Microsoft Mail / OpenMail Solution

Sales Brief

1. Overview

The Microsoft Mail Windows native client implementation to OpenMail is now

available. The intent of this document is to define more clearly what the solution comprises in terms of client, server, network and directory functionality. The format of this document is as follows:

Section 2 MS Mail for Windows solution
Section 3 MS Mail/OpenMail solution
Section 4 MS Mail/OpenMail user model
Section 5 MS Mail/OpenMail Networking
Section 6 MS Mail/OpenMail extendable
client capability
Section 7 MS Mail/OpenMail product
distribution, cost and support

2. MS Mail for Windows (version 3.0 or 3.2)

MS Mail Lan Mail architecture overview

The typical architecture for a pure MS Mail solution is made up of clients which are connected to "Post-Offices". Typically 50-100 configured users can be supported by one Post-Office. Post-Offices store and forward the messages for the users on a particular node. Connections between Post-Offices are via "Import/Export" machines. Gateway capability requires further dedicated machines for X.400, MHS, Fax, Telex etc.

The Post Office, Import/Export and each Gateway require dedicated PCs. This means for each 50-100 users there must be a Post Office and an Import/Export PC. Gateway machines are usually centralized and will be configured by usage expectations.

Client Features

The Microsoft Mail for Windows standard client was designed to be a simple, user friendly interface with well integrated, familiar features that are widely supported on multiple mail systems. This strategy is very different than any other in the industry at this time. Thus the client will be able to use alternative server mailing systems as a back end. The client will also have a clearly defined interface (MAPI - messaging API) to aid in development of "drivers" which will connect the MS Mail client to multiple mailing systems.

It allows the user the following capabilities:

- To Read, File, Copy, Print, and Delete a message
- Acknowledgments; Read, and not delivered
- User configurable password changes
- Message Filters; Based on subjects and priority
- Priority Levels; Urgent, Normal and Non-urgent

• Traveling user; This is accomplished via dial-in Modem

The features which are not available in the Microsoft Client of note are:

- User configurable conversions; the client was designed for use in an MS Mail environment. (There are conversions which are gateway specific, however.)
- Autoforward/Autoanswer
- Text editor of choice; Other Windows applications can be linked in, though.
- Nicknames
- Importance Levels
- Designates

Directory Features:

The MS Mail client allows a user to check names against the server directory, then offers choices based on partial matches of last names. Frequently used names can be stored in a personal address book. This address book has a point and shoot interface. The directory does not iteratively search for names in an on-line fashion as the user types each letter in.

The directory is proprietary, not standards based and contains only name and address information.

Server Features (Post-Office):

The LAN mail Post-Office is based on a shared file architecture where all the processing occurs on the client not the server. A single file holds all of the messages to the users within a particular Post-Office. This means that the server is inherently unscalable. However powerful the processor, the Post-Office server message file has a saturation limit which cannot be exceeded. This architecture has implications on the security of the system as well as its integrity.

Administration capabilities are local, not remote and are mainly focused on routine tasks such as the maintenance of user details, directory entries and distribution lists. The server must be taken off-line for regular service maintenance tasks. There are no preventative maintenance, monitoring, or troubleshooting tools available.

There are Server Post-Offices available which support DOS, Macintosh and Windows clients. The UNIX and terminal environments are not supported.

Gateway Features:

LanMail "Post-Offices" are connected together via another PC with "Import/Export capability". The import/export machine allows communication within the MS Mail environment. Other dedicated machines are necessary to offer gateway capability to Fax, Telex, X.400 etc.

3. The OpenMail server/Microsoft Mail client Solution

Essentially the solution offers the Microsoft Mail 3.0 or 3.2 Windows client running natively on OpenMail (Atlantic version or later). Rather than using a gateway, the solution natively integrates the MS Mail client with OpenMail's

Directories and Transport functions. This inherently does away with the need for post offices and gateways and allows the messaging system to run more efficiently and effectively.

The way that this is accomplished is through the interfaces that are available on both the MS Mail client and OpenMail. The MS Mail client interface will eventually be called MAPI (Microsoft's Messaging API), although today we have developed to a precursor of this interface (We call this "MAPI 0"). When MAPI becomes a fully specified interface ("MAPI 1"), we will roll the driver development to comply with it. The OpenMail User Agent Layer (UAL) is the server interface. For the current release, a mail driver has been developed to integrate the client to OpenMail which utilizes "MAPI 0" and the UAL.

Hewlett-Packard and Microsoft have signed a legal contract covering the development, marketing, distribution and support of the software driver that links Microsoft Mail clients with OpenMail servers in this direct client/server relationship. Reference press release dated April 19, 1993.

HP wants to ensure that our customers are protected into the future with this solution. Microsoft has committed, through the contract, to release the full MAPI 1.0 in an open release. This provides the necessary protection of an interface that is open to the industry and therefore less susceptible to Microsoft changing strategies and interface in the future.

Additional Server Capabilities:

There are no differences to note between OpenMail running MS Mail clients and OpenMail running HP Clients.

There are many notable differences in comparing OpenMail with the LanMail server components. The additional functionalities that are available with OpenMail are;

- X.400 Native Server
- Multi-Platform support
- Unix, Transaction, Multi-tasking, multiuserbased
- High Availability
- Scalability
- Security (Access Passwords, Mailbox secure, Messages encoded)
- Administration Tools (Local or Remote)
- Preventative Maintenance Tools (Loop detection,
- Monitor Facility, Network statistics,
- Non-delivery reports)
- Trouleshooting Tools (Error manager server, message tracing)
- Audit & Statistics
- Access Control Lists
- Request Server

The OpenMail server will support all the major client platforms; DOS, Windows, UNIX, Mac and Terminals. OpenMail runs natively over X.400 and SMTP.

(* For more detail, consult the OpenMail Specification or Datasheet)

Additional Directory Features:

The directory functionality is enhanced within the solution to include the

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following attributes:

- Native X.400 addressing compliance
- Soundex searching
- Configurable directory fields for additional user information.
- Wildcard Searching
- Directory administration tools

Client Features:

All of the client features of MS Mail 3.2 for Windows are supported in the solution.

The solution also provides some features which are not currently available in the native MS Mail client. These are:

- Blind Carbon Copy
- Message Sensitivity Levels (Normal, Private, Personal, Company Confidential)
- Wastebasket Folder

4. The Solution User Model

In the solution the server stores messages in a secure and reliable fashion within the OpenMail In-Tray and Out-Tray. These messages are not held in a single file that has multi-user access. The server essentially has all the attributes of OpenMail.

The benefits of using OpenMail as a server are increased reliability, integrity, scalability and security.

The MS Mail client has a local message store. Once the user is connected to the server, new messages are transferred in a batch fashion. The server can then be polled in predefined time intervals to receive mail in a continuous fashion.

The benefits of the client user model are that it will allows; offline access to mailing, speed of access to messages and less server disk space/CPU usage.

5. OpenMail server to MS Mail client connections

The following connections are supported with the first release of the Microsoft Mail driver:

Network Type

Networking Vendor

Products

TCP/IP

Hewlett-Packard

ARPA/NS

Services for

DOS/LanManager/

NetWare

Microsoft LAN Manager 2.1a

Novell Lan Workplace for DOS

4.03

Future Connections:

Support for the following connection methods has still to be confirmed. It is hoped to be provided during CQ393.

SPX/IPX Novell Portable NetWare 3.11
Winsock 1.1 Hewlett-Packard FTP PC TCP 2.2
Serial (EDCL) Hewlett-Packard Protocol bundled with

UAL library

6. Extendable Client Capability

MAPI, the Microsoft messaging API is intended to become a standard interface that can be used to develop message-enabled applications. In theory, this means that any application which is MAPI compliant will be able to run natively on the HP OpenMail backbone (eg. Spreadsheets, Word Processors and

other clients written to the MAPI interface).

Today, because developers are still developing to a precursor of the MAPI interface (MAPI 0), MAPI conformance cannot be assumed, and consequently each application needs to be tested with the Microsoft Mail driver to certify the application's MAPI conformance.

For example, because MS Schedule+ does not conform 100% to the interface specification, it is not supported for integrated use with this first release of the driver.

7. Product distribution, availability, cost and support

The MS Mail driver is supplied on the OpenMail media. In addition, as the Microsoft Mail client is not available on its own without a Post Office, HP also distributes a copy of the Microsoft Mail client with OpenMail. The required number of user licenses for the Microsoft Mail client must be purchased from a Microsoft distributor or reseller.

The Microsoft Mail driver begins shipping with the OpenMail media September '93. Customers with support contracts for OpenMail will receive the Microsoft Mail driver and client with their next OpenMail update.

There is no incremental cost to the solution. The products are standard "off the shelf" Microsoft Mail 3.0 or 3.2 for Windows and HP OpenMail. Use of

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the driver is included in the price of any OpenMail mailbox license. Use of the client requires purchase of the required number of client user licenses from Microsoft.

Hewlett-Packard and Microsoft have worked together to ensure high-quality support is available for the Microsoft Mail with OpenMail solution.

Provided that the relevant support contract is in place with Hewlett-Packard and a similar support mechanism has been established with Microsoft, the customer may call either company for first level support. The query will then be fully qualified, and if necessary, the customer will be redirected so that the appropriate party can respond.

Basically, the driver has tracing facilities within it that can be used to diagnose the origination of a problem from either the client or server. OpenMail or driver problems will be handled through normal HP processes, client problems will be dealt with by Microsoft.

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