

Mail*Link SMTP Gateway

Version 4.1

Manual Addendum

Section 1: Summary of Changes In Mail*Link SMTP 4.1

Support for Dialup SMTP (see below)

Quarterdeck Mail Version 4 Long Message Body Option (see below)

Better AOL connections

AOL has recently changed the Domain Name Resolver algorithm to return CNAME records. We have changed the code to handle this better.

OT MX record-caching option

Open Transport, unlike the last version of MacTCP, does not cache MX records. This means that multiple messages to a large domain (such as compuserve.com) have to be looked up over and over again. To avoid this, we have implemented Domain Name Resolving (DNR) for Open Transport.

If you do not use a default host, and have a high volume of outgoing mail, or often send to a default host whose IP address is defined by an MX record, you can enable this option for better performance.

Note: the ML Test application also includes the new DNR options in the preferences. If you are on MacTCP, choose the Apple DNR and do a Lookup command, you will not get any information. ML Test previously switched to StarNine DNR automatically, but no longer does so.

Pass long QuickMail subject lines

Subject lines going through the Mail*Link SMTP/QuickMail gateway used to get truncated at 27 characters. This has been changed to allow much longer subject lines.

x-content uuencode tag

Some mailers send multipart-attachments binhexed with the tag "x-content" and a type of "uuencode". The Mail*Link SMTP gateway now fully decodes these attachments.

MIME Subtypes Table allows periods

You can now type a period in the MIME Subtypes Table.

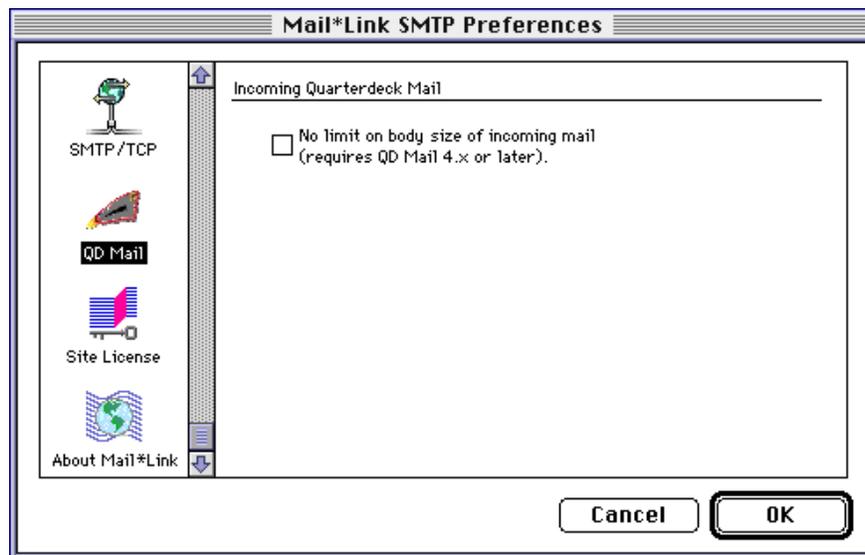
Support for Netscape and GroupWise/SMTP forwarded messages

Some email programs enclose forwarded messages in a MIME media type of message/rfc822. Older versions of the SMTP Gateway did not decode these messages but left them in the text. This version converts the forwarded messages into enclosures.

Section 2: Quarterdeck Mail Version 4 Long Message Body Option

Quarterdeck Mail Version 4 clients support messages whose bodies are limited only by the amount of memory allocated to the client. Previous versions had a body size limit of 32K. The new option shown below allows you to tell the gateway that it can submit unlimited sized bodies. If the item is **not** checked, incoming bodies will be limited to 32K. If it **is** checked, there is no limit.

Note: You should only check this box if all users at your site are be using the new Quarterdeck Mail Version 4 client. If they are not, and you check this box, they will be unable to view messages whose bodies are larger than 32K.

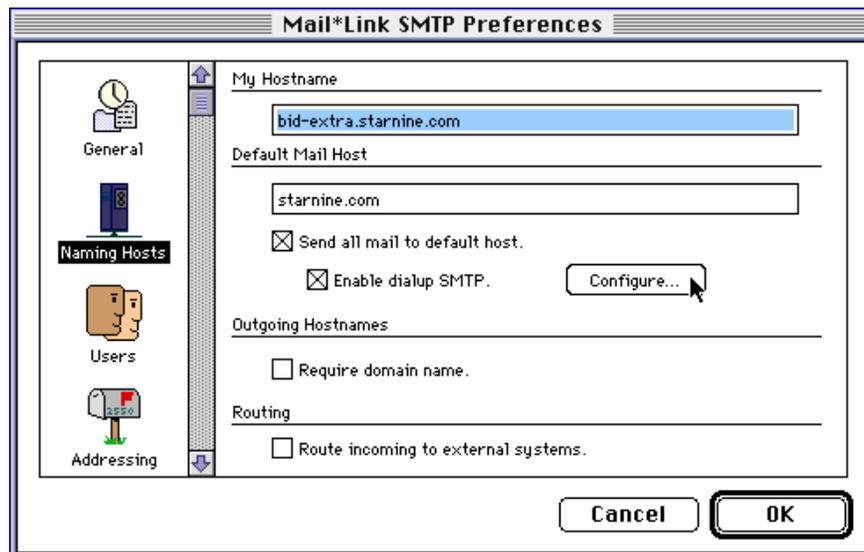


Section 3: Dialup SMTP

This version of the Mail*Link SMTP Gateway allows you to connect to your mail host at specified times rather than continuously. Any mail that is sent via SMTP must go through an SMTP host server, and this version of the gateway provides workarounds so that you do not have to be connected to the server at all times. It's easy to do this for outgoing messages, but there are problems receiving mail. The SMTP host server queues the mail when it can't find the Mail*Link gateway, and needs to be forced to send the waiting messages when the gateway creates the connection. This version of the SMTP gateway has a new configuration panel which will let you specify how and when the gateway dials up, and how it notifies the SMTP host server to send the queued mail.

When you press the "Configure" button, the SMTP Dialup Configuration panel will be displayed. You should be connecting to only one host via dialup SMTP, and the host is the one defined as the "default host".

To enable this option, make sure that the "Send all mail to default host" option is checked, and check the "Enable dialup SMTP" checkbox in the "Naming Hosts" pane of the smtp.daemon's preference panel. To set the dialup preferences, click the Configure... button next to the checkbox.



Dialup Changes

With these features enabled, the smtp.daemon is substantially different from a direct connection (as described in the main manual).

1. All SMTP listeners are turned off. They will only be activated when the connection criteria are satisfied.

This means that **no** files can be received by the daemon until it is time to call. When in dialup mode, it is assumed that the only other SMTP host that would wish to

communicate and exchange files with your system is the default host (normally your service provider's system), and that the exchange of mail between these hosts will only take place when the connection has been properly established.

2. The TCP is closed. It will **not** be opened until it is time to call.
3. An AppleScript may be specified to be executed before TCP is actually opened by the daemon. This AppleScript may force a TCP connection to be established between the daemon and the default host and may also perform other actions that might cause mail to start flowing (some hosts that are queuing mail for the daemon may need to be alerted in some manner to let them know that the daemon is now connected and able to receive mail).
4. The default host should be configured in such a manner that it properly deals with a discontinuous TCP/SMTP connection. Most SMTP hosts assume that they can immediately send mail to a target system. If they can't, and are unable to send mail for a certain interval, they will generate a "problem report" back to the original sender of the message indicating that the mail has been undeliverable for some number of hours. If this condition continues for a certain number of days, the mail will be returned. You will have to work with the host mail administrator to avoid this (see below).
5. Outgoing mail will still be extracted from QuickMail and Quarterdeck Mail, and initial processing will take place on it. **No delivery attempt will be made until the conditions satisfied in the dialup preferences are met.** This could result in a large number of queued mail messages. Please be aware of the potential for mail overflow because of queued outgoing mail and make sure that the options for mail overflow are compatible with the options specified for dialup. We recommend that you check the option that will cause a connection attempt based on the number of queued messages and that this number be compatible with the number of queued messages that causes mail overflow to be invoked.

Connection Criteria

A connection attempt will be made when any of the **connection criteria** is met:

1. A connection attempt is forced by selecting "Connect Now" from the "Administration" menu.
2. The number of queued outgoing messages equals or exceeds the number specified in the "Call when ## messages are pending" preference item in the SMTP Dialup Configuration window.
3. The daemon determines that it is time to call based on the connection timings specified in the "Invoke connection at" item in the SMTP Dialup Configuration window.

Requesting Mail

There are four basic methods that the daemon supports to indicate to the default host that there is a TCP connection established and that the smtp.daemon is ready to receive mail.

1. A “loop around” message is sent to the daemon. It is addressed to an internal hidden address at our hostname, but is sent to the default host which will then loop it back to the daemon.

Most UNIX systems will try to deliver mail when they receive it. They can also be configured to recognize that a host, that was unavailable, is now available when the sending of a new message succeeds. Because the “loop around” message is sent and received during one session, the default host should recognize that your host is now connected and send any mail that is currently queued for your host.

2. The SMTP Gateway can send a message on startup to a special address. UNIX systems can be configured to take actions when they receive mail to special addresses. One of the actions that could be taken is to tell the mail delivery system that your host is connected and to start delivering any mail that is currently queued for it. This may be done by executing the UNIX sendmail program with the `-qR` flag (tested with sendmail 8.8.5) When the SMTP Gateway is ready to receive mail, it connects to the host and sends the message to the special address, which then executes sendmail.

For example, if the domain name is `acme.acme.com` and the special address is “acme-dialup”, the entry might look something like this:

```
acme-dialup: "| /usr/lib/sendmail -qRacme.acme.com > /dev/null"
```

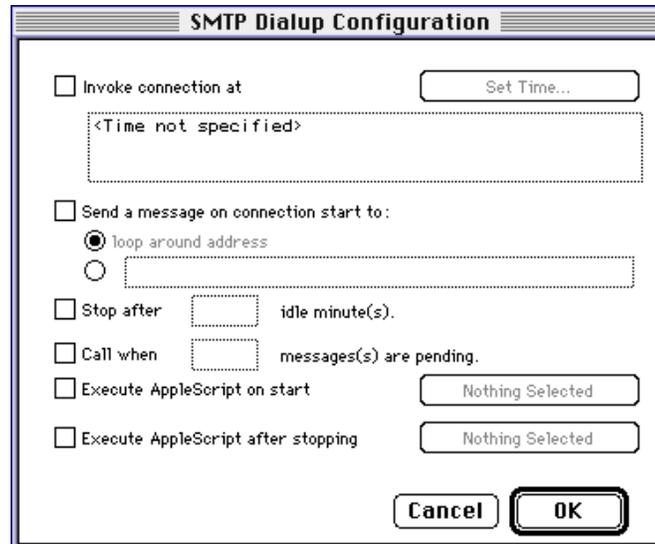
3. An AppleScript can be executed on startup that can do any number of things. An example of what it could be configured to do is to “finger” a specific address. Some hosts, (specifically UUNET), set up some of their accounts so that delivery of mail will be attempted only when a certain address is “fingered”.

NOTE: you can use AppleScript to launch and run a finger application, such as the shareware Finger available from stairways.com.

4. The last method is an implicit connection method (sometimes known as “mailbagging”), in which the upstream mail host automatically recognizes when your system connects. It can take any number of actions at the time the dial-in connection is established, including downloading pending mail.

Dialup Preferences

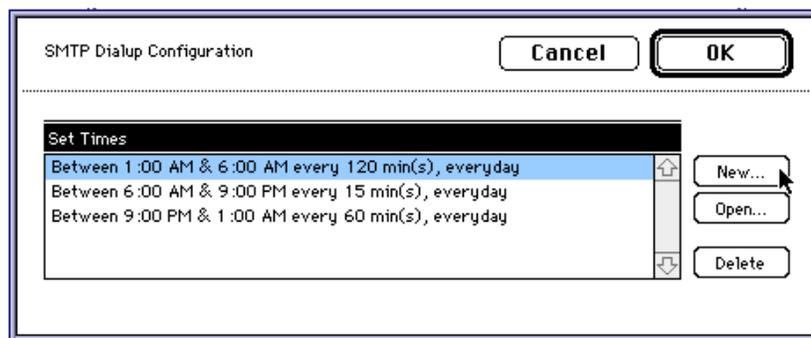
When you press the “Configure” button, the SMTP Dialup Configuration panel will be displayed. You should be connecting to only one host via dialup SMTP, and the host is the one defined as the “default host”.



Connection Times

To configure the connection times, check the “Invoke connection at” checkbox and then press the “Set Time...” button. If you do **not** check this button and specify one (or more) connection times, a connection attempt will be made only when one of the other two connection criteria (described below) are satisfied.

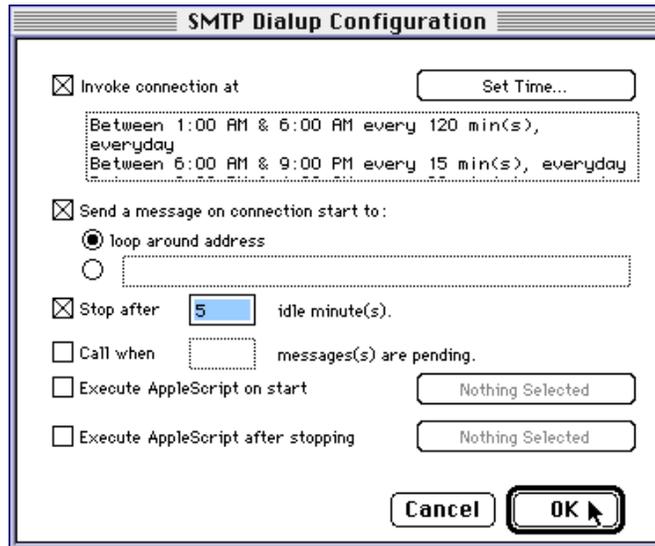
You may specify multiple connection times in the “Set Time” dialog. This allows you to specify very rich (and complex) timings. You may not want to connect on weekends or you may want to wait longer between connections during the night. A connection time example is shown below in which we have indicated that we want to connect every 15 minutes during working hours, but less frequently at night.



Send a message on connection start

Two of the methods used to alert your service provider have to do with having the daemon send mail when it connects. These two methods are specified by checking this box. If you wish a loop around message sent to the “black hole” address, select the “Loop around address” radio button. If you wish the message sent to a different address, select

the radio button next to the text edit box and then enter that address.



Stop after ## idle minutes

The daemon needs to know when it is to take down TCP. If there are many mail messages to be transferred between your system and the default host, the connection could remain established for a long time. If there is little (or no) mail, the connection will not be up as long. You need to tell the daemon how long to wait before taking down the TCP connection. Do this by specifying the number of idle minutes (defined as no sending or receiving of mail packets) that are to go by before the daemon takes down the connection.

Call when ## messages are pending

If checked, and the number of queued outgoing messages reaches the specified number, a connection attempt will be made to the default host.

Execute AppleScript on

You can specify an AppleScript that is to be executed at TCP startup and TCP takedown. The startup script might cause the dialup connection to be made, as well as performing some action that to alert the default host to start delivering mail.

The takedown script might perform actions necessary to ensure that the dialup connection to the default host is actually terminated. While many of the PPP implantations can shut themselves down during idle, you may choose to explicitly shut them down when the gateway knows it's idle.

The ability to execute AppleScripts at these times greatly extends the flexibility of the dialup interface to support your service provider's methods for mail delivery, including alerting the default host. Please see the documentation for your PPP application, such as

OpenTransport/PPP, for example scripts.

Note: Though the Mail*Link SMTP 4.1 gateway supports the use of AppleScripts, StarNine can neither provide nor support the scripts themselves.