NAME
mailq − zmailer mail queue printer

SYNOPSIS
mailq

[−**4**|−**6**] [−**d**] [−**i**] [−**M**] [−**p** *port_or_socket_path*] [−**s**[**s**]] [−**t**] [−**u** *user*] [−**U** *user-name/password*] [−**v**[**v**]] [−**S**] [−**Q**[**Q**[**Q**[**Q**]]]] [−**Z** *zenvfile*]]] [[−**c** *channel*] −**h** *host*] [*host*]

FIXME: Not all options are documented!

DESCRIPTION
The *mailq*(1zm) queries a running *scheduler*(8zm) process on a specified host for its current internal model of the mail transport queues and presents this information to the user. By default, the *scheduler*(8zm) process queried is the one relevant to the local host, i.e. either a local process or a *scheduler*(8zm) on a mail server host. If the optional *host* argument is specified, the *scheduler*(8zm) running on that host will be queried instead.

If the *scheduler*(8zm) has used −**Q** option to shrink the amount of output, the *mailq*(1zm) **must** also use −**Q** option to report about the queue status at the server in "queue-summary" format.

The information printed for each queued message is labelled by its message file id, which is the name of the original message file in the *POSTOFFICE*/**queue** directory and of the message control file in the *POSTOFFICE*/**transport** directory. The information may be different for different *channel/host* combinations in destination addresses in a single message, so the status information is grouped in clusters labelled by the channel and host for addresses in the group.

The text associated with a particular deferred destination in a message originates in a transport agent. The *scheduler* annotates the transport agent messages with retry information when an address has been scheduled for later delivery attempts, or with text stating why a retry that should have happened was delayed. A lack of annotations indicates a delivery attempt is in progress.

OPTIONS
The normal action is to print the transport queue.

−c *channel* −h *host*

> in MAILQv2 mode (see *scheduler*(8zm)) query details about only those messages destined at given channel and host.
>
> The default for *channel* is "*smtp*".

−d   This prints the information received from the scheduler as is. This will override the verbose option. This is *debugging* mode.

−i

> prints a verbose transport queue output (see the −v flag) for your own messages only.

−M

> Attached to an MTA instance wide shared memory segment, and dumpts its content (various counters and gauges).
>
> *This works only local in the system, unlike MAILQ-v2 queries!*
>
> Listed variables are described at: *mailq-m*(5zm).

−p *port*

> specifies an alternate TCP/IP port to connect to a *scheduler*(8zm) at.

−Q

> Shows full thread-wise status of *scheduler*'s internal state.

−QQ

> Produces abbreviated summary of *scheduler*'s internal state.

−QQQ
>   Shows only *scheduler*'s summary statistics lines.

−QQQQ
>   Shows same dump as "mailq -M" produces, but can do it over the network.
>
>   Listed variables are described at: *mailq-m*(5zm).

−s
>   asks for a status of the *router*(8zm), *scheduler*(8zm), and transport queues.
>
>   The first two are determined by scanning the appropriate directories and counting files, whereas the status of the transport queue is retrieved from the running *scheduler*(8zm) process.
>
>   Doubling this option will cause *mailq*(1zm) to exit after printing this summary.

−S   shows summary of files queued to the channel/destination. Listed info tells the number of files, and if available, also total- and mean-size of those files.

−t   disables any previous verbose flags to produce the normal *terse* output.

−u *user*
>   selects messages sent by the specified user id.
>
>   This option is usually only useful to the Postmaster on the system.

−U *username/password*
>   Defines username/password pair for MAILQ-V2 mode connection, in case the default "nobody"/"nobody" is not proper.
>
>   Do note: The "/" separates fields!

−v[v]
>   will produce verbose transport queue output in that message id's, and sender and recipient addresses, will be listed in addition to the normal status line.
>
>   Doubling this option asks for extra verbose output, presently this adds the message size in bytes after the message id. This option is only useful if *mailq* can read the message control files in the postoffice. Most users can only see the data for their own messages.

−Z *zenvfile*
>   :RS passes on explicit non-compiled-in-default located ZCONFIG environment file.

mailq -Q output codes

>   Examples of "mailq -Q" output:

```
smtp/*.com/0
   smtp/aol.com/0   R=1 A=147 P={19598} HA={571}s FA={571}s OF=1 S={STUFF} UF=0 QA=1d18h
   smtp/some.com/0  R=1 A=58 W=1860s QA=11h11m28s
      Threads: 11 Msgs: 36 Procs: 23 Idle: 12 Plim:90 Flim: 150 Tlim: 1
Kids: 414 Idle: 324 Msgs: 754 Thrds: 129 Rcpnts: 943 Uptime: 1d31m22s
Msgs in 5384 out 4630 stored 754 Rcpnts in 441890 out 440917 stored 971
```

>   The codes mean following:

R=   Number of **messages** on this "channel/host" thread; this does **not** count individual target users separately! (e.g. if there are a dozen recipients at some message, but they are at same host, they are counted as one.)

A=   Count of *A*ttempts to do delivery at this thread.

P=   *P*rocess number(s) of the transport agent actively handling this thread. *There can be multiple processes, and they are listed comma-separated inside the curly brackets.* Similarly for the rest of the things below.

W=   Delay time until next time the transport-agent may try to send this thread. (*W*ait)

HA=   "#*H*unger *A*ge(s)" -- time since the scheduler saw last "#hungry" message from the transport agent.

FA=   "*F*eed *A*ge(s)" -- time since the scheduler did last time feed something to the transport agent(s).

OF=   "*O*ver*F*eed count" -- how many unacknowledged tasks are still in the transport agent(s) for this thread. The "OverFeed" was created to handle sluggish scheduler in hard pressed system to get jobs scheduled around, when the transport agents were in practice running dry as they did their jobs fast, but the scheduler didn't get around to feed them... Thus the way for the scheduler to "overfeed" as many of the jobs in active thread to the transport agent as possible, and then just wait them to complete, and be acknowledged. With this a lot more gets done even with a sluggish scheduler.

S=   Feed-*S*tate of TA-process(es) doing actual job. The scheme goes like following:

   LARVA
            (This is very fast transient state.) TA processes are created at this state, and they stay there only until the first "#hungry" message is heard, then *one* job if fed there, and state is changed to "STUFFing." (One job so that if it fails, TA process kicks to other thread.)

   STUFFing
            This is normal lifetime state of a TA process. When process' *UF=* count goes to zero, more jobs are fed to it. A process moves away from this state by either:

            Getting a #retryat *message*
                     Next state is FINISHing.

            Running out of jobs to feed
                     Next state is FINISHing -- this requires that no messages were available for feeding at the time. If even single one is fed, state stays in STUFFing.

   FINISHing
            This waits for the *OF=* count to go to zero, and then it tries to pick a new thread for the process to work on (if available), or if none can be found, moves the process to IDLE state. If a new thread is found for processing, process moves there, and goes to STUFFing state.

   IDLE   (This is very fast transient state.) The TA process is being idled, next state for the process will be in thread-group idle-pool.

UF=   How many messages out of all present in the queue have not yet been fed to the current TA process set ? ("*Un*F*ed count")

QA=   Age of oldest message in the queue at this thread. ("*Q*ueue *A*ge")

FILES
            /opt/mail/zmailer.conf   (ZCONFIG)
            /var/spool/postoffice/transport (POSTOFFICE/transport)
            /var/spool/postoffice/queue   (POSTOFFICE/queue)

SEE ALSO
            The **MAILQ-V2** protocol is described at the *scheduler*(8zm) manual page.

            mailq-m(5zm),   *zmailer*(1zm),   *router*(8zm),   *scheduler*(8zm),   *ZMailer::mailq*(3pm),
            zmailer.conf(5zm).

AUTHOR
        This program authored and copyright by:
            Rayan Zachariassen <no address>
        Partial rewrite for ZMailer 2.99/3.0 by:
            Matti Aarnio <mea@nic.funet.fi>