SOFTWARE PRODUCT DESCRIPTION

PMDF® popstore

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

Version 6.5

Overview

PMDF popstore is a message store streamlined for use with POP3 clients. It is distinct from MessageStore and the Berkeley and VMS MAIL mailbox message stores that can be used for PMDF on UNIX and OpenVMS platforms. A single copy of a given message is stored for all recipients. This message is stored in a ready-to-download format; i.e., the server maps the file into memory and sends it down the TCP connection without the need for any preprocessing of the message data as is the case with many stores such as Berkeley and VMS MAIL mailboxes.

The popstore is primarily designed for scaleability. Central database files, a principal cause of bottlenecks in high volume settings, are avoided. In a similar way, the underlying message store itself may be spread across a number of disks.

The POP server used by PMDF popstore is the same server that is used by PMDF-MTA to serve out native mailboxes to POP users. The POP server for PMDF popstore is a multi-process, multi-threaded server that is controlled using the Multi-threaded Service Dispatcher. This is known as the legacy POP server.

PMDF popstore includes both command line and web-based management interfaces. It allows both easy scripting of management functions and delegation of account management functions to less technical personnel. Additionally, PMDF popstore includes a complete, fully documented API to allow system managers to customize the management interfaces to the popstore to meet the needs of the installation.

Description

PMDF popstore is designed for performance and has a rich set of features that makes a popstore installation easy to manage.

Feature Summary

Accounts and Passwords

Each user of the popstore has a popstore account. One of two case-insensitive naming schemes may be used for popstore accounts. The character set used for account names can be configured. Accounts are created with either the web-based or command line management utilities. Sites may develop their own utilities using the API.

The popstore has the concept of "privileged" popstore accounts. These are popstore accounts which have the MANAGE usage flag set. Only accounts with the MANAGE flag set may use the web-based management interface.

Passwords are used to authenticate a would-be user of the popstore. This support is implemented using the Simple Authentication and Security Layer (SASL) technique defined in RFC-2222. Thus, passwords can be stored in a variety of locations including the PMDF popstore profile, the PMDF password database, system password files, LDAP directories, and user defined data structures. In addition to password location independence, SASL allows a variety of authentication methods to be used including plain text password, the login password method, CRAM-MD5, APOP, and user-defining methods.

To complete the security services available for user authentication, PMDF popstore access can be encrypted with the addition of PMDF-TLS, a complete implementation of SSL/TLS mechanisms.

Account Groups

For management and accounting purposes, an optional group name may be associated with each popstore account.

A privileged popstore account—a popstore account with the MANAGE flag set—may perform management functions on only those accounts within the same management group. A privileged popstore account which is in no group (it is in the WORLD group) may manage all popstore accounts.

Groups may be nested. That is, a group may contain subgroups and those subgroups may contain further subgroups. The ability to nest groups is useful in account management. An account with management privileges may manage any account within the same privileged account group and any accounts con-

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tained in groups below the group of the management account.

Account Quotas

PMDF popstore has account quotas to control how much message storage a given account may have. When an account exceeds its storage quota, as measured in bytes of disk space, the account may not receive new mail. The user must delete some of their stored mail in order to receive new mail.

Message Delivery

When a message is stored in PMDF popstore it is not considered delivered for purposes of messaging and is subject to being returned if not downloaded within the time period set by the system manager. For the purposes of Sieve message filtering, delivery to popstore is considered a local message delivery and thus the per-user message filtering is available to popstore users. A simple web-based interface to the Sieve filters allows untutored users to take advantage of message filtering.

The popstore supports the concept of subaddresses. If an address contains a plus sign (+) in the local part then the plus sign and any characters to the right of it up to the at sign (@) are ignored for message delivery.

Message Forwarding

The popstore includes a forwarding database used to re-route destined mail for the popstore to other addresses. The addresses may be either internal or external to the popstore. Moreover, forwardings need not correspond to actual popstore accounts.

Message Store Structure

Stored messages are spread across a directory tree, not contained in a single directory or file. Messages are stored as text files ready for downloading to the client. Message files are platform independent and can be moved from

The Core Features of popstore...

* Provides a message store for POP3 clients
* Is an easy to manage installation
* Provides the following features:
  - Account groups
  - Account quotas
  - Accounts and passwords
  - Message delivery
  - Message forwarding
  - Message store structure
  - User account structure
* Provides the following components:
  - API
  - Command line management utility
  - Delivery channel
  - Forwarding database
  - Legacy and popstore POP3 server
  - Message bouncer
  - Migration utility
  - POP3 server
  - Poppassd server
  - Account Validation
  - Web-based management utility
  - Web-based user interface
  - Support for Sieve standards

one platform to another without modification.

User Account Structure

Frequently, the central list of users of a message store causes a performance bottleneck. With PMDF popstore there is no central list of user accounts; rather, user profiles are hashed across a directory tree. Using a variety of techniques appropriate for the platform, PMDF popstore user profiles can be spread across multiple disks to insure that user information can be accessed quickly. User profiles are platform independent and can be copied from one platform to another as needed.

PMDF popstore Components

PMDF popstore provides a full complement of POP services.

API

An API is available for sites who want to generate their own management, accounting, billing, logging, and facilities. In addition, agents that access the popstore or manipulate user accounts may be written using the API.

Command line management utility

Users with operating system privileges as well as popstore users who have been granted popstore management privileges may use the utility. Local users can use this utility to change their popstore password.

Delivery channel

Inbound messages for the popstore are queued to this master channel by PMDF which then runs the channel to deliver the messages to the popstore.

Forwarding database

A forwarding database allows mail for popstore users, fictitious or otherwise, to be redirected elsewhere automatically.

Legacy and popstore POP3 server

A dual-store, multi-threaded POP3 server is provided on UNIX and OpenVMS platforms that supports both the PMDF popstore and the legacy UNIX MAIL mailbox formats.

Message bouncer

This job runs periodically and either returns or deletes old stored messages that have “expired”. This process is best likened to the PMDF RETURN job. This job is used to “time out” old messages that popstore users have not deleted. If an old message has never been read, it is returned as undelivered. If it has been read, it is deleted. Note that you can configure the popstore to never delete old messages, keeping them indefinitely.

MessageStore and popstore POP3 server

A dual-store, multi-threaded POP server is provided on all platforms that support both the popstore and MessageStore. This server includes security and performance enhancements not possible while maintaining support for legacy mailbox formats.

Migration utility

This utility migrates the mail in native mailboxes to the popstore. It can create a popstore account for each migrated user, migrate their inbox, and then establish mail forwarding from their login account’s message store to the popstore.

Poppassd server

A multi-threaded poppassd server for users of Eudora and other POP3 clients that support the ad hoc poppassd protocol for changing passwords.

Account Validation

The popstore channel is set up by PMDF so that it can, when presented with a popstore address, immediately check to see if it is valid. For example, is it a valid recipient address? Is the recipient allowed to receive new messages? This allows for various incoming mail streams to reject up front invalid messages for the popstore thereby obviating cases where the message is received only to be bounced.

Web-based management utility

This web-based management utility manages the popstore. It presents itself as a multi-threaded CGI accessed through the PMDF HTTP server. Users of popstore with management privileges may use this interface to monitor and manage the popstore. The utility is reconfigurable; the entire interface can be changed to suit a site’s needs.

Web-based user interface

This basic web-based user interface allows users to use a web-client to change their password, set vacation notices, and see basic usage information about their popstore account. They can read and delete messages stored for their account.

PMDF popstore Configuration

PMDF popstore requires that PMDF-MTA be installed on the same system as popstore.

Although installed as part of the base PMDF-MTA product, the PMDF popstore is licensed separately. The popstore may, however, be used without a license: sites without a PMDF popstore license may create up to ten popstore accounts plus a default account. A PMDF popstore license enables a site to create more than ten user accounts.

Hardware Requirements

* Linux — any valid Linux configuration on x86-based systems
* OpenVMS—any valid OpenVMS configuration including standalone machines, OpenVMS clusters, and mixed-architecture OpenVMS clusters
* Solaris—any valid Solaris configuration including both SPARC and x86-based systems
* Tru64 UNIX—any valid Tru64 UNIX configuration on Alpha hardware
* Windows—Supports any valid Windows 2000/2003 configuration on x86-based systems.

Software Requirements

PMDF popstore 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

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.

Consulting
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.

Hot Line Support
Networking experts are available by telephone, e-mail, or fax. Optional 24-hour support is also available.

Updates
All maintenance customers with current service contracts receive automatic software and documentation updates of major releases.

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A wide range of educational services can be provided at your site, at regional training locations throughout North America, or at our own training facility in Framingham, MA.

Ordering Information
PMDF is shipped on CD-ROM.

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

Documentation
Comprehensive documentation for all PMDF products includes user guides, installation and configuration information, management functions and utilities, programming facilities, and network security. Documentation in HTML and PDF format is included on your product CD, and is available in HTML format on Process Software's web site, www.process.com.

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).

About Process Software
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Rev. 6.5