OpenWorX Communications Portal

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ABSTRACT The OpenWorX Communications Portal (OCP) is an application to be released in the United States by NEC Unified Solutions Inc. the fourth quarter of this year. OCP presents a unified web accessible "portal" which is easy to use and serves as a launching point for the business communication such as scheduling, collaboration, telephony, multimedia communication, and unified messaging. In addition, the Enterprise Information Portal (EIP) platform allows customers to extend their OCP functionalities by also incorporating their business applications such as CRM/ERP.

KEYWORDS Unified Communication, Unified Messaging, EIP (Enterprise Information Portal), Converged Communications Solutions

1. INTRODUCTION

Advance of IT is changing the communication environment for company users, such as the spread of broadband network and mobility of devices and information. Today, e-mail, Instant Message, etc. become more common compared with the time when a telephone, fax, and voice mail were the main communication methods. Furthermore, it is beginning that multimedia communication tools such as video conferencing are spreading and users must employ various communication procedures to conduct business.

Moreover, many business application systems are web-based and written in ASP. It is in the state where each business application exists individually for a user.

It is required to provide a user with the environment where these complicated communication procedures can be unified, and the business process can be advanced seamlessly. Thereby, an employee can communicate with a customer or a project member quickly and exactly, and can proceed further on business. It leads to increased productivity and competitive power in the business.

2. OpenWorX COMMUNICATIONS PORTAL OVERVIEW

The OpenWorX Communications Portal (OCP)

combines the infrastructure of the Business Portal (BP) and the video and future collaboration capabilities of Communication Door (CommDoor) with the power of OpenWorX, resulting in a total solution that allows employees to manage their various contact methods based on their availability and the person trying to reach them. OCP users not only have access to existing OpenWorX Personal Call Assistant tools such as their incoming/outgoing call logs and corporate/personal directories, but they can also define a Buddy List with frequently contacted people from their corporate and personal directories, arrange this list into groups as needed, and contact other users based on their configured desired methods of communication. OCP integrates with Microsoft Exchange, enabling users to not only manage their calendar from the portal, but also to integrate their calendar activities with their displayed status and contact rules. The Outlook Inbox is available from within the portal to view and respond to both e-mails and voice mails in a unified environment. The Real-Time Status Bar, also available in the portal, shows currently connected callers and missed calls, and allows users to quickly change their status, build an ad-hoc voice or video conference, add collaboration to an existing call, and perform basic telephony functions such as answer, hold, and disconnect (**Fig. 1**).

3. ARCHITECTURE

The OCP is built on the OpenWorX architecture which runs on Windows 2000/2003 server, employs Microsoft SQL Server 2000 or MSDE for its database, and communicates with NEC PBX's (not key systems)

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using OAI (Open Application Interface). For voice communication, users can utilize a TDM Dterm, an IP Dterm, or the NEC softphone (SP20 or SP30). Applications such as Incoming Call Assistant (ICA) and Location Status Information (LSI) work behind the scenes to provide incoming and outgoing call information as well as helping to maintain the user's status from the portal, Dterm, or Exchange 2000/2003. OpenWorX Administrator is used to configure the applications and PBX information, and to maintain login ID's/passwords/privileges as well as employee and extension information. Personal Call Assistant (PCA) runs on the client machines, communicating to the OpenWorX server via IIS and Tomcat, to provide the real time operations needed as well as user authentication. Also at the client side, it is possible to synchronize with the user's Outlook contacts if Outlook is running (**Fig. 2**).

If MA4000 is present, OpenWorX can be configured to be automatically updated as users and extensions are added to the PBX. An optional LDAP interface is also available to synchronize the OpenWorX corporate directory to such directories as Active Directory.

OCP installs Business Portal on the OpenWorX server to manage the portal logic needed to display and manage the portlets contained in the portal. BP provides the framework to configure and display the portlets as well as single sign on (SSO) capabilities.

CommDoor must be present in order for OCP to provide video capabilities and some types of collaboration such as white boarding.

Microsoft's Live Communication Server/Windows Messenger can be used for peer to peer application sharing and instant messaging.

When unified messaging is available through any of the Active Voice products, the ActiveX Outlook Inbox component will display both the user's voice mails and e-mails.

4. FEATURES

(1) Corporate/Personal Directories
User can find person using by server based Electronic Telephone Directory.

(2) Inbound/Outbound Call Logs
CP captures called and caller information with

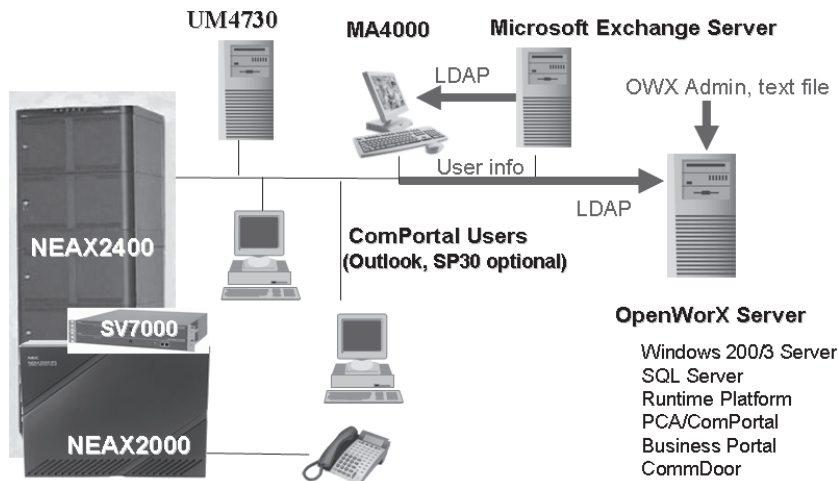Fig. 1 OpenWorX Communications Portal - main screen.

Fig. 2 OpenWorX Communications Portal architecture.

data & time.

(3) Location Status and Presence

CP has presence server feature.

(4) Calendar Link

This allows the user's calendar information to automatically populate the Location Status Information.

(5) Contact Rules

User can customize and prioritize methods of contact by status and caller. Portal users are offered the first contact method with the ability to "Try Next" in the order of the contact rule designated for them by the person they are trying to reach, given that person's status. Primary choice is used by Incoming Call Assistant.

(6) One-Click to Add Video to Current Voice Call

(7) Personal Call Assistant

This is the native application program which provides screen popup notification of calling and easy to access to information.

(8) Enterprise Information Portal

User can add other portal tabs for quick access to information and other sites.

(9) Single Sign-On capabilities

5. CONCLUSION

The OCP integrates a variety of technology to simplify the end user's experience. It allows employees to maintain a variety of communications methods and helps them manage how they wish to be contacted. The portal incorporates daily activities into a centralized space promoting efficiency and ease of use. It surpasses basic call processing, offering enhancements such as collaboration, video, and instant messaging. The OpenWorX Communications Portal is the next generation application designed to meet the growing expectations of today's most sophisticated users.

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