

# msmtp

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An SMTP client  
version 1.3.6, February 6, 2005

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# 1 Introduction

msmtp is an SMTP client.

In its main mode of operation, it reads a mail from standard input and sends it to a predefined SMTP server that takes care of proper delivery. This is done in a sendmail compatible way (regarding command line options and exit codes).

The best way to start is probably to have a look at the Examples section. See [Chapter 8 \[Examples\]](#), page 17.

In addition to the sendmail mode, there are two other modes of operation:

- Server information mode. In this mode, msmtp prints as much information as it can get about a given SMTP server (greeting, supported features, maximum mail size, ...).
- Remote Message Queue Starting mode. In this mode, msmtp sends a Remote Message Queue Starting request for a host, domain, or queue to a given SMTP server.

Normally, a system wide configuration file and/or a user configuration file contain information about which SMTP server to use and how to use it, but almost all settings can also be configured on the command line.

SMTP server information is organized in accounts. Each account describes one SMTP server: host name, authentication settings, TLS settings, and so on. Each configuration file can define multiple accounts.

Supported SMTP features include:

- Authentication methods PLAIN, LOGIN, CRAM-MD5 and EXTERNAL (and GSS-API, DIGEST-MD5 and NTLM when compiled with GNU SASL support)
- TLS encrypted connections with the OpenSSL or GnuTLS libraries (including server certificate verification and the possibility to send a client certificate)
- DSN (Delivery Status Notification) support
- PIPELINING support for increased transmission speed
- RMQS (Remote Message Queue Starting) support (ETRN keyword)

## 2 Configuration files

msmtp supports a system wide configuration file and a user configuration file. Both are optional and need not exist.

If it exists and is readable, a system wide configuration file `SYSCONFDIR/msmtprc` will be loaded, where `SYSCONFDIR` depends on your platform. Use `--version` to find out which directory is used.

If it exists and is readable, a user configuration file will be loaded (`$HOME/.msmtprc` by default). It's settings override system wide settings: You can add new account data or overwrite (parts of) existing account data.

Note that configuration data from either file can be changed by command line options.

A configuration file is a simple text file. Empty lines and comment lines (whose first non-blank character is '#') are ignored. Every other line must contain a command and may contain an argument to that command. The argument may be enclosed in double quotes (").

If the first character of a filename is the tilde (~), this tilde will be replaced by `$HOME`.

Commands form groups. Each group starts with the 'account' command and defines the settings for one SMTP server.

See [Chapter 8 \[Examples\]](#), page 17.

### 2.1 General commands

#### 'defaults'

Set defaults. The following configuration commands will set default values for all following account definitions. Default values set in a system wide configuration file apply to the user configuration file, too.

#### 'account *name*'

Start a new account definition with the given name. The current default values are filled in (see [\[defaults\]](#), page 2).

#### 'host *hostname*'

The SMTP server to send the mail to. This server is supposed to send the mail to the recipients. The argument may be a host name, an IPv4 address in dot notation, or (if your system supports it) an IPv6 address in colon notation. Every account definition must contain this command.

#### 'port *number*'

The port that the SMTP server listens on. The default is 25, unless TLS without STARTTLS is used, in which case it is 465.

#### 'domain *argument*'

This command sets the argument of the SMTP EHLO command. The default is 'localhost' (stupid, but working). Possible choices are the domain part of your mail address (`provider.example` for `joe@provider.example`) or the fully qualified domain name of your host (if available). An empty argument sets this back to the default.

## 2.2 Authentication commands

See [Section 4.2 \[Authentication\]](#), page 11.

`'auth (on|off|method)'`

This command enables or disables SMTP authentication and optionally chooses an authentication method to use. It should be necessary to choose a method; with the argument `on`, `msmtp` will choose the best one available. Accepted methods are `plain`, `cram-md5`, `digest-md5`, `gssapi`, `external`, `login`, and `ntlm`. See [Section 4.2 \[Authentication\]](#), page 11.

For compatibility with older versions, an empty argument is treated the same as the argument `on`.

`'user [username]'`

Set your user name for SMTP authentication. An empty argument unsets the user name. Be sure that your configuration file is only readable by yourself if you store authentication data in it!

`'password [secret]'`

Set your password for SMTP authentication. An empty argument unsets the password. Be sure that your configuration file is only readable by yourself if you store authentication data in it!

`'ntlmomain [ntlmomain]'`

Set a domain for the `'ntlm'` authentication method. The default is to use no domain (equivalent to an empty argument), but some servers seem to require one, even if it is an arbitrary string.

## 2.3 TLS commands

`'tls (on|off)'`

This command enables or disables TLS/SSL encrypted connections to the SMTP server. Not every server supports TLS, and some (few) that do require the `'tls_starttls off'` command. See [Section 4.1 \[Transport Layer Security\]](#), page 10.

`'tls_trust_file [file]'`

This command activates strict server certificate verification. The file must contain one or more certificates of trusted Certification Authorities (CAs) in PEM format. An empty argument disables this feature. See [Section 4.1 \[Transport Layer Security\]](#), page 10.

`'tls_key_file [file]'`

This command (together with the `'tls_cert_file'`) command enables `msmtp` to send a client certificate to the SMTP server if requested. The file must contain the private key of a certificate in PEM format. An empty argument disables this feature. See [Section 4.1 \[Transport Layer Security\]](#), page 10.

`'tls_cert_file [file]'`

This command (together with the `'tls_key_file'` command) enables `msmtp` to send a client certificate to the SMTP server if requested. The file must contain

a certificate in PEM format. An empty argument disables this feature. See [Section 4.1 \[Transport Layer Security\]](#), page 10.

`'tls_certcheck (on|off)'`

This command enables or disables sanity checks for the server certificate. These checks are enabled by default, but can cause difficulties. See [Section 4.1 \[Transport Layer Security\]](#), page 10. For compatibility with older versions, `'tls_nocertcheck'` is accepted as an alias for `'tls_certcheck off'`.

`'tls_starttls (on|off)'`

This command enables or disables the use of the STARTTLS SMTP command to start TLS encryption. It is enabled by default. See [Section 4.1 \[Transport Layer Security\]](#), page 10. For compatibility with older versions, `'tls_nostarttls'` is accepted as an alias for `'tls_starttls off'`.

## 2.4 Commands specific to sendmail mode

`'from [address]'`

The mail address that the mail will be sent from (the envelope from address). An empty argument unsets the envelope from address, which means that one will be generated if necessary (this is the default). See [Section 5.1 \[Envelope from address\]](#), page 13.

`'maildomain [domain]'`

Sets the mail domain for the construction of an envelope from address. An empty argument unsets the mail domain. See [Section 5.1 \[Envelope from address\]](#), page 13.

`'dsn_notify (off|conditions)'`

This command sets the condition(s) under which the mail system should send DSN (Delivery Status Notification) messages. The argument `off` disables explicit DSN requests, which means the mail system decides when to send DSN messages. This is the default. The *condition* must be `'never'`, to never request notification, or a comma separated list (no spaces!) of one or more of the following: `'failure'`, to request notification on transmission failure, `'delay'`, to be notified of message delays, `'success'`, to be notified of successful transmission. The SMTP server must support the DSN extension. See [Section 4.3 \[Delivery Status Notifications\]](#), page 12.

`'dsn_return (off|amount)'`

This command controls how much of a mail should be returned in DSN (Delivery Status Notification) messages. The argument `off` disables explicit DSN requests, which means the mail system decides how much of a mail it returns in DSN messages. This is the default. The *amount* must be `'headers'`, to just return the message headers, or `'full'`, to return the full mail. The SMTP server must support the DSN extension. See [Section 4.3 \[Delivery Status Notifications\]](#), page 12.

`'keepbcc (on|off)'`

This command controls whether to remove the Bcc header before sending a mail (this is the default) or to keep it. See [Section 5.3 \[Bcc header\]](#), page 14.

For compatibility with older versions, an empty argument is treated the same as the argument `on`.

`logfile [file]`

This command enables or disables logging to the specified file. An empty argument disables this feature. The file name `-` directs the log information to standard output. See [Section 5.2 \[Logging\]](#), page 13.

`syslog (on|off|facility)`

This command enables or disables syslog logging. The facility can be one of `LOG_USER`, `LOG_MAIL`, `LOG_LOCAL0`, . . . , `LOG_LOCAL7`. The default facility is `LOG_USER`. Syslog logging is turned off by default. See [Section 5.2 \[Logging\]](#), page 13.



## 3 Invocation

### 3.1 Synopsis

- Sendmail mode (default):  
`msmtp [option...] [--] recipient...`  
`msmtp [option...] -t [--] [recipient...]`
- Server information mode:  
`msmtp [option...] --serverinfo`
- Remote Message Queue Starting mode:  
`msmtp [option...] --rmqs=(host|@domain|#queue)`

### 3.2 Exit code

The standard exit codes from `sysexits.h` are used.

### 3.3 Options

Options override configuration file settings. They are compatible with sendmail where appropriate. The following options are accepted:

#### 3.3.1 General options

`--version`

Print version information. This includes information about the library used for TLS/SSL support (if any), the library used for authentication, the authentication mechanisms supported by this library, and the default locations of the system and user configuration files.

`--help` Print help.

`-p`

`--pretend`

Print the configuration settings that would be used, but do not take further action. An asterisk (\*) will be printed instead of the password.

`-d`

`--debug` Print lots of debugging information, including the whole conversation with the SMTP server. Beware: a password may get printed in an easily decodable format!

#### 3.3.2 Changing the mode of operation

`-S`

`--serverinfo`

Print information about the SMTP server and exit. This includes information about supported features (mail size limit, authentication, TLS, DSN, ...) and

about the TLS certificate (if TLS is active). See [Chapter 6 \[Server information mode\]](#), page 15.

`--rmqs=(host|@domain|#queue)`

Send a Remote Message Queue Starting request for the given host, domain, or queue to the SMTP server and exit. See [Chapter 7 \[Remote Message Queue Starting mode\]](#), page 16.

### 3.3.3 Configuration options

Most options in this category correspond to a configuration file command. Please refer to [Chapter 2 \[Configuration files\]](#), page 2 for detailed information.

`-C filename`

`--file=filename`

Use the given file instead of `$HOME/.msmtpc` as the user configuration file.

`-a account`

`--account=account`

Use the given account instead of the account named `default`. This option cannot be used together with the `--host` option. See [Section 3.4 \[Choosing an account\]](#), page 9.

`--host=hostname`

Use this SMTP server with settings from the command line; do not use any configuration file data. This option cannot be used together with the `--account`

option. It disables loading of configuration files. See [Section 3.4 \[Choosing an account\]](#), page 9.

`--port=number`

Set the port number to connect to. See [\[port\]](#), page 2.

`--domain=[argument]`

Set the argument of the SMTP EHLO command. See [\[domain\]](#), page 2.

`--auth=(on|off|method)`

Enable or disable authentication and optionally choose the method. See [\[auth\]](#), page 3.

`--user=[username]`

Set or unset the user name for authentication. See [\[user\]](#), page 3.

`--tls=(on|off)`

Enable or disable TLS. See [\[tls\]](#), page 3.

`--tls-trust-file=[file]`

Set or unset a trust file for TLS encryption. See [\[tls\\_trust\\_file\]](#), page 3.

`--tls-key-file=[file]`

Set or unset a key file for TLS encryption. See [\[tls\\_key\\_file\]](#), page 3.

`--tls-cert-file=[file]`

Set or unset a cert file for TLS encryption. See [\[tls\\_cert\\_file\]](#), page 3.

`--tls-certcheck=(on|off)`

Enable or disable server certificate checks for TLS encryption. See [\[tls\\_certcheck\]](#), page 4.

`--tls-starttls=(on|off)`

Enable or disable STARTTLS for TLS encryption. See [\[tls\\_starttls\]](#), page 4.

### 3.3.4 Options specific to sendmail mode

`-f address`

`--from=address`

Set the envelope from address. If neither `--account` nor `--host` is used, the first account of the configuration files with a matching envelope from address will be chosen. An empty argument unsets the envelope from address, which means that one will be generated. See [\[from\]](#), page 4. See also [Section 5.1 \[Envelope from address\]](#), page 13 and [Section 3.4 \[Choosing an account\]](#), page 9.

`--maildomain=[domain]`

Sets the domain part that will be used if an envelope from address is generated. See [\[maildomain\]](#), page 4. See [Section 5.1 \[Envelope from address\]](#), page 13.

`-N (off|condition)`

`--dsn-notify=(off|condition)`

Set or unset DSN notification conditions. See [\[dsn\\_notify\]](#), page 4.

`'-R (off|amount)'`

`'--dsn-return=(off|amount)'`

Set or unset the DSN notification amount. See [dsn\_return], page 4. Note that 'hdrs' is accepted as an alias for 'headers' to be compatible with sendmail.

`'--keepbcc=(on|off)'`

Enable or disable the preservation of the Bcc header. See [keepbcc], page 4.

`'-X [file]'`

`'--logfile=[file]'`

Set or unset the log file. See [logfile], page 5.

`'--syslog=(on|off|facility)'`

Enable or disable syslog logging. See [syslog], page 5.

`'-t'`

`'--read-recipients'`

Send the mail to the recipients given in the To, Cc, and Bcc headers of the mail in addition to the recipients given on the command line.

`'--'`

This marks the end of options. All following arguments will be treated as recipient addresses, even if they start with a '-'.

The following options are accepted but ignored for sendmail compatibility: `'-Btype'`, `'-bm'`, `'-G'`, `'-hN'`, `'-i'`, `'-L tag'`, `'-m'`, `'-n'`, `'-O option=value'`, `'-ox value'`, `'-v'`

### 3.4 Choosing an account

There are three ways to choose the account to use:

1. `'--account=account'` Use the given account. Command line settings override configuration file settings.
2. `'--host=hostname'` Do not use an account from a configuration file; use only the settings from the command line.
3. `'--from=address'` Choose the first account from the system wide configuration file or from the user configuration file that has a matching envelope from address. This works only when neither `'--account'` nor `'--host'` is used.

It depends on the circumstances which method is the best.

## 4 SMTP features

### 4.1 Transport Layer Security

(Please note that this section is just a short description of how to use TLS features with `msmtp`; it does not explain the concepts of TLS or certificates.)

Quoting from RFC2246 - the TLS 1.0 protocol specification:

"The TLS protocol provides communications privacy over the Internet. The protocol allows client/server applications to communicate in a way that is designed to prevent eavesdropping, tampering, or message forgery."

SMTP servers can use TLS in one of two modes:

- Immediately  
This is known as SMTP tunneled through TLS. The default port for this mode is 465 (`ssmtp`).
- Via the `STARTTLS` SMTP command  
The SMTP session begins normally. The client sends the `STARTTLS` command when it wishes to begin TLS encryption. The default port for this mode is the default SMTP port: 25 (`smtp`).

`msmtp` can switch between these modes with the `'tls_starttls'` command (see [\[tls\\_starttls\]](#), page 4) command or the `'--tls-starttls'` option (see [\[-tls-starttls\]](#), page 8).

When TLS is started, the server sends a certificate to identify itself. This certificate contains information about the certificate owner, the certificate issuer, and the activation and expiration times of the certificate. This information can be displayed in server information mode. See [Chapter 6 \[Server information mode\]](#), page 15.

Some sanity checks are done with the server certificate. These include:

- Does the certificate belong to the host name of the SMTP server?
- Is the certificate activated?
- Is the certificate still valid, or has it expired?

Sometimes one of these checks fail. `msmtp` will abort the connection in this case. If the user still wants to use this SMTP server with TLS, the sanity checks can be switched off with `'tls_certcheck'` or `'--tls-certcheck'` (see [\[tls\\_certcheck\]](#), page 4, [\[-tls-certcheck\]](#), page 8).

Note that the SMTP server cannot be fully trusted just because the certificate passes the sanity checks. To verify that the user can trust the SMTP server, it is necessary to use a (list of) certificates of Certification Authorities (CAs) that are trusted. If `msmtp` can verify that the server certificate was issued by one of these CAs, then the SMTP server is trusted. A file containing CA certificates can be set with `'tls_trust_file'` or `'--tls-trust-file'` (see [\[tls\\_trust\\_file\]](#), page 3, [\[-tls-trust-file\]](#), page 8).

If the server requests it, the client can send a certificate, too. This allows the server to verify the identity of the client. See the EXTERNAL mechanism in [Section 4.2 \[Authentication\]](#), page 11. The `'tls_key_file'`/`'tls_cert_file'` commands or the `'--tls-key-file'`/`'--tls-cert-file'` options can be used to set a client certificate. See [\[tls\\_key\\_file\]](#), page 3/[\[-tls-key-file\]](#), page 8, [\[tls\\_cert\\_file\]](#), page 3/[\[-tls-cert-file\]](#), page 8.

Note that GnuTLS will only send a client certificate if it matches one of the CAs advertised by the server. If you set a client certificate but it is not sent to the server, probably does not match any CA that the server trusts.

## 4.2 Authentication

Many SMTP servers require a client to authenticate itself if it is allowed to send mail.

Multiple authentication methods exist. Most SMTP servers support only some of them. Some methods send authentication data in plain text (or nearly plain text) to the server. These methods should only be used when TLS is active to prevent others from stealing the password. See [Section 4.1 \[Transport Layer Security\], page 10](#).

msmtp supports a subset of the following authentication methods:

- ‘PLAIN’ This authentication method needs a user name and a password. Both are sent in BASE64 encoding, which can be easily decoded to plain text.
- ‘CRAM-MD5’ This authentication method needs a user name and a password. The authentication data is not sent in plain text, which means this method can safely be used without TLS.
- ‘DIGEST-MD5’ This authentication method needs a user name and a password. The authentication data is not sent in plain text, which means this method can safely be used without TLS.
- ‘GSSAPI’ This authentication method needs a user name. The Kerberos framework takes care of secure authentication, therefore this method can be used without TLS.
- ‘EXTERNAL’ This is a special authentication method: The actual authentication happens outside of the SMTP protocol, typically by sending a TLS client certificate (see [Section 4.1 \[Transport Layer Security\], page 10](#)).

The EXTERNAL method merely confirms that this authentication succeeded for the given user (or, if no user name is given, confirms that authentication succeeded). Thus it may not be necessary for authentication to use this method, and if the server does not support the EXTERNAL method, this does not mean that it does not support authentication with TLS client certificates.

This authentication method is not chosen automatically; you have to request it manually.

Note: Sendmail 8.12.11 advertises the EXTERNAL mechanism only after a TLS client certificate has been sent. It seems to ignore the optional user name. Does anyone know more about this?

- ‘LOGIN’ This is a non-standard authentication method similar to (but worse than) PLAIN. It needs a user name and a password, both of which are sent in BASE64 encoding, which can be easily decoded to plain text.
- ‘NTLM’ This is an obscure non-standard authentication method. It needs a user name and a password and in some cases a special domain parameter (see [\[ntlm domain\], page 3](#)). The authentication data is not sent in plain text.

It depends on the underlying authentication library and its version whether a particular method is supported or not. Use the ‘--version’ to find out which methods are supported by your version of msmtp.

Authentication data can be set with the ‘`user`’ and ‘`password`’ commands or with the ‘`--user`’ option. See [\[user\], page 3](#), [\[password\], page 3](#), [\[-user\], page 8](#).

The authentication method can be chosen with the ‘`auth`’ command or ‘`--auth`’ option, but it is usually sufficient to just use the ‘`on`’ argument to let `msmtp` choose the method itself. See [\[auth\], page 3](#), [\[-auth\], page 8](#).

If `msmtp` chooses the method itself, it will not choose a method that sends plain text authentication data when TLS is not active. This means that only CRAM-MD5, DIGEST-MD5, GSSAPI, and NTLM are available when TLS is inactive. PLAIN and LOGIN are only available when TLS is active. If you really want to send clear text authentication data, you have to force `msmtp` to do that by setting the authentication method to PLAIN or LOGIN while TLS is off.

### 4.3 Delivery Status Notifications

In situations such as delivery failure or very long delivery delay, the mail system often generates a message for the sender of the mail in question, informing him about the difficulties.

Delivery Status Notification (DSN) requests, defined in RFC 3461, try to give the sender of the mail control about how and when these DSN messages are sent. The SMTP server must support the DSN extension. See [Chapter 6 \[Server information mode\], page 15](#).

A first parameter controls when such messages should be generated: never, on delivery failure, on delivery delay, and/or on success. This can be set with ‘`dsn_notify`’/‘`--dsn-notify`’, see [\[dsn\\_notify\], page 4](#)/‘`-dsn-notify`’, [page 8](#).

A second parameter controls how much of the original mail should be contained in a DSN message: only the headers, or the full mail. This can be set with ‘`dsn_return`’/‘`--dsn-return`’, see [\[dsn\\_return\], page 4](#)/‘`-dsn-return`’, [page 8](#). Note that this parameter only applies to DSNs that indicate delivery failure for at least one recipient. If a DSN contains no indications of delivery failure, only the headers of the message are returned.

## 5 Sendmail mode

### 5.1 Envelope from address

The SMTP server expects a sender mail address for each mail. This is the envelope from address. It is independent of the From header (because it is part of the mail *envelope*, not of the mail itself), but in most cases both addresses are the same.

The `'from'` command and the `'--from'` option can explicitly set an envelope from address. See [\[from\]](#), page 4, [\[-from\]](#), page 8.

If no envelope from address is set, `msmtp` will construct one: The local part will be set to `$USER` or, if that fails, to `$LOGNAME` or, if that fails, to the login name of the current user. If that fails, too, the local part will be set to `'unknown'`. Note that the envelope from address will lack a domain part in these cases.

If a mail domain is given with the `'maildomain'` command or the `'--maildomain'` option (see [\[maildomain\]](#), page 4/[\[-maildomain\]](#), page 8), it will become the domain part of the envelope from address.

Example: `maildomain example.com` and the user name `joe` will result in the envelope from address `joe@example.com`.

### 5.2 Logging

Logging is enabled on a per account basis. If it is enabled, `msmtp` will generate one log line for each mail it tries to send via the account in question.

The line will include the following information:

- Host name of the SMTP server: `host=hostname`
- Whether TLS was used: `tls=(on|off)`
- Whether authentication was used: `auth=(on|off)`
- The envelope from address: `from=address`
- The recipient addresses: `recipients=addr1,addr2,...`
- The size of the mail as transferred to the server, in bytes (only if the delivery succeeded): `mailsize=number`
- The SMTP status code and SMTP error message (only in case of failure and only if available): `smtpstatus=number, smtpmsg='message'`. Multiline SMTP messages will be concatenated into one line.
- The `msmtp` error message (only in case of failure and only if available): `errmsg='message'`
- The `msmtp` exit code (from `sysexit.h`; `'EX_OK'` indicates success): `exitcode=EX_?`

If a logfile is given with the `'logfile'` command or `'--logfile'` option, this log line will be prepended with the current date and time and appended to the specified file. See [\[logfile\]](#), page 5, [\[-logfile\]](#), page 9.

If syslog logging is enabled with the `'syslog'` command or `'--syslog'` option, the log line is passed to the syslog service with the specified facility. See [\[syslog\]](#), page 5, [\[-syslog\]](#), page 9.



### 5.3 Bcc header

The mail will be transmitted unaltered to the SMTP server, with one exception: the Bcc header(s) will be stripped from it before the transmission. This behavior can be changed with the ‘`keepbcc`’ command and ‘`--keepbcc`’ option, see [\[keepbcc\]](#), page 4/[\[-keepbcc\]](#), page 9.

## 6 Server information mode

In server information mode, `msmtp` prints as much information about the SMTP server as it can get and then exits.

The SMTP features that can be detected are:

- **SIZE**  
The maximum message size that the SMTP server accepts.
- **PIPELINING**  
Whether certain SMTP commands may be send in groups rather than one by one. This can speed up mail transmission if the recipient list is long. This feature is used automatically.
- **STARTTLS**  
See [Section 4.1 \[Transport Layer Security\]](#), page 10.
- **AUTH**  
See [Section 4.2 \[Authentication\]](#), page 11.
- **DSN**  
See [Section 4.3 \[Delivery Status Notifications\]](#), page 12.
- **ETRN**  
See [Chapter 7 \[Remote Message Queue Starting mode\]](#), page 16.

If TLS is activated for server information mode, the following information will be printed about the SMTP server's TLS certificate (if available):

- Owner information
  - Common Name
  - Organization
  - Organizational unit
  - Locality
  - State or Province
  - Country
- Issuer information
  - Common Name
  - Organization
  - Organizational unit
  - Locality
  - State or Province
  - Country
- General
  - Activation time
  - Expiration time
  - SHA1 fingerprint
  - MD5 fingerprint

## 7 Remote Message Queue Starting mode

Remote Message Queue Starting (RMQS) is defined in RFC 1985.

It is a way for a client to request that a server start the processing of its mail queues for messages that are waiting at the server for the client machine. If any messages are at the server for the client, then the server creates a new SMTP session and sends the messages at that time.

msmtp can send the *request* (using the ETRN SMTP command); a mail server on the client side should then accept the connection of the remote SMTP server to receive the mail.

Destinations defined in RFC 1985 are:

- *host*  
Request the messages for the given host.
- *@domain*  
Request the messages for the given domain.
- *#queue*  
Request the delivery of the messages in the given queue.

## 8 Examples

### 8.1 A system wide configuration file

```
# A system wide configuration file should include a default account,  
# especially if msmtplib is used as a replacement for /usr/sbin/sendmail.  
account default  
  
# The SMTP smarthost.  
host mailhub.oursite.example  
  
# Construct envelope from addresses of the form "user@oursite.example".  
# Without this, envelope from addresses will just contain the user name,  
# without a domain part.  
#maildomain oursite.example  
  
# Use TLS.  
#tls on  
#tls_trust_file /etc/ssl/certs/ca.pem  
  
# Syslog logging with facility LOG_MAIL instead of the default LOG_USER.  
syslog LOG_MAIL
```

### 8.2 A user configuration file

```
# Set default values for all following accounts.  
defaults  
tls on  
tls_trust_file ~/.ca-bundle.pem  
logfile ~/.msmtplib.log  
  
# Use the mail transport agent running on your computer.  
# Disable TLS for this account.  
account default  
host localhost  
tls off  
  
# Use an external SMTP server  
account provider1  
host smtp.provider1.example  
from joe@provider1.example  
  
# Use an external SMTP server with authentication.  
account provider2  
host smtp.provider2.example  
from joe.smith@provider2.example  
auth on
```

```

user joe.smith
password secret

# Use an external SMTP server with authentication and TLS.
# Don't use the default trust file for TLS.
account provider3
host mail.provider3.example
from smithjoe@provider3.example
auth on
user 123456789
password my_password
tls_trust_file /etc/ssl/certs/thawteCb.pem

```

### 8.3 Using msmtplib with Mutt

Create a configuration file for msmtplib and add the following lines to your Mutt configuration file:

```

set sendmail="/path/to/msmtplib"
set use_from=yes
set realname="Your Name"
set from=you@example.com
set envelope_from=yes

```

The `envelope_from=yes` option lets Mutt use the `-f` option of msmtplib. Therefore msmtplib chooses the first account that matches the from address `you@example.com`. Alternatively, you can use the `-a` option:

```
set sendmail="/path/to/msmtplib -a my_account"
```

See [Section 3.4 \[Choosing an account\]](#), page 9.

Or set everything from the command line:

```
set sendmail="/path/to/msmtplib --host=mailhub -f me@example.com --tls"
```

If you have multiple mail accounts in your msmtplib configuration file and let Mutt use the `-f` option to choose one, you can easily switch accounts in Mutt with the following Mutt configuration lines:

```

macro generic "<esc>1" ":set from=you@example.com"
macro generic "<esc>2" ":set from=you@your-employer.example"
macro generic "<esc>3" ":set from=you@some-other-provider.example"

```

Now you can use `<esc>1`, `<esc>2`, and `<esc>3` to switch accounts.

### 8.4 Using msmtplib with mail

Put a line similar to the following one to your `~/.mailrc`:

```
set sendmail="/path/to/msmtplib"
```

That's it.

## 9 Development

The homepage of `msmtp` is <http://msmtp.sourceforge.net/>; the SourceForge project page is at <http://sourceforge.net/projects/msmtp/>.

The mailing list `msmtp-users` can be accessed from the project page.

Please send any questions, suggestions, and bug reports either to the mailing list or to the bug report address, which you can find on the homepage or with `msmtp --help`. If you send a bug report, please include the output of `msmtp --version`.