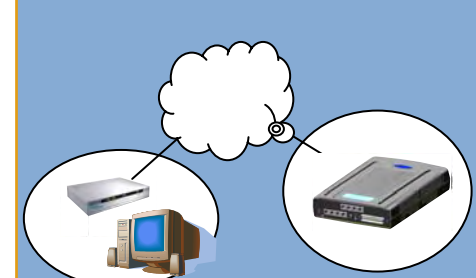


## Multisite

- Secure VPN Capable



## Remote Management

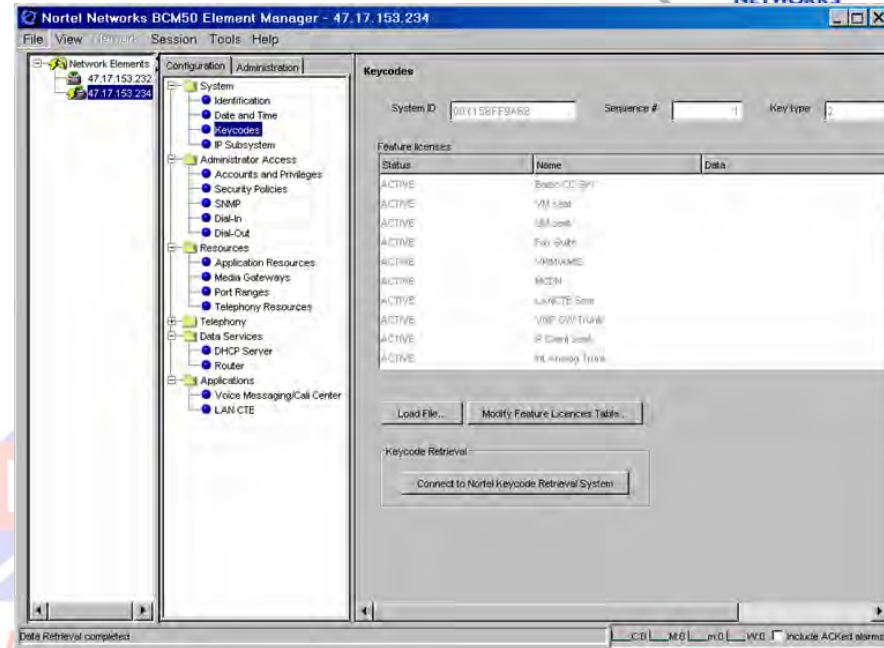


**Positioning: Broadband (vs. WAN) VPN Router specifically targeted at SMB solution requirements**

# BCM50 Management Interface – Element Manager



- > Simplification
  - New client based application
- > Ease of installation
  - Reduced clicks to perform tasks
  - More information displayed per page
  - Can save or print out customer records
- > Norstar set based administration option
  - Can program through the telephone keypad and soft keys
- > Remote dial up management through a flexible internal soft modem
  - Do not need dedicated line for modem
- > Multi-system management using Network Configurations Manager



# BCM50 Element Manager Example

The screenshot shows the 'All DNs' table with the following data:

DN	Global	Name	Phone Line	Subscription	Context Code	First Display	Auto Called ID
231	Global	231	02	040	231	Name	<input type="checkbox"/>
232	Global	232	02	040	231	Name	<input checked="" type="checkbox"/>
233	Global	233	02	040	231	Name	<input type="checkbox"/>
234	Global	234	02	040	231	Name	<input type="checkbox"/>
235	Global	235	02	040	231	Name	<input type="checkbox"/>
236	Global	236	02	040	231	Name	<input type="checkbox"/>
237	Global	237	02	040	231	Name	<input type="checkbox"/>
238	Global	238	02	040	231	Name	<input type="checkbox"/>
239	Global	239	02	040	231	Name	<input type="checkbox"/>
240	Global	240	02	040	231	Name	<input type="checkbox"/>
241	Global	241	02	040	231	Name	<input type="checkbox"/>
242	Global	242	02	040	231	Name	<input type="checkbox"/>
243	Global	243	02	040	231	Name	<input type="checkbox"/>
244	Global	244	02	040	231	Name	<input type="checkbox"/>

The 'Details for DN 232' section shows a phone image and the following configuration:

- DN: 232
- Global: Global
- Phone Line: 02
- Subscription: 040
- Context Code: 231
- First Display: Name
- Auto Called ID:

# BCM50 Call Center

- > BCM50 supports up to 10 agents logged in at a time;
  - 20 total registered agents
- > 2 Skillsets supported, 20 routing steps per skill set,
- > Recorded Announcements Greetings (30) built in
  - Shares 10 channels with Voice Mail
- > Queuing, Overflow, Call priority, Supervisor with Help, Silent monitor
- > Expected Wait times (5 tables)
- > Call Center is enabled via optional Keycode
- > CTI (LAN CTE) for Screen Pops and Outdialing (optional Keycode)