Network Computing Request for Information: **VoIP System**
Publication Date: **June 24, 2004**

## I. Introduction

Network Computing's June 24, 2004 cover package will be devoted to the state of VoIP for smaller companies. Why should a 200-employee company buy your VoIP system rather than outsourcing its telecom needs? We're basing our analysis on a fictional 180-employee insurer that is moving into new offices (details below). If you would like to participate, please RSVP to the author, Peter Morrissey, by March 26, 2004, and return completed RFI to Peter by April 14.

### A. Purpose

This Request for Information is proprietary to Network Computing and CMP Media, LLC. It is drafted and disseminated for the sole purpose of generating information on VoIP products for publication in Network Computing on June 24, 2004. Participating vendors must meet the minimum requirements for participation and agree that any information returned to Network Computing in response to this RFI will be published in print and electronic form on our Web site, www.networkcomputing.com.

### B. Instructions

The following minimum requirements are essential to participate in this review. Please check all that apply.

**Please note:** Products proposed in this RFI **MUST** be shipping at time of your response. No beta products, please. We reserve the right to examine a test unit (either in our lab or at a customer site) of any product submitted.

___ System must support a minimum of 220 Ethernet-attached IP phones (180 employees plus room to grow. Please list maximum number of phones supported.)
___ All phones must support 802.3af
___ All phones must have two, 100 megabit ports
___ All phones must support 802.3q/p and either DiffServ- or TOS-based QOS
___ All responses must include Unified Messaging support
___ All responses must include ACD support
___ All responses must include Presence support
___ All responses must include support for Telecommuters

**If you do not meet all of these criteria, your product does not meet the minimum qualifications for this review. Please RSVP to Peter Morrissey (pmorrissey@nwc.com, 315-443-2575). Thank you for your consideration.**

If you respond to the RFI, please note the dates in Section C to complete the RFI on time for inclusion in our June 24, 2004 issue. We suggest you read through the entire RFI before answering questions. You can reference answers to other questions in the RFI using the section and question number. Please do not reference materials outside the RFI; incorporate them into your answers. This RFI will be the **only** source used to compare the participating products.

Questions provide for Yes/No checkbox answers. In addition, some questions require more detail using an essay format. **Essay-type questions include word-count limits. Any responses submitted beyond the limit may be disqualified**.

Please answer all questions as this information is the foundation on which we determine the winning bid and our Editor's Choice Award. If you have questions, please contact Peter Morrissey.

**C. Effective Dates**

RFI Issue Date: March 12, 2004
RSVP Deadline: Postmarked by March 26, 2004
**RFI Deadline: Postmarked by April 14, 2004**
Publication Date: June 24, 2004

**II. Business Overview**

HaveNoFear Insurance LLC insures the makers of reality television programs, including everything from Fear Factor to Candid Camera. The growing reality TV media phenomenon requires insurance due to the dangerous, high-risk activities that make these shows so popular. The likelihood of a lawsuit from a stunt gone wrong, or mental abuse and humiliation from another contestant or panelist is high. As a result, insuring the sponsors, producers and staff of these shows has become a high-growth area. HaveNoFear is growing quickly, but also faces stiff competition. As a result, actuaries, risk managers, loss control engineers, underwriters and legal counsel must work together to efficiently set premiums for new shows, sometimes on a stunt-by-stunt basis, while keeping the company's costs down. Case managers, customer service reps and claims adjusters have to work together to resolve claims in a timely manner.

The company plans to move its staff of 180 employees to larger headquarters and will require a new phone system. Upon occupying the building, HNF IT will install a high-bandwidth, high-quality LAN that will not be part of this RFI. While there are no satellite offices, about 20 employees telecommute from home, and 30 additional employees have offices at headquarters but also travel extensively and telecommute from home occasionally.

The company is seeking basic, reliable, cost-effective communications, but it is also interested in improving efficiency of staff interactions and optimizing business processes. Aside from traditional phone service, provided cost-effectively via VoIP, HNF is also interested in applications such as presence and unified messaging. The company hopes this new system will give it a competitive edge against larger, more well-established insurers who are increasingly attracted to the lucrative business of insuring those associated with reality TV.

**III. HNF Business Essentials**

A. Total employees: 180
B. Number working remotely: 50
C. Existing network infrastructure:

The network infrastructure will be LAN-based with Layer 2 and Layer 3 QoS enabled. There will be 100 megabit connections to desktops with 802.3af PoE support. A gigabit backbone will connect to the rest of the network. Assume that the network is more than adequate to support VoIP applications.

## IV. Goals

The company hopes to keep costs low and improve productivity and its ability to compete.

## V. Business Objectives

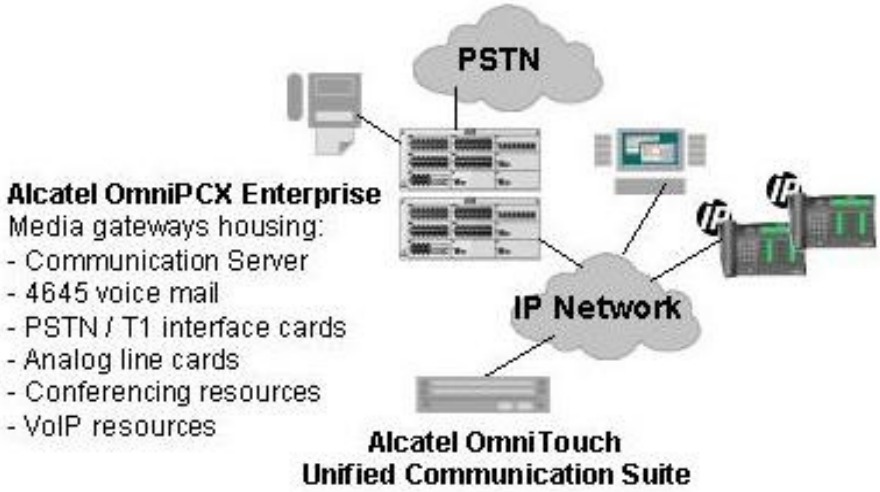
A. Improve internal communications
B. React quickly to new business prospects
C. Provide excellent customer support
D. Control costs

## VI. Review Criteria:

**The proposed solutions will be graded on the following criteria:**

### A. General Architecture

1. Provide a diagram of the major hardware and software components and how they are connected.




2. Provide the business case for your selection based on HaveNoFear's goals, objectives and business environment. You are free to include a competitive analysis. Please limit your answer to 500 words or fewer.

Alcatel is pleased to make the following proposal to HNF Insurance LLC in response to their requirements for an IP telephony system. We are proposing the Alcatel OmniPCX Enterprise IP communication system with Alcatel e-Reflexes IP telephones and the

OmniTouch Unified Communication suite. The OmniPCX Enterprise system is comprised of a core Communication Server software application running on a Linux-based call processing server supporting IP phones and a set of media gateways housing the various required applications, resources and legacy public network connections. The OmniTouch Unified Communication suite is a consistent set of standards-based (XML, SIP, VxML, J2EE, IMAP, etc.) applications providing softphone, team collaboration, personal routing and unified messaging services, accessible from anywhere on any device.

In this proposal, HNF will see the many benefits of our unique solution, including:

- A Linux-based Communication Server software application supporting IP phones in a true client / server architecture and providing them with over 500 features.
- A comprehensive, consistent suite of standards-based unified communication tools to enhance the accessibility and collaboration capabilities of HFN employees, regardless of their location.
- Support for wide range of IP endpoints tailored to meet the various user requirements and profiles of the HNF staff, from our executive-level and business-class IP phones to standards-based support (SIP and H.323) for third party devices.
- A standards-based approach with native support for standards such as SIP, XML, LDAP, TCP/IP, CSTA, Q-SIG, 802.3af (in-line power), 802.3 p/Q and TOS/DiffServ (QoS).

Alcatel brings with it a long legacy of voice expertise, having been in telecommunications for over 100 years with a global installed base of over 500,000 customers in 130 countries. In addition, our world-class channel partners bring a wealth of knowledge and expertise in the sale and support of IP communications solutions.

**B. Phones**

**Basic phones for most employees**. (These phones should be as low cost as possible while still containing required features)

1. Model of phone proposed: *Alcatel Premium 4020IP e-Reflexes*

2. Pricing per 100 phones including software licenses:
*$ 29,900.00 HW plus $16,430 user licenses USPL*

3. Insert picture of phone here:

4. Please verify support for the following required features:
X 802.3af
X Two 100-megabit ports
X 802.3q/p and either DiffServ- or TOS-based QOS

5. Please check features tied to hard key:

X Call transfer

X Call forwarding
X Call hold
X Volume control buttons

6. Please check additional features supported:

X Calling number & name on display
X Message-waiting indicator
__Backlit display
__Tiltable screen

7. Please fill in quantity:

Number of call appearances: up to 12
Number of bridged appearances: up to 12
Number of programmable keys: up to 12
Size of display: 1 by 20 characters

8. List codecs available: G.711, G.729A, G723.1

9. List codecs available with Voice Activity Detection/Silence Suppression: G.729A, G723.1

**2. Executive phones:**

1. List model of phone proposed: *Alcatel Advanced 4035IP e-Reflexes*

2. Pricing per 100 phones including software licenses:
*$ 39,900.00 HW + $16,430 user licenses USPL*

3. Insert picture of phone here:

4. Please verify support for the following required features:
X 802.3af
X Two 100 megabit ports
X 802.3q/p and either DiffServ- or TOS-based QOS

5. Please check features tied to hard key:

X Call transfer
X Call forwarding
X Call hold
X Volume control buttons

6. Please check additional features supported:

X Calling number & name on display
X Message-waiting indicator
__Backlit display

__Tiltable screen

7. Please fill in quantity:

Number of call appearances: up to 24
Number of bridged appearances: up to 24
Number of programmable keys: up to 69
Size of display: 2 by 40 characters

8. List codecs available: G.711, G.729A, G723.1

9. List codecs available with Voice Activity Detection/Silence Suppression: G.729A, G723.1

**3. Attendant Consoles:**

1. List model of phone proposed: *Alcatel Advanced 4035IP e-Reflexes*

2. Pricing for two phones including software licenses: *$ 1126 USPL (HW + user licenses)*

3. Insert picture of phone here:

4 Please verify support for the following required features:
X 802.3af
X Two 100-megabit ports
X 802.3q/p and either DiffServ- or TOS-based QOS

5. Please check features tied to hard key:

X Call transfer
X Call forwarding
X Call hold
X Volume control buttons

6. Please check additional features supported:

X Calling number & name on display
X Message waiting indicator
__Backlit display
__Tiltable screen
X Direct trunk selection
X Incoming trunk display

7. Please fill in quantity:

Number of call appearances: up to 24
Number of bridged appearances: up to 24
Number of programmable keys: up to 69

Size of display: 2 by 40 characters

8. List codecs available: G.711, G.729A, G723.1

9. List codecs available with Voice Activity Detection/Silence Suppression: G.729A, G723.1

**4. Conference phones:**

List model of phone proposed: ____Polycom SoundStation IP 3000 conferencing unit (third-party provided)__

Pricing for five phones including software licenses:___$4995 HW + $822 user licenses USPL

Insert picture of phone here:

Describe major features of conference phone: Limit answer to 100 words.

Full-featured, easy-to-use conferencing tool:

- Graphical display with intuitive User Interface
- Built in phonebook for quick access to frequently dialed numbers

Easy Network management:

- SoundStation IP 3000 automatically checks and downloads configuration changes to update and upgrade seamlessly, effortlessly, and without disruption
- Manage the phone remotely using a standard Web browser

Protect your investment:

- Field upgradeable to enable new features and applications

Standards based communications:

- Supports H.323 ensuring a high degree of interoperability

5. Describe how software images are updated on phones in order to minimize management costs and disruption to end users. Maximum of 100 words.

Software images are automatically updated on system phones via TFTP when they are first installed and whenever a new software binary detected (e.g., system software is upgraded).

Provide the business case for your phone selection based on HaveNoFear's goals, objectives, and business environment. Please limit your answer to 100 words.

The e-Reflexes telephones meet the needs identified by HNF at an optimized price for each user profile identified.

**C. PBX**

Pricing for PBX with the following capacities and features checked below:

300 IP phones
50 telecommuters
10 analog fax lines
48 Inbound digital trunks with DID support
35 Outbound digital trunks

1. PBX Model: *Alcatel OmniPCX Enterprise R 5.1.2*
2. PBX Price: *$29,656 USPL*

3. Describe high- availability and redundancy features. Limit answer to 200 words:

4. Check the following features that are supported in the proposed system:

X Authorization codes
X Automatic callback
X Add-on conference
X Call waiting
X Paging
X Hoteling
X Automatic camp-on
X Automatic alternate routing
X Trunk callback queuing
X Uniform dial plan
X Night service
X E911 Support
X Class of service
X Class of restriction
X Intercom groups
X Group paging
X Directed call pickup
X Group call pickup
X Distinctive ring

5. Provide the business case for your selection based on HaveNoFear's goals, objectives, and business environment. You are free to include a competitive analysis. Limit response to 300 words.

**D. Telecommuting:**

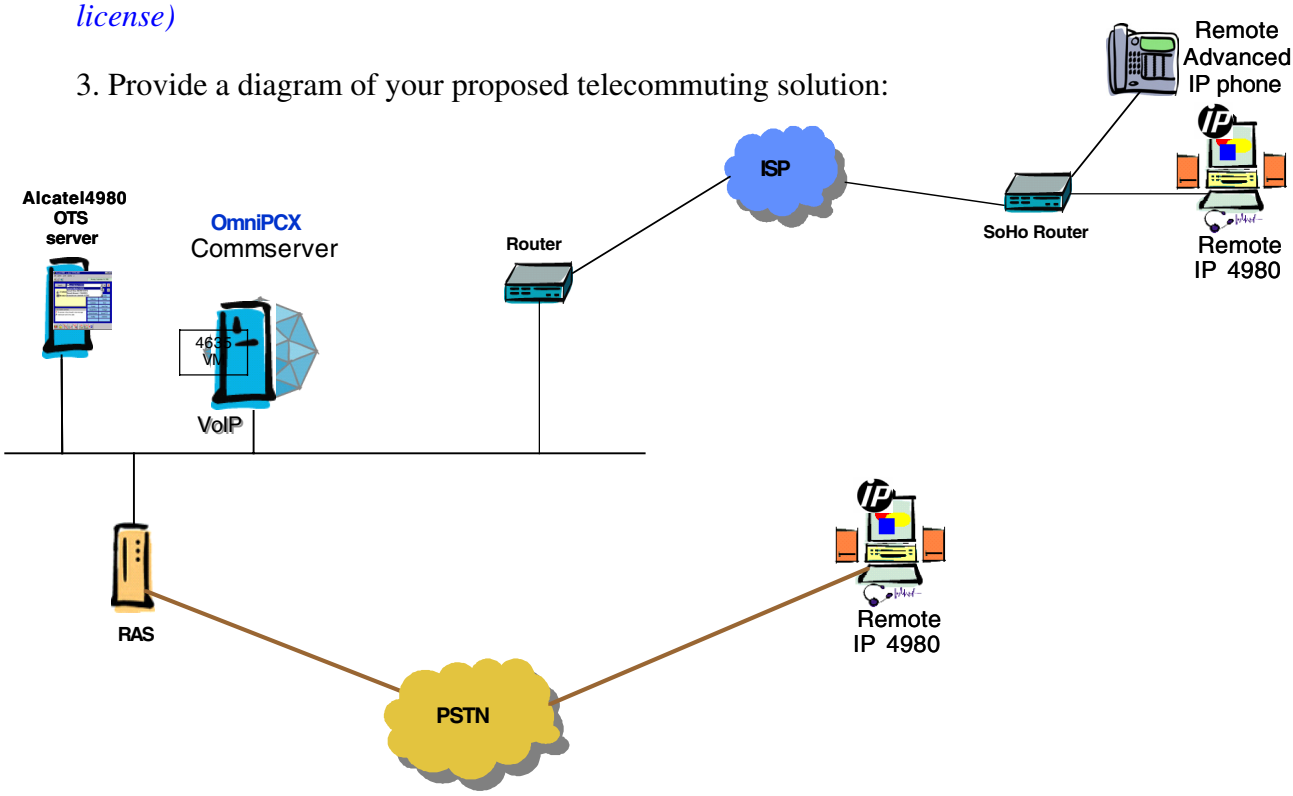
Currently there are 20 employees who live in the area and want to telecommute from home via their broadband connections. The company wants to provide the flexibility for those in the call center to be able to work from home in a seamless manner. There will

also be 30 additional telecommuters who also have office phones but spend a majority of their time on the road.

1. Provide name of telecommuting product: *Alcatel 4980 Softphone*

2. Provide per employee price for telecommuting product: *$ 279 USPL (including user license)*

3. Provide a diagram of your proposed telecommuting solution:




4. Describe how you provide this in a secure, functional environment. Limit response to 150 words.
The Alcatel telecommuter solution is standards-based, so if fits into the customer's existing remote access security framework, e.g., VPNs, SecureID, SSH/SSL, etc.

**E. Presence:**

The second set of telecommuters mentioned above will need to be accessed as quickly as possible. There are also numerous other groups of individuals within the company who need to access each other at a moment's notice. The company would like the option of knowing the availability information of individuals, or groups of individuals, who can quickly be consulted or patched into a call to address problems via office phone, telecommuting phone, cell phone, IM or e-mail.

1. Indicate the product name or feature that provides this option:_Alcatel OmniTouch Unified Communication My Phone and My Assistant applications.

2. Provide the price for this feature per 100 users: My Phone 4980 = $11,500; My Assistant = $6,000 USPL; User licenses = $16,430

3. Describe the hardware/software platform and requirements. The Alcatel OmniTouch Unified Communication suite is a set of standards-based (SIP, XML, VxML) applications that run on an Alcatel-provided J2EE application server on an industry-standard Linux-based server platform. This connects to the OmniPCX Enterprise IP-PBX via SIP and CSTA/XML to provide access to its services and features. Users will be equipped with the My Phone 4980 client application. Mobile users will also have access to the My Phone web softphone, which provides web-based access to a scaled down feature set of the 4980 option. Users may also have access to the My Assistant application to dynamically route calls to their preferred location based on who the caller is, time of day and calendar status.

4. List the features available:

My Phone:

- Intuitive GUI access to multi-line call handling and full feature-set of the OmniPCX Enterprise
- Web-based softphone access to a standard set of telephony features
- Softphone may be dynamically associated with any telephone (e.g., office, cell or home) or used in VoIP mode on a multi-media PC
- Groupware toolbar, providing calendar sharing, presence information, one-click dial capabilities and note-sending between team members
- Groupware toolbar may be integrated with Lotus Notes
- Integrates with Netmeeting to provide video, whiteboard, form sharing and chat capabilities

My Assistant:

- Personal routing / find-me application
- Allows user to specify:
    - Location at which to be reached (e.g., office, cell or home)
    - Callers allowed (e.g., VIP, none, all)
    - Times specific callers are allowed (e.g., manager is VIP during office hours only)
- Routing rules set up via web or telephone access
- May be integrated with Outlook or Notes for dynamic synchronization with agenda, e.g., automatic do-not-disturb during meetings.

5. Describe how a user updates his or her own presence, for example, the application and rules available.

The users may specify presence (i.e. availability status) using the 4980 groupware feature. The My Phone 4980 may also be integrated with Lotus Notes, in which case presence status may be dynamically linked to Notes calendar status.

6. List enterprise IM products supported that will display presence information

Presence information is shared between users using the My Phone 4980 softphone client; in a future release of the OmniTouch Unified Communication suite, Alcatel will support the interworking of presence information with standards-based presence servers.

Another alternative, if interworking with standard enterprise IM products is a high priority, would be for employees to use the Microsoft Messenger SIP client as their softphone client. The OmniPCX Enterprise natively supports SIP clients, so users would have access to IM/presence from the Microsoft Messenger client as well as access to telephony features and network resources of the OmniPCX Enterprise.

7. List phones that will reveal presence information, and describe the presence information that they will reveal to presence application. Limit description to 100 words.

Presence information is supported today using the My Phone 4980 softphone client.

8. List desktop applications that reveal desktop presence, and how presence is monitored and revealed. For example, keystroke monitoring, application usage monitoring.

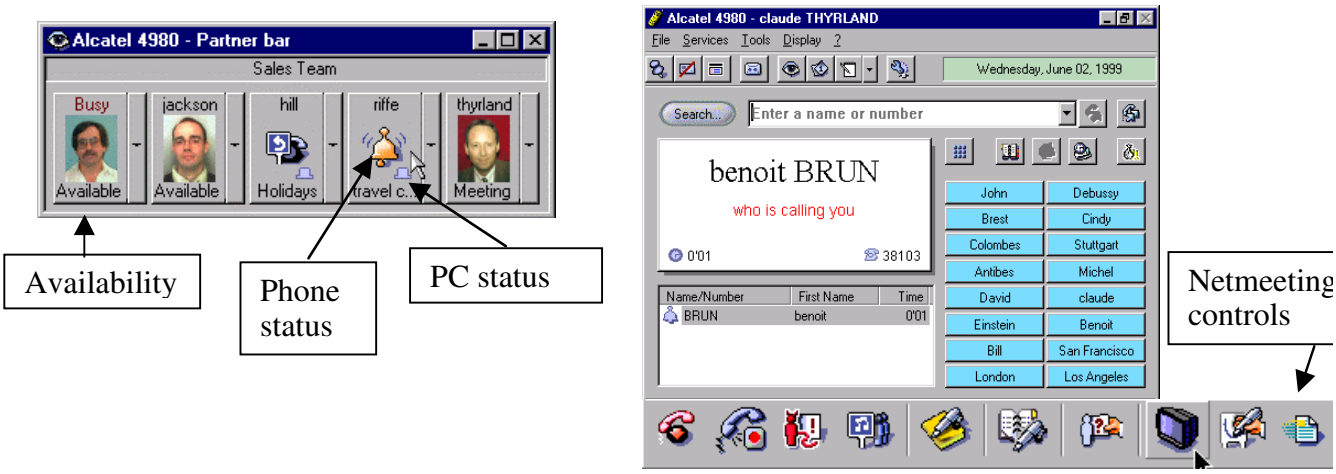
Users of the My Phone 4980 client will have access to the presence information for other My Phone 4980 users in their work-group. Groups may be established to publish and receive presence information of all group members. The following types of presence are indicated:

- Telephony presence (I.e., on-hook / off-hook status)
- Availability status (local calendar or maybe integrated with Lotus Notes)
- PC status – log-in and keystroke/activity status

9. List groupware/calendaring systems that support user-driven status updates and describe their level of integration.

The My Phone 4980 client may be integrated with Lotus Notes to provide dynamic calendar-based presence updates.

10. Provide screenshot of presence client interface.




11. Provide the business case for your selection based on HaveNoFear's goals, objectives, and business environment. You are free to include a competitive analysis. Limit response to 300 words

The Alcatel OmniTouch Unified Communication solution is perfectly suited to meet the needs of the HNF employees to enhance their collaboration capabilities. The My Phone 4980 client provides the ability to set up teams of employees, whether they are full-time

in the office, on the road or full-time telecommuters. With the Groupware toolbar, team members have constant access to a variety of information about the availability of their co-workers. Users can instantly view the status of teammates to make decisions on whom to call or transfer callers to, pass instant messages and reach teammates with a single click. With the My Assistant feature, mobile employees are in control of how and by whom they are reached and can stay constantly in contact with other employees regardless of their location.

**F. Conference Calls**

Currently the company rents a conference bridge for conference calls. It would like three simultaneous conference bridges with 6 participants each.
Please describe the features and limitations of your system, including additional cost if necessary, which will allow the company to set up calls with one call-in number that will include external participants.

1. Indicate the product name or feature that provides this option:_ "Add-on conference", an integrated feature of the Alcatel OmniPCX Enterprise system.

2. Provide the per user price for this feature: $3055 USPL (price for hardware supporting up to 3 simultaneous 29-party conferences)

3. Describe how conference calls are set up and reserved. Limit response to 100 words.
The Alcatel OmniPCX Enterprise supports up to 29-party conference calls using resources in a media gateway. These conference calls may be set up from the telephone in either a meet-me mode or in a mastered mode, where the conference leader dials out to the participants. In a future release (September 2004), the Alcatel OmniTouch Unified Communication suite will a support SIP- and web-based tool to set up multi-media conferencing and collaboration sessions.

**G. Voice Mail**

Approximately 50 hours of voicemail for 220 employees is requested. Please indicate the per user price of the voicemail and the maximum hours allowed.

1. Indicate the product name or feature that provides this option: Alcatel OmniMessage 4645 voice mail system

2. Provide the per user price for this feature plus maximum per user hours: *$14,896 USPL (sized to support up to 250 users)*

**H. Unified Messaging**

Employees rely on voicemail and e-mail for communications. HNF would like to simplify the process of retrieving voicemail and possibly provide more flexibility in retrieving e-mail. For this reason the company is investigating the possibility of integrating its voicemail system with a future new e-mail system. Please indicate which of the following features are supported:

1. Indicate the product name or feature that provides this option: OmniTouch Unified Communication My Messaging

2. Provide the price for this feature or product per 100 employees:__$13,679 USPL (including VxML voice access)

3. Check all the features provided in the quoted product:

_X Read voicemail messages from e-mail
_X Caller ID information provided in header of e-mail
_X Delete voicemail messages on voicemail system from e-mail
_X Listen to e-mail messages from phone
_X Delete e-mail from phone
_X Forward e-mail messages from phone
_X Forward e-mail messages from phone with comments

4. Describe any IVR or speech recognition capabilities that add value to the product. Limit response to 100 words.
The My Messaging application also includes a VxML Automated Attendant function to improve the company greeting for external callers. This Automated Attendant application provides self-service functions as well as:
- Company greetings (VxML or Wav)
- Call transfer (by dialing number, by name, to mail box, etc.)
- Language selection
- Transfer to human attendant (operator)

It includes a unique web based configuration tool to easily set up the company welcome rules.
Speech recognition capabilities will be supported in a future release.

5. List the e-mail packages that support the unified messaging feature
Exchange 2000, Exchange 2003, Domino5.x, Domino 6.x and any IMAP4 e-mail servers

6. Provide additional comments as necessary. Limit comments to 100 words.
My Messaging application is a true VxML Unified Messaging application providing a single message store.

**I. Application Integration**

HNF is open to the possibility of realizing gains by integrating its phone system with business applications. The company will be investing upgrades to its business apps in the near future. It is currently interested in exploring the possibilities for integrating these apps with their VoIP system.

1. Please list the business applications that will integrate with your system, along with a brief summary.

Alcatel partners with numerous application developers through the Alcatel Application Partner Program. See the following web-site for more information:

http://www.applicationspartner.alcatel.com/

We are currently launching an XML Developers Forum within the AAPP to specifically partner with software companies around our XML interfaces.

2. List the software vendors not mentioned above with which you have established partnerships: See above.

3. Provide additional comments about the current or planned business value of support for third party integration. Limit response to 100 words.

The Alcatel OmniPCX Enterprise and the OmniTouch Unified Communication suite support a number of open interfaces for third-party application integration, both traditional CTI standards, such as CSTA, as well as XML-based application programming interfaces.

XML and Web services are the corner stones that allow the integration of communication applications or services within business applications and processes with the lowest possible integration cost. Alcatel has designed its Enterprise solutions especially for XML and web services integration.

Alcatel offers a new comprehensive set of XML APIs and Web services. Through XML APIs and Web services, telephony services of our IP Telephony communication server, the Alcatel OmniPCX Enterprise, and Unified Communication services of our Unified Communication software suite, the Alcatel OmniTouch Unified Communication suite, can be integrated with any business application to seamlessly incorporate communication services into business processes.

Using the XML APIs, general web developers with no specific CTI training are easily able to integrate telephony and unified communications capabilities into business applications and web portals.

**J. Business Summary (Optional)**

You may use this section to summarize the business value that you are providing that you were not able to cover in any of the above sections. You may also use it to make additional recommendations or comments on the RFI. Limit your answer to 200 words.

HNF Insurance LLC is a perfect candidate for an Alcatel IP communication system, since they are in a greenfield deployment environment and have a large percentage of their staff that is out of the office and / or mobile. Alcatel's solution will provide the following primary business benefits:

- Maximized ROI – Alcatel offers a very flexible system design approach, with a single software supporting a wide range of mix and match hardware options, allowing for an minimized initial capital expenditure; IP telephony will provide a high degree of capabilities and accessibility to remote workers with centralized management, thus minimizing operating expenses; Alcatel's highly secure, Linux-based system ensures that HNF does not suffer system downtime due to security breaches or attacks.

- Enhanced employee efficiency – Alcatel's broad range of employee desktop and mobile communications tools, including the IP Touch application phones and the OmniTouch Unified Communication suite, ensure that each employee will have the right tools available to access the types of communications services required for optimal efficiency in their job.
- Enhanced customer satisfaction – Keeping all employees in constant touch ensures that responses to customer inquiries will be handled as quickly as possible and keeps business processes moving across the entire company.

**J. Pricing Summary and Totals**
**Please include all costs incurred by HNF in incorporating your system.**

1. Provide pricing summary for sections B – I, by section.

All pricing given in US list price; discount depends on Alcatel Business Partner.

| Section | Summary of product | Total price USPL |
|---|---|---|
| B | • 100 Premium e-Reflexes 4020 IP phones plus user licences<br>• 102 Advanced e-Reflexes 4035 IP phones plus user licenses<br>• 5 Polycom SoundStation IP 3000 Conferencing Units | $109,575 |
| C | • OmniPCX Enterprise R5.1.2 system wired for 300 users + 50 telecommuters<br>  ○ Communication Server hardware and software<br>  ○ Media gateways with PSTN and analog line interfaces | $29,656 |
| D | • OmniTouch Unified Communication My Phone 4980 licenses for 50 users (including user licenses) | $13,950 |
| E | • OmniTouch Unified Communication My Phone 4980 and My Assistant licenses for additional 100 users (including user licenses) | $33,930* |
| F | • Hardware supporting up 3 simultaneous 29-party conferences | $3055 |
| G | • Voicemail system supporting up to 250 users | $14,896 |
| H | • OmniTouch Unified Communication My Messaging licenses for 100 users | $13,679* |
| Total | • OmniPCX Enterprise system equipped for 202 IP phone users and 50 My Phone 4980 softphone users with voicemail and multi-party conferencing (wired for 300 users) | $171,132<br>$679 / equipped user |

* Pricing for E and H excluded from total since they were given as exploratory requirements.

2. Provide all installation costs and maintenance costs
Not available; Alcatel's business partners determine installation and maintenance costs.

**K. Distribution Channel**

1. Is the system purchased through direct sale, resellers, and/or channel partners?
__ Direct sale
__ Resellers
__ Certified Resellers

XX Channel Partners
__ Other. Please explain:

**VII. Vendor Information**

1. How long have you been in business? Over one hundred years

2. What is the size of your organization by number of employees? Over 60,000

3. How long has the product been shipping?
OmniPCX Enterprise: since February 2003
OmniTouch Unified Communication suite: since November 2003
IP Touch phones: will ship in September 2004
e-Reflexes phones: since September 2002
Alcatel OmniMessage 4645: since February 2003

4. Do you provide onsite support for installation and configuration?
Support and installation is provided by our channel partners.

5. In how many cities do you provide onsite support?
In North America, Alcatel has business partners in all major and most second-tier markets. We also have business partners in over 100 other countries.

6. List three enterprises that are currently using the proposed solution.