

Unified Messaging, Winning the Message Management Battle

— Introduction of UM4730 —

Introduction

An integral component of NEC's UNIVERGE family, the UM4730 is an innovative IP-based, unified messaging system built on a standard PC (Personal Computer) platform or server running a Linux operating system. The UM4730 uses the latest software-based, DSP (Digital Signal Processing) and VoIP technologies to integrate to NEC's UNIVERGE SV7000 telephony server.

For individual users (called subscribers), the UM4730 offers modules that integrate with their LAN letting them access and conveniently manage their voice and e-mail messages, mailbox settings, incoming and outgoing calls directly from their desktop PC. System Administrators will enjoy the intuitive web-browser interface, which allows easy LAN or Internet access to subscribers and system settings.

NEC's objective is to offer the most intelligently designed and cost-effective unified messaging systems on the market. The dozens of powerful features that come standard with UM4730 were designed with two things in mind: 1) to improve your ability to communicate and 2) to make UM4730 easy and efficient to use.

UM4730 Highlights

The UM4730 system is a combination of several voice processing functions including



voicemail, automated attendant, audio text and text-to-speech (**Fig. 1**). The UM4730 is available in 2 to 32-port configurations and is pre-licensed for 25 seats of unified messaging, 25 seats of the desktop call control and unlimited licenses of the mailbox management applications. The

UM4730 also provides an abundance of voice storage with approximately 3,600 hours and a logical database limit of 65,000 voice mailboxes.

Direct IP Integration

As mentioned earlier, the UM4730 features a unique IP integration that utilizes a single Ethernet connection to provide up to 32 simultaneous VoIP connections. The single connection is easily made to the customer's network via an Ethernet switch. The IP integration provides the necessary data to forward callers to the proper subscriber's mailbox, to control message waiting lamp indications and to perform out dial message notifications for pagers and cell phones. Furthermore, VoIP integrated messaging systems like the UM4730 offer several benefits when compared to legacy circuit-switched, TDM voice messaging systems.

One of the most notable benefits of an IP-based messaging system is by its inherent design that reduces overall system hardware costs. Since all voice and integration are combined and transported over its network connection it eliminates

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the need to support dedicated TDM components. Traditionally these components included; specialized voice cards that analyzed call progress tones (ringback, busy and reorder), voice thresholds and touchtone digits; PCs, servers or adjunct hardware to provide sufficient ISA and/or PCI card slots to house these cards; and trunk or line cards in the PBX that provided the physical voice path for connecting callers. The UM4730 can run in a small workstation PC or rack-mounted in standard 1U style servers.

System Administration and Management

When using the web browser interface of the UM4730, the technician or administrator simply enters the IP address of the UM4730 to access the system (Fig. 2). After entering the proper authorized ID and security code, the UM4730's Web Administration Console will provide easy point and click access to the various menus and configurations settings.

TeLANophy

TeLANophy is a suite of optional unified messaging and call management modules that can

enhance your UM4730 system by linking the subscriber's telephone and LAN. All TeLANophy modules use an intuitive graphical user interface. The UM4730 system includes 25 seats of TeLANophy so customers can begin using these applications right away. As their organization's needs increase additional seats of the different TeLANophy modules can be licensed with a simple activation code. The UM4730's TeLANophy modules include ViewMail, ViewMail for Microsoft Messaging and ViewCall Plus.

Viewmail and VMM (Viewmail for Microsoft Messaging)

These two applications provide practical solutions that simplify the entire messaging process. ViewMail is an independent application that provides no interaction with e-mail services while VMM (as shown in Fig. 3) is specifically designed to inter-operate with the Microsoft Outlook client application. Both applications organize messages on screen, making them much easier to manage than via the telephone. Subscribers can see whom each message is from, the date and time it was sent, the length, and a subject if one were included. When used with ANI (Automatic Number

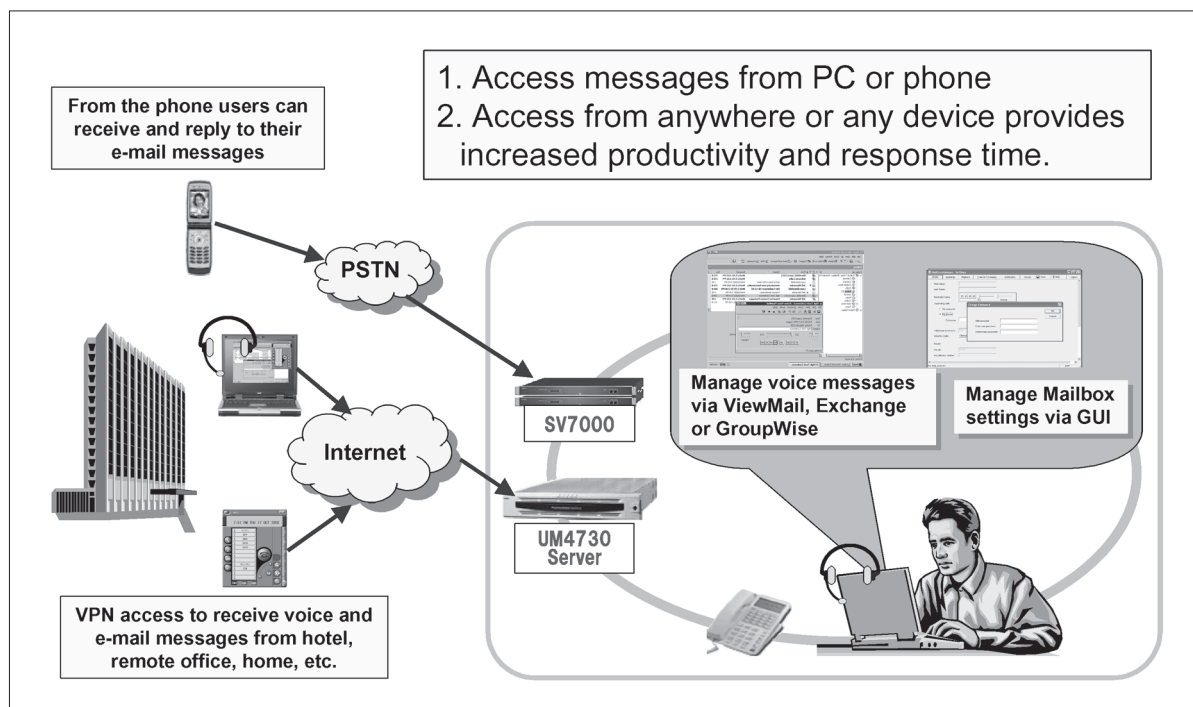


Fig. 1 Unified Messaging with UM4730.

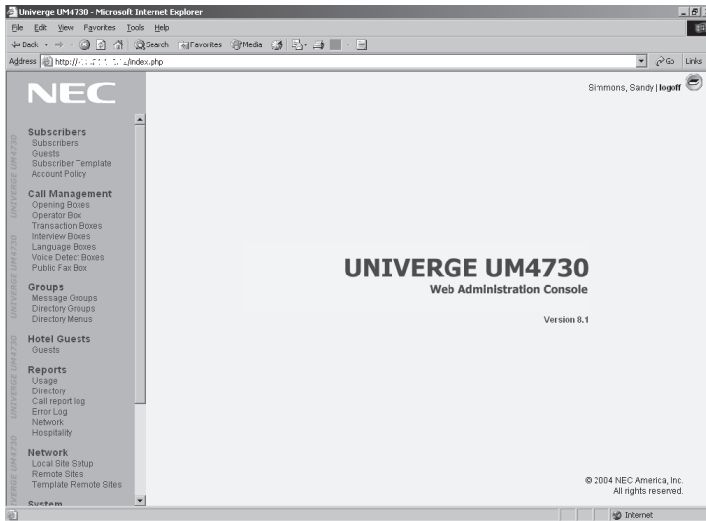


Fig. 2 Web browser interface of the UM4730.

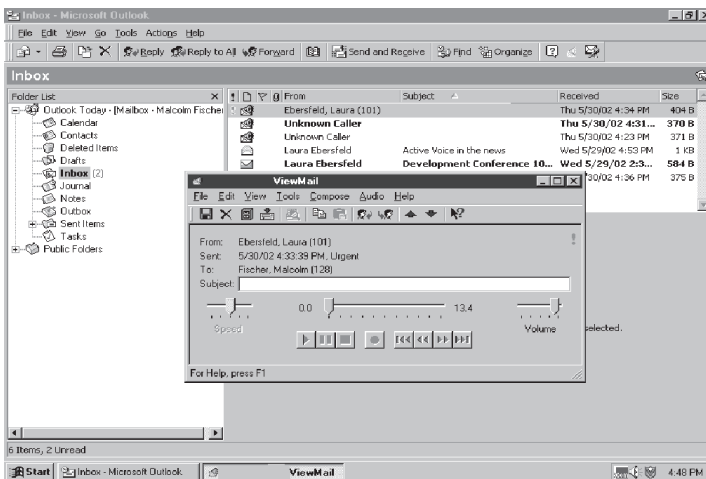


Fig. 3 VMM with Playback Control.

Identification) or Caller ID, or when entered manually through the UM4730 call screening feature, the name and number of the message sender is also included. Subscribers can sort messages in any order and see details about them at a glance. Intuitive buttons and icons make ViewMail or VMM easy to use. Subscribers can play and review selected messages, send a new message to another subscriber(s), send a copy of a message to another subscriber(s), and delete messages from their mailbox—all with a click of a mouse. As seen in Fig. 3, subscribers use VCR-style buttons to control functions (play, rewind, pause or fast-forward) during the message. A position slider shows the playback position in the message, and allows subscribers to move immediately to any part of the message.

Text-To-Speech, E-Mail Reader for Exchange

The optional TTS (Text-To-Speech) e-mail reader is the ‘telephone-side’ component of unified messaging that allows subscribers’ access to their text e-mail messages over the telephone. With TTS the e-mail message is read via a synthesized voice. Subscribers may then save, delete or redirect the message to another subscriber with or without a voice annotation. TTS allows quick access to e-mail for busy executives or mobile workers from their cell phones 24 hours a day.

ViewCall Plus

ViewCall Plus gives a subscriber control over their incoming, outgoing, external, and internal telephone traffic by managing calls on a PC via a Windows GUI (Fig. 4). With ViewCall Plus, a subscriber simply clicks a mouse to take calls, send calls to a voice mailbox, transfer calls to other extensions, ask callers to hold, or hear the caller’s name. All this from the desktop PC without picking up the telephone, which means a subscriber can handle several calls at once without interrupting their current conversation.

Mailbox Manager

This application brings many voicemail features to the subscriber’s desktop PC. The graphical user interface gives a subscriber the ability to set up and control personal mailbox settings as an alternative to the standard (Fig. 5). Telephone User Interface (TUI): with this intuitive and easy-to-use tool, subscribers may modify their greetings, security code, notification methods, groups, conversation preferences, and much more.

Additional Features

The previous sections provided information on key features of the UM4730, which are specific to the overall Unified Messaging functionality. However the UM4730 also offers other notable options including:

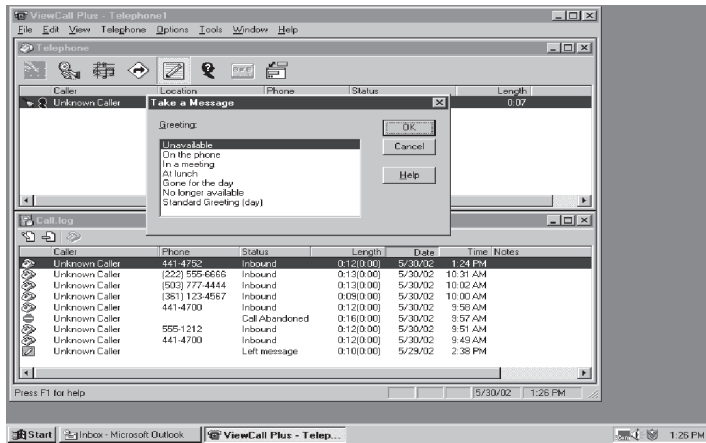


Fig. 4 View Call Plus.

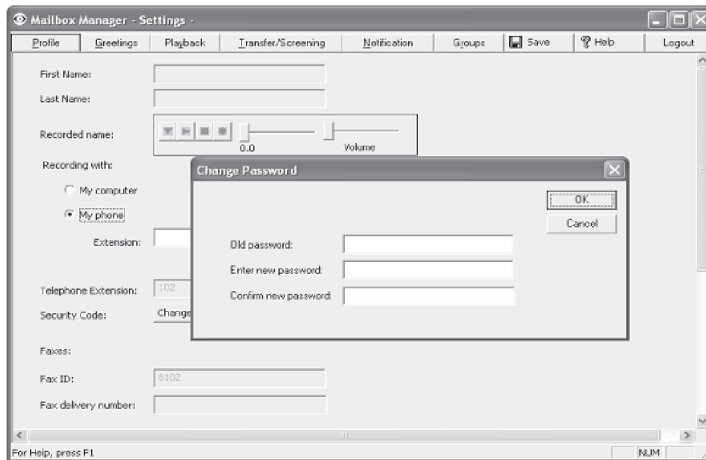


Fig. 5 Mailbox Manager with Password Dialog window.

- TTS and e-mail integration for Novell GroupWise.
- Hospitality Feature Package with: PMS (Property Management System) Integration. This includes five free languages with support for up to 18 available languages.
- ActiveNet networking (support for AMIS and PlusNet protocols).

UM4730 Benefits

The benefit for the employees is greater access to all messages.

- Listen to e-mail using Text-To-Speech technology.
- Mobile employees can gain quick access to their e-mail messages via the telephone.
- After hearing the message they may reply to or forward the e-mail with their voice comments.

- Saves the time normally used to connect via PC, login to their mailbox and type out responses.
- Allows them to prioritize their messages responding to the critical ones first.
- Allows them to make changes to their mailbox settings and schedules, which makes it simple for them to adjust notification and delivery methods to meet their needs.
- Consolidation of their messages by content, not type, allows for improved workflow and message management.
- Notification for all message types allows your employees to be alerted to important messages via phone or text paged devices.

Conclusion

There are many reasons why or organizations should consider the deployment of a Unified Messaging system. Some of these are identified below; however each organization will have its own unique environment where unified messaging deployment makes the most sense. In fact, most organizations will find that the deployment of unified messaging features benefits certain groups more than others.

One of the benefits of the UM4730 is the inclusion of 25 unified messaging seat licenses. Since the UM4730 is already equipped with these seat licenses, organizations may choose to conduct internal trials with select groups before committing to larger deployments.

The overall benefit is that organizations will realize improved communications and response times between their employees which ultimately reduces unnecessary delays and allowing for timely decisions and actions.

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