



Mitel Networks Nupoint Messenger

Technical Overview: *An Evolution
to Unified Messaging*

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Abstract:

While most vendors offer a “forklift strategy” when it comes to deploying Unified Messaging, Mitel Networks’ remains faithful to its commitment to a strategy of Intelligent Evolution. This technical overview describes how customers can leverage their existing NuPoint Messenger investment and deploy Unified Messaging to their users.

A Voice Messaging Legacy that Lives On

Mitel Networks NuPoint Messenger is a carrier grade messaging platform that has a distinguished record of delivering industry-leading features and outstanding stability and reliability. With over 15,000 systems deployed, customers worldwide have helped evolve NuPoint Messenger into a comprehensive solution suite for small to very large distributed enterprises supporting both enterprise and Central Office-based integrations. Though reliability and scalability remain its hallmark, NuPoint Messenger’s versatile application suite has helped to it establish it as *the* messaging solution of choice within a number of vertical market segments including Healthcare, Government, Higher Education, Financial Services and Hospitality.

Since NuPoint Messenger was first brought to market over 18 years ago, it has continually evolved, transforming it into a market leading voice messaging solution. (Over 15,000 installed systems worldwide and leadership market leadership position - Gartner Enterprise Voice Messaging Forecast 2001.) With employees becoming more PC centric, and the increase of mobility and customers teleworking, customers seek a new suite of converged applications referred to as Unified Messaging or Unified Communications. Mitel Networks, with 30 years in leading voice and converged solutions, is committed to supporting its NuPoint Messenger customers in evolving to Unified Messaging through Intelligent Evolution.

Market Trends and Demands: UM without compromise

This overview will not attempt to justify the market need for Unified Messaging – that has been already been done. However, it is important to acknowledge that the recent technologies of the Internet, PCs and cell phones have dramatically changed the way we communicate. The networks within and between organizations have undergone major upgrades providing connectivity and bandwidth that allows voice and data to be shared. Though we have seen great benefits from these technology enhancements, users are now confronted with the problem of trying to manage the volume and pace of communications – hence the need for Unified Messaging.

There are a variety of industry and customer definitions for Unified Messaging. For the purpose of this paper, Unified Messaging is ***“the ability to access and manage voice, fax and email messages through a single interface.”*** That interface may be a telephone, an email client application, a PDA or a web browser application.

While the market has generally accepted that Unified Messaging is needed, many messaging vendors have failed to acknowledge customers' investment in their current voicemail and email infrastructures. These customers have no intention of "throwing it all away". In many instances, UM vendors can only offer customers total replacement strategies that will fail to leverage the current capital investment and often come with compromise. When new markets open, new market entrants appear offering "new" platforms with cutting edge technology, but they often fail to deliver on baseline system features. These new platforms usually offer a variety of open standards, but fail to deliver on the reliability customers have come to expect. Market feedback has been consistent- customers want to build on what they have; and they want to evolve their current voice messaging infrastructure.

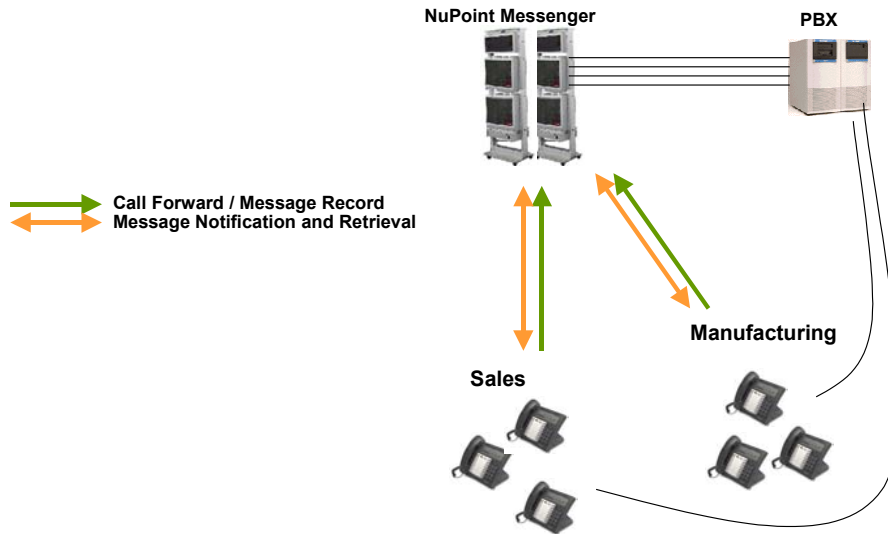
The following will identify how Mitel Networks' approach to Unified Messaging is unique. This approach ensures customers not only extend the financial investment they have made in NuPoint Messenger, but allows them to retain the system performance and business applications that they expect – without compromise.

NuPoint Messenger – Unified Messaging: How It Works

Today, thousands of organizations run their voice processing applications on NuPoint Messenger. These companies have built up databases with user accounts, class of service templates, system wide distribution lists, auto attendant and call routing menu structures, self-service based information access systems - all on a highly reliable platform that provides 24X7 service, 365 days per year. User requirements within these companies are changing with emerging needs within some workgroups and departments for unified messaging. The next section will describe how to deploy Unified Messaging into a current NuPoint Messenger solution.

Existing NuPoint Deployment

The following diagram depicts a scenario of an existing NuPoint Messenger deployment. For the sake of simplicity, this example organization only has 2 departments, sales and manufacturing.



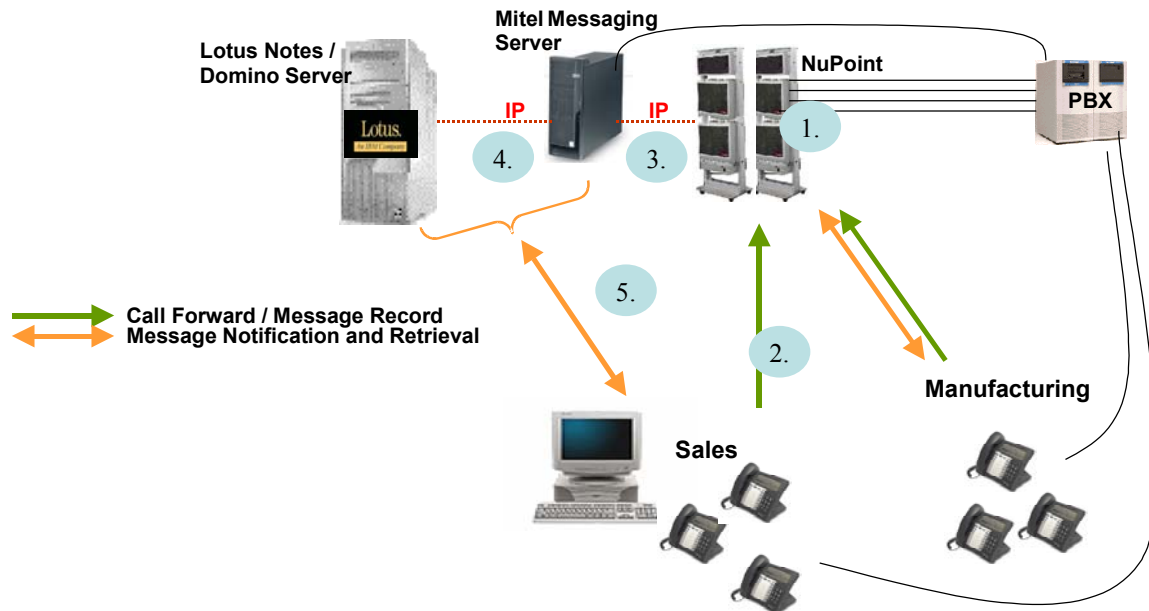
In this example, the NuPoint Messenger answers incoming calls, processes auto attendant (Call Agent) rules, records voice messages, initiates new message notification rules and is used by all users (manufacturing and sales) for message retrieval.

Planned UM Deployment

While the company relies on their NuPoint Messenger, 20% of their employees, (sales) would see significant benefits if they had Unified Messaging. The company is not willing to replace their NuPoint Messenger because it continues to serve their business needs and replacing it would entail significant capital investment.

With Mitel Networks, this customer can continue to leverage their NuPoint Messenger while providing Unified Messaging to the sales department using the Mitel Networks Messaging Gateway to provide integration to their Lotus Notes Email server. The NuPoint Messenger will continue to be used for **all** call routing and Auto Attendant, **all** system wide distribution lists and provide certain voicemail services to **BOTH** manufacturing and sales employees.

Configuring NuPoint Messenger with Unified Messaging



With the new Mitel Messaging server, integration to email environments is provided to bring Unified Messaging to a select group of users while continuing to utilize their NuPoint Messenger system for core voicemail.

The Mitel Messaging server is connected to the LAN allowing communication with both the NuPoint Messenger, and the Lotus Notes email server. Traditional circuit-switched connections are deployed to connect the Mitel Messaging server to the PBX. The following points describe the how the systems function:

1. The NuPoint Messenger system continues to be the workhorse of the messaging solution. All auto attendant, call routing, user accounts and system distribution lists remain on NuPoint Messenger. In fact, the NuPoint continues to handle user level call processing (call agent rules) and the recording of voicemail for ALL (manufacturing and sales) users.

2. Users in the sales department continue to manage their NuPoint Agent "rules" and incoming greetings on the NuPoint Messenger, and keep their call forwarding to the NuPoint Messenger for the recording of voice messages. Sales users also have the option to continue using their personal distribution lists on the NuPoint for making messages for a group of recipients.
3. The NuPoint Messenger mailbox properties for users in the sales department are programmed so that all new voicemails on the NuPoint will be automatically forwarded to their new UM account on the Mitel Messaging Server. New messages are encoded and sent over the data network using TCP/IP. Note: No voice ports are required on the NuPoint or the Mitel Messaging Server to support this message forwarding between systems.
4. The Mitel Messaging Server is programmed with accounts for the sales department users who require a Unified Messaging service. When a new message is received from NuPoint (over the IP network), the Messaging Server communicates with the Lotus Notes server and also invokes message waiting notification back to the PBX to light the lamp on the user's telephone.
5. Users in the sales department now have access to voice messages through their Lotus Notes client application or through any telephone. Since there are significant benefits to accessing new voice messages through an email interface, it is important to highlight that when a sales user listens to voice messages in this manner, THEY DO NOT USE A VOICE PORT on the Mitel Messaging Server. This means a Mitel Messaging Server will support a significant number of users with very few voice ports.

While sales users will now have the option to manage (keep, forward, Reply) to new messages from their PC, all users (in either sales or manufacturing) continue to have the option to reply or forward new voicemails (from an internal caller), as they have always done in the past by simply choosing the "A" to answer or "G" to give TUI commands.

In addition, Text-to-speech options can be enabled on the messaging server allowing sales users also have access to email messages from any telephone.

With the deployment of the Mitel Messaging Server, users can augment their NuPoint Messenger with incremental functionality without having to displace their current infrastructure. Because the NuPoint Messenger continues to be used for recording all new messages, and the Messaging server allows

voicemails to be retrieved through the email server over the IP network, the Messaging server can be deployed in a VERY COST EFFECTIVE MANNER.

NuPoint Messenger – Unified Messaging: The Benefits

User Benefits

Sales users can now enjoy the incremental functionality and experience the productivity improvements associated with a unified messaging application. Along with managing voicemail through their PC email client, mobile personnel will have ubiquitous access to emails through the telephone or voicemails through any Web browser.

Unlike the pains associated of migrating to an new messaging system, users also benefit by continuing to use the NuPoint Messenger Telephone User Interface (TUI) for greeting, message, call box management and distribution list management. No new complex menu structures to memorize and user profile re-programming is not required.

Telecom / IT Department Benefits

By deploying Unified Messaging on NuPoint Messenger, the Telecom /IT group can now offer a range of application alternatives to their varied communities of interest. Advanced applications can be cost effectively rolled out on an “as required” basis while ensuring that mainstream voice mail services can continue to operate without disruption.

With Mitel Networks’ Intelligent Evolution approach, Telecom / IT managers have a compelling alternative to deploy UM in a very cost effective manner. First, since NuPoint Messenger continues to be the “workhorse” for all call routing, message taking etc. new capital investment is focussed on the advanced applications as opposed to “port replacement”. Second, because the NuPoint TUI is leveraged going forward, user retraining is kept to a minimum. Finally, with the Mitel approach, a fail safe approach to voice messaging is always beneficial – should the IP network or the Email server go down, Telecom/IT Managers can quickly reprogram the mailbox profile for the “sales department” back to NuPoint voicemail to ensure service disruptions have a minimum impact.

The bottom line is that unlike most vendors, Mitel Networks offers a graceful evolution to Unified and Advanced applications. Over a course of time dictated by their requirements, each customer can build out their next generation messaging network, leveraging and co-existing with their proven legacy platform. And, IT managers can take comfort in sourcing their UM solution from the vendor that has provided them with years of reliable

voicemail service and will benefit from the tight integration and single point of solution support.

NuPoint Messenger – Unified Messaging: Moving Forward

NuPoint Messenger customers now have a viable option for deploying Unified Messaging on their terms. The Mitel Messaging Server approach preserves the integrity and investment of their NuPoint Messenger while gracefully introducing Unified Messaging – simply a solution without compromise. The Mitel Networks Messaging Server is available today, and customers can begin planning their Unified Messaging deployment immediately. Moving forward, Mitel plans to continue to enhance it's Unified Messaging offer delivering a range of progressive features targeted at both end user and system administrator needs.

Today customers can dramatically enhance their Auto Attendant and voice response systems with the deployment of advanced speech recognition based Auto Attendant, voice dialing and custom applications with the Mitel Networks Speech Server, a market leading, natural language, speaker independent based platform. The Speech Server can be deployed in conjunction with NuPoint Messenger allowing customers to build sophisticated, yet simple-to-navigate self service applications targeted at call routing or, IVR business process automation offering inbound callers with a voice interface and user experience that is superior to DTMF based systems.