



Shepherd.POP3 Service

J&J Computer Consulting Shepherd Server Publications

Overview

The Shepherd.POP3 Service implements an RFC 1939 compliant Post Office Protocol - Version 3.0 service. All POP3 commands are implemented including those deemed optional by RFC 1939. Through Shepherd Directory Services (SDS), Shepherd.POP3 provides support for virtual hosts with unique IP addresses or virtual hosts on a single IP address.

Installation

Unzip the Shepherd.POP3 distribution to the Shepherd installation directory. This will install a sample pop3 configuration for the directory in setup\pop3.ldif, the Service initialization file in services\pop3.svc, and the dynamic link library for the Shepherd.POP3 Service in services\pop3.dll. Before getting started with Shepherd.POP3, you need to create an additional attributes required by Shepherd.POP3 and create a ShepherdService object in the directory. To create the additional attributes, use the atsetup option in the shepherd.ini file to create the attributes found in setup\pop3.attrib. Refer to "Shepherd Installation and Configuration" for further information on configuring the ShepherdService object for Shepherd.POP3.

Configuration

After the ShepherdService object, there are only three objects used by the Shepherd.POP3 Service, the ServiceLog, ShepherdAccount, and internetDomain. This section explains the requirements for each object.

ServiceLog

Shepherd.POP3 supports one ServiceLog object. The only unique attribute to the ServiceLog is the filename. ServiceLogs are typically stored in the logs subdirectory but can be stored anywhere. The ServiceLog also needs to be referenced by the serviceLog attribute in the Shepherd.POP3 ShepherdService object.

The format of each Shepherd.POP3 log file entry is as follows:

<clientip> <server> <username> <timestamp> <time> <bytes>

<clientip> => IP address of the client system.
<server> => IP address or host name of the server.
<username> => User name submitted by the client system.
<timestamp> => Date and time of the connection.
<time> => Time connected in seconds.
<bytes> => Amount of data transferred in bytes.

Both successful and unsuccessful entries are logged, so the user name may contain a dash ("-") to indicate that it wasn't provided.

ShepherdAccount

Like other Shepherd Services, Shepherd.POP3 uses the common name (cn) attribute of Shepherd Accounts as the user name and the userPassword attribute as the password. Authenticating to the Shepherd.POP3 Service can be completed through the user/pass commands or with the APOP command. Shepherd.POP3 will accept valid entries for either command.

Shepherd.POP3 does require one additional attribute in the ShepherdAccount object to function properly, the **mailboxLocation** attribute. The mailboxLocation attribute specifies the path to the user's mailbox storage. Each user mailbox should be given its own directory to prevent naming problems for e-mail message files.

internetDomain

The internetDomain objects in Shepherd tell it where to authenticate users attempting to logon to the Shepherd.POP3 Service. If a server uses a unique IP address for each POP3 virtual host, there should be an internetDomain object with the appropriate ipHostNumber entry in the same path of the directory as the users for that domain.

If a server uses IP-less virtual hosts, the user name sent by the client must be specified as user/domain where user is the simple user name in the directory and domain is the common name (cn) attribute of an internetDomain object in the same path as the user.

Using Shepherd.POP3 with a Mail Transfer Agent (MTA)

Though Shepherd.SMTP provides the best integrated and highest performance MTA solution for Shepherd.POP3, it is possible to use other MTA software to transfer mail into Shepherd.POP3 accounts. To do this, the MTA must open and lock the mailbox.idx file found in the user's mailbox directory. Once this is done, the mailbox index file consists of the number of messages in the mailbox on the first line, and the following lines point to each of the messages. Message lines consist of the size of the message, the uidl (calculated as an MD5 hash of the message), and the file name of the message separated by white space. File names are typically stored local to the mailbox directory to decrease storage requirements, but Shepherd.POP3 will accept any valid file name. External MTAs should update the number of messages, add the appropriate message lines to the index file, and close the mailbox.idx file.