

PMDF®-LAN

for Linux, OpenVMS, Solaris, Tru64 UNIX, Windows 2000/2003

Version 6.5

Overview

PMDF-LAN provides channels that allow PMDF-MTA to interoperate with PC LAN-based electronic messaging systems. The following LAN mail systems are supported by the channel programs supplied with PMDF-LAN.

- * GroupWise (WordPerfect Office for PCs)
- * Lotus cc:Mail (both PC and Macintosh)
- * Lotus Notes (server on OS/2 or Windows NT)
- * Microsoft Mail for PCs
- * Any Novell MHS-based mailer

In each case, messages are converted from their native format to MIME when moving out of the PC LAN environment to PMDF, and from MIME to the native format when moving from PMDF into the PC LAN environment. Since some LAN mail systems do not have a way to indicate the type of data in a message part, provisions are made for mapping between PC filenames associated with attachments and MIME content-type labels. Using MIME as the interchange format insures that the form and content of messages generated by the various PC LAN messaging systems can be fully represented.

In addition to providing high performance message handling facilities for the LAN mail systems that PMDF-LAN

serves, PMDF includes a set of directory coordination tools. The directory systems supported by these tools are

- * Lotus cc:Mail
- * Microsoft Mail
- * GroupWise
- * Hewlett Packard's DDS (OpenVMS only)
- * X.500
- * PMDF Generic Databases

A general design rule for PMDF-LAN is to do as much of the actual message processing as possible on the PMDF host system and relying on support services of MS-DOS-based applications only where it makes sense. This means that for each LAN messaging system PMDF supports, PMDF-LAN depends on software generated by the LAN mail system vendor to retrieve messages from the LAN message store, and to write messages into the LAN message store. PMDF-LAN understands vendor specific file formats that are supplied by their import/export utilities. These files are hereafter referred to as message drop files. The advantage to using this technique is that the messaging backbone implemented by PMDF is insulated from changes to the LAN messaging system.

Since messages destined for the LAN messaging systems are handled by PMDF-MTA first, PMDF-LAN is able to overcome some inherent limitations in

PC-based SMTP gateways. Probably the most important limitation a PMDF-based solution overcomes is the poor performance of PC-based systems due to the single threaded nature of MS-DOS. PMDF-MTA accepts multiple messages destined for the LAN-based system asynchronously, and delivers them with PMDF-LAN synchronously.

It is possible to configure PMDF to ensure that the binary attachments generated by the PC LAN message systems are tagged correctly with MIME content-types. This effectively deals with the problems associated with exchanging binary mail messages between different LAN user communities that have different standards for the definition of MS-DOS file names. The configuration can include the use of third-party format conversion utilities to perform document conversion as needed.

Once configured, the delivery of messages to and from the PC LAN mail system is automatic.

Message Transport

PMDF-LAN requires that message drop files, files containing one or more messages, be available in both the PMDF and the PC LAN environments. There are several ways to accomplish this. All of the methods involve some processing in an MS-DOS environment. This processing environment is referred to as the support PC. The support PC function is performed on a dedicated PC, but it can

be a DOS window on an OS/2 or Windows NT system as well. It should also be noted that a single support PC can be used to service more than one PC LAN postoffice.

Message Transfer Using File Service

Many commercial products are available that allow PC clients to access files directly on an OpenVMS or UNIX system. In this environment, the message drop files can be written onto disks that are directly accessible by PMDF processes. PMDF can use normal file access methods to read incoming messages and write outgoing messages.

Indirect Message Transfer

In numerous environments the PC file server and PMDF disk storage area are disjointed and it is not an option to use a Network Operating System like NetWare as the method to make message drop files accessible to both the PMDF system and the PC postoffice server. How the files are transferred between two environments is not critical. Thus, a wide variety of methods can be employed to move message drop files between the two environments. The three most common methods are described next.

1. DECnet

To use DECnet to move message files between the PC LAN and PMDF environments requires that DECnet be available on the support PC. Once DECnet connectivity has been established, standard DECnet copies are used to move the files between environments. Generally, this means that the PC is operating in a Pathworks environment, although it need not be. The main advantage of using DECnet over other methods is that it is possible to setup the support PC so that it executes commands at the request of the PMDF system. Thus, the whole process of moving mail into and out of the LAN mail system can be controlled from the PMDF system.

2. TCP/IP

To use TCP/IP to move message files between the PC LAN and PMDF

environments system requires that TCP/IP be available on the support PC and the PMDF system. Once TCP/IP connectivity has been established, it is straight forward to construct a message transfer system that is controlled completely from the support PC. Controlling the message delivery process completely from a single environment solves file lock issues between disparate, disjoint systems that can prevent the messaging system from operating reliably and efficiently.

3. Serial Link

To use a serial communications line to move message files between the PC LAN and PMDF environments does not require any network software on the support PC. Using tools as simple as the Kermit terminal emulator, a PC LAN message system can be connected to the SMTP/MIME backbone using PMDF-LAN. The requirements are

- * The ability to move binary files between the support PC and the PMDF system.
- * A scripting facility to automate the connection, file transfer, and message delivery commands.

Most PC terminal emulation packages support the scripting facilities that are required to move message drop files to and from the PMDF system. While these transfers are quite straight forward, it should be kept in mind that all file transfers need to be binary transfers.

Hardware Requirements

Linux Systems

PMDF-LAN supports any valid Linux configuration on x86-based systems.

Tru64 UNIX Systems

PMDF-LAN supports any valid Tru64 UNIX configuration on Alpha AXP hardware.

OpenVMS Systems

PMDF-LAN supports any valid OpenVMS configuration including standalone

machines, OpenVMS clusters, and mixed-architecture OpenVMS clusters.

Solaris Systems

PMDF-LAN supports any valid Solaris configuration on x86 or Sun SPARC hardware.

MS-DOS Requirements

An MS-DOS processing environment is required for part of the message handling for all systems with the exception of Lotus Notes. This environment may be provided in any of the following ways:

- * A dedicated IBM-compatible PC running MS-DOS version 3.3 or greater
- * A DOS window on a Windows system
- * A DOS window on an OS/2 system

Lotus Notes Environment

Any valid configuration of Lotus Notes running on Intel or Alpha hardware is supported.

Windows Environment

Supports any valid Windows 2000/2003 configuration on x86-based systems.

Software Requirements

PMDF-LAN is supported on the following operating systems:

- * Linux distributions compatible with Red Hat Enterprise Linux 4 update 8 or higher
- * OpenVMS VAX/Alpha v6.1 or higher
- * OpenVMS I64 v8.2 or higher
- * Solaris SPARC, x86-based systems 2.6, 8 or higher (not 7)
- * Tru64 UNIX 4.0d or higher
- * Windows 2000/2003

See the version compatibility chart on our website under PMDF support for more details.

cc:Mail—IMPORT/EXPORT v3.3 or greater. (The version number of the IMPORT and EXPORT utilities are different than the version of the cc:Mail client. The version of the cc:Mail client is

not critical to the operation of PMDF-LAN).

GroupWise—v4.0a or greater

Lotus Notes—v3.3 or later running under either Windows NT or IBM O/S2 server.

Microsoft Mail—Version 3.11 or greater and must be a full function post office. A Windows for Workgroups post office must be upgraded to become a full function post office with Microsoft Mail Gateway Access for SMTP. Microsoft part number 068-099-127.

Novell MHS Mail Systems—Either v1.5 or 1.5N. PMDF-LAN reads either SMF-70 or SMF-71 message formats and generates SMF-70 formatted messages.

Services, Documentation, and Ordering Information

Technical Services

A highly acclaimed Technical Services program includes consulting, training, software maintenance, hotline support, and online resources—everything you need to keep your Process Software products and your network operating at peak efficiency.

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A comprehensive suite of programs is available on a host of topics, including PMDF installation and configuration, DNS setup and use, network security, troubleshooting, and others.

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You can find Frequently Asked Questions (FAQs) on the Tech Support web page on the Process Software web site (<http://www.process.com/tcpip/pmdf.html>).

Ordering Information

PMDF is shipped on CD-ROM.

Software Warranty

Process Software warrants all products for 90 days from the date of delivery.

About Process Software

Process Software is a premier supplier of infrastructure software solutions to mission critical environments. We deliver customer-centric and innovative IP-based technologies to our customers worldwide, and provide them with superior customer support and service.

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