Netscape™ Mail Server

On Nov 27, Netscape Communications Corp. announced a new product, the *Netscape Mail Server*. It is being positioned as "*an open client/server messaging system that enables corporate users to exchange information easily across their enterprises and the Internet*". The product is based on code which Netscape has licensed from a small California company called *Software.Com*. We believe the initial release of *Netscape Mail Server* in late 95 or early 96 will be substantially identical to *Software.Com's* current product – called *Post.Office*, which is reviewed in detail below. *Software.Com* will continue to sell the *Post.Office* mail server themselves in addition to Netscape. They have also licensed this software to another vendor - *NCD Corp.*, which will market this server under the name *Post.Office for Z-Mail.*

The announced price for *Netscape Mail Server* is US $495.00. This includes unlimited client connections, but no actual client software (must be purchased separately).

SERVER PLATFORM

Netscape Mail Server will be initially available on the Windows NT™ platform (Intel® and MIPS) as well as two flavors of UNIX® - SunOS and Solaris. It will run on either Windows NT Server (requires 20MB RAM) or Windows NT Workstation (requires 16MB RAM).

This mail server is built on the SMTP (Simple Mail Transfer Protocol) standard – which is the standard for electronic mail on the Internet today. As such, it requires no "gateways" in order to be able to send and receive mail on the Internet.

MAIL CLIENTS

The current *Post.Office* mail server from *Software.Com* does not come with any client software. Rather, it is designed to work with any standard Internet Mail client that supports either the SMTP or POP3 mail protocols. Current customers of *Software.Com* are encouraged to purchase one of several popular Internet Mail clients – including *Eudora, Z-Mail, Pegasus, or Windows® 95 Exchange Inbox (with Internet Mail MAPI drivers).*

Netscape is currently beta-testing their own Internet Mail client – which will be sold as part of their *Netscape Navigator 2.0* client bundle. This bundle includes client modules for Web browsing, Internet News reading, and Mail. The *Netscape Mail* module is a basic Internet Mail client which supports the standard SMTP and POP3 protocols.

POSITIONING OVERVIEW

? Based on documents from Netscape and from the developer of the product—Software.Com – the following is a brief look at how this server will be positioned, and a comparison to Microsoft Exchange Server. Following this section you will find a table which details many important technical features.

■ **Post.Office is built on the standards of the Internet Community. There is no need for awkward and expensive gateways to connect your email system to the rest of the world. It supports any standard Internet Mail client, from any vendor, on any platform**

Microsoft Exchange Server is also built on the standards of the Internet Community and MORE. In addition to native support for Internet Mail standards such as SMTP and MIME, Microsoft Exchange Server also provides native support for X.400 and Microsoft Mail. *Post.Office* has no way to communicate with these other important standards except via awkward and expensive gateways. Microsoft Exchange Server is also directly compatible with existing Microsoft Mail gateways – providing connectivity with over 60 different email systems. Also note that, as with any SMTP system, *Post.Office* requires a correctly-configured DNS (Domain Name Server) in order to properly route mail. This is not included with *Post.Office*.

Microsoft Exchange Server supports any standard MAPI client from any vendor. In addition, in 1996 Microsoft Exchange Server will also support any standard POP3 Internet mail client.

■ **Post.Office allows extensive remote administration of all servers in an organization, using simple Web-based browsers.**

Post.Office performs all administration functions through an HTML-based Web interface. While this is certainly an improvement over most UNIX-based SMTP mail systems, it is a giant step backward in usability from the Windows® GUI administration interface found in Microsoft Exchange Server. Administration is "page-oriented" - every transaction requires filling out a form, and then submitting it.

More importantly, *Post.Office* requires you to administer *one server at a time*. Microsoft Exchange Server allows a single-seat view of all

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the messaging resources within your organization. With Microsoft Exchange Server, large groups of servers can be clustered together into units called *Sites* and managed as a single entity. *Post.Office* has no directory service, no Global Address Book, no central management of Distribution Lists – all very basic requirements of an "enterprise" messaging system.

■ **Targeted for Small Organization, Large Organizations, and Internet Service Providers**

Certainly *Post.Office* is better suited to smaller organizations. It lacks the basic requirements of an enterprise messaging system: no directory service (client-based PABs only), no server-based mailbox storage (POP3 clients generally download all mail locally), no backup & recovery facilities, and no centralized administration. It is not integrated with Windows NT security in any way – a separate mail-only account & password must be maintained for each mailbox.

For Internet Service Providers (ISPs), *Post.Office* will be an interesting product. It clearly comes from an Internet heritage -- where users are more forgiving of no directory services, etc. -- and it supports all standard Internet mail clients on all platforms. Microsoft Exchange Server 4.0 currently requires a MAPI-compatible client (Windows only, except for the Macintosh® & MS-DOS® clients from Microsoft). For this reason, Microsoft Exchange Server is currently not as attractive to Service Providers – despite its reliability & advanced systems management features. This will be improved in 1996 with the addition of direct POP3 support to Microsoft Exchange Server.

■ **A secure mail server**

Here *Post.Office* is primarily comparing themselves to traditional UNIX SMTP mail servers, many of which require the server code to run with "administrator" privileges. Both *Post.Office* and Microsoft Exchange Server run as a Windows NT service, under a special "service account" that

does not require administrator access.

However, this overlooks the fact that POP3 is an inherently unsecured communications protocol. Both passwords and message data are transmitted over the wire in clear text form, allowing someone with a sniffer easy access. Microsoft Exchange Server, on the other hand, provides a highly secure connection between client & server, and uses Windows NT security as its authentication mechanism - thus inheriting all of its benefits.

It's likely that Netscape will add some additional form of security enhancement to their version of *Post.Office* mail server – probably based on their existing SSL implementation on their Web servers.

■ **Integration with other Netscape Communications Servers**

Netscape will claim to have an integrated suite of communications servers with the shipment of this mail server, including *Netscape News Server, Netscape Communications Server*(Web)*,* and *Netscape Commerce Server.* While they can all run on the same server, the primary "integration" is that they all use Web-based forms for their administrative interface. Netscape has also recently acquired Collabra Software Inc., but as of this date *Collabra Share* remains a separate product. Today, Netscape servers require administrators to maintain separate user accounts & passwords for Email, Web, and Collaboration. Separate administration tools must be used for each.

Microsoft Exchange Server itself provides an integrated platform with Email, Group Scheduling, Forms, and Groupware applications like discussion, tracking and reference. In addition, Microsoft Exchange Server is part of a truly integrated Microsoft BackOffice™ family of server applications – all built on Windows NT Server, and all providing integrated user and security management. The Windows NT Server directory provides a common user list for all BackOffice applications.

Detailed Comparison

The following table is based on the current Post.Office mail server product which Netscape has licensed from Software.Com, current as of 12/15/95. It is assumed here that the initial Netscape Mail Server release will be substantially identical to this. It does not include a detailed comparison of client-side features since Post.Office does not include any mail clients.

Feature	Post.Office	Microsoft Exchange Server
General		
Runs on Windows NT Server	✓	✓
Runs on Windows NT Workstation	✓	
Runs on UNIX Servers	✓	
Native SMTP - direct Internet Mail w/ no gateway	✓	✓
Flexible per-domain configuration of MIME/UUENCODE formats		✓
Native X.400 support		✓
Native MS Mail Server support		✓
English language server	✓	✓
French language server		✓
German language server		✓
Japanese language server		✓
Supports MAPI clients		✓
Supports POP3 clients	✓	1996*
Applications		
Email	✓	✓
Integrated Group Scheduling		✓
Server auto-maps MIME types to file extensions		✓
Global Address Book		✓
Server-based Inbox storage	limited	✓
Server-based hierarchical mail folders		✓
Server-based Inbox Assistant (Rules)		✓
Server-based Out of Office reply	✓	✓
Replicated Public Folder/Groupware applications		✓
Replicated Enterprise Forms Library		✓
Integrated Forms Designer		✓
Email over dial-up connections	✓	✓
Local replication - off-line use of server-based data		✓
Networking Support		
TCP/IP	✓	✓
Novell® IPX/SPX		✓
Banyan® VINES		✓
Netbios		✓
Named Pipes		✓
AppleTalk®		✓

Feature	Post.Office	Microsoft Exchange Server
Security		
Plain-text passwords sent at logon	✓	
Encrypted challenge/response logon		✓
Restrict sending to Internet by user/group		✓
Integrated logon (NOS & Email)		✓
Password minimum length		✓
Password age limit		✓
Password uniqueness		✓
Limit logon to specific workstations	✓	✓
Limit logon hours		✓
Bad password lockout		✓
Client-server network packets encrypted		✓
Integrated end-to-end Message Encryption		✓
Integrated Digital Signatures on messages		✓
Integrated Public/Private Key Management		✓
Secure Delegate Access to your mailbox		✓
Secure "Send on Behalf Of" feature		✓
Systems Management/Administration		
Directory Service		✓
Distribution List management	limited	✓
Remote Administration	✓	✓
Administration from Web Browser	✓	
Sites - single administration view of multiple servers		✓
Automatic multi-server Routing & Replication		✓
Adaptive Least-Cost Routing		✓
Hot online backup to tape		✓
Hard & soft crash recovery via transaction logs		✓
Proactive monitoring		✓
All services instrumented via NT PerfMon		✓
Enterprise-wide Message Tracking		✓
Single-copy-per-server message storage		✓
Per-user Mailbox Storage Limits		✓
Per-user Message Size Limits		✓
Administration "Mailbox Clean" utility		✓

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