

NAME

GLST – SMTP GreyListing module

SYNOPSIS

```
glst [--mfile MFIL] [--raddr RADDR] [--sender SNDR] [--rcpt RCPT] [--generr ERR] [--rejerr ERR]
[--timeo NSEC] [--xnet NET] [--mnet MNET] [--exptimeo NSEC] [--lametimeo NSEC] [--cfg CFIL]
[--rejfile RFIL] [--cleanup] [--help]
```

DESCRIPTION

Glst is an implementation of **SMTP Grey Listing** , that has been described in the following URL <http://projects.puremagic.com/greylisting> . You are invited to read the documentation contained inside the above listed URL for a detailed description of the SMTP greylisting solution. The **glst** module uses the **gdbm(3)** database interface to store its data. On Windows, binaries are provided for the **gdbm(3)** library and for the final executables.

OPTIONS

The following options are recognized by **glst**:

--mfile *MFIL*

Specify the input mail file name as *MFIL*. The **glst** module can be used by passing all the parameters it needs inside the command line or, optionally, a mail file name can be passed to it, that **glst** will try to parse to extract missing information. At the moment, only the XMail spool files are recognized.

--raddr *RADDR*

Specify the remote SMTP client IP address. This can be an IP address, or a string in the [IP]:PORT form. In the latter case, the IP address part is extracted and used as remote SMTP client IP address.

--sender *SNDR*

Specify the email address of the sender of the currently processed message.

--rcpt *RCPT*

Specify the recipient of the message. This command line option can be passed multiple times to let the caller specify multiple recipients.

--generr *ERR*

Specify the error code that should be returned by **glst** in case of internal processing errors.

--rejerr *ERR*

Specify the error code that should be returned by **glst** in case the current message should be rejected by the calling SMTP layer. The message that should be returned to the remote SMTP client can be specified with the *rejmsg* configuration option. Such message will be printed on *STD-OUT*, if no **--mfile** *MFIL* option is specified, while it will be stored in *MFIL.rej* in case the caller specified an input spool/mail file.

--timeo *NSEC*

Specify the time window (in seconds) that should be used to reject unknown triplets. A triplet, like the **SMTP Grey Listing** describes, is a set containing:

- o The remote IP of the SMTP client
- o The sender email address
- o The recipient of the message

Triplets are stored as keys of the **glst** database.

--xnet *NET*

Specify a network that should be whitelisted by the **glst** module. The format for the *NET* parameter is *IP,MASK* , for example *127.0.0.1,255.255.255.255* . The **--xnet** parameter can be specified multiple times inside the command line, and inside the configuration file.

--mnet *MNET*

The **glst** module stores the exact remote IP that is trying to send the message, inside the key (triplet) that is used to index its database. There are certain big ISPs though, that might try to send the same message from different IPs, by having the **glst** unable to recognize the previous key (triplet) in the database. The **--mnet** option gives the ability to apply a transformation on the incoming IP, so that entire subnets can be used as source IP in the stored triplet. the format of the *MNET* parameter is *IP,MASK,NMASK* , with the *IP* and *MASK* fields that are used to match the incoming IP, and the *NMASK* field that is applied to the incoming IP to retrieve the address that should be stored inside the database key. For example, supposing a /24 masking should be applied to all incoming IPs, the *MNET* field should be *0.0.0.0,0.0.0.0,255.255.255.0* . If the entire 10.0.0.0/8 subnet should be masked using a /27 address size, the *MNET* field should be *10.0.0.0,255.0.0.0,255.255.255.224* .

--exptimeo *NSEC*

Specify the expire timeout for triplets that have been successfully accepted by the **glst** module. Every time a triplet is accepted (the remote mailer retried after the blackout window set with **--timeo**) the count of successfully accepted messages is increased, and the record timestamp is updated with the current time. During cleanup, if the timestamp is found older than the current time minus the timeout specified with **--exptimeo**, the record (triplet plus record metadata) is purged from the **glst** database.

--lametimeo *NSEC*

Specify the expire timeout for triplets that never attempted (lame) to resend during/after the blackout window set with **--timeo**. During the cleanup, if the record timestamp is found older than the current time minus the timeout specified with **--lametimeo**, and the number of successfully accepted messages for the current triplet is zero, the record (triplet plus record metadata) is purged from the **glst** database.

--cfg *CFIL*

Specify a **glst** configuration file to be loaded for default options. The **glst** module loads by default a file named *glst.conf* in the same directory where the **glst** binary resides. The **--cfg** option let the caller to specify an alternate configuration file to be loaded.

--rejfile *RFIL*

Specify the output reject message file name as *RFIL*. The reject message file name is the file where **glst** will store the reject message, in case the result of the processing will result in rejection. If the *RFIL* is not specified, the reject file name is composed by appending the '.rej' extension to the *MFIL* file path. If even *MFIL* is not specified, the reject message is printed on **STDOUT**.

--cleanup

Ask the **glst** module to perform database cleanup operations.

--help Print an help message about the **glst** usage.**EXAMPLES**

The **glst** module can either be run with all the parameters it needs supplied on the command line, or it has the ability to parse mail files to extract the required information for it to function. Currently the **glst** module has the ability to parse XMail's spool files and extract the required information from there. A typical usage of **glst** is inside an XMail's SMTP *pre-data* filter, with the *filters.pre-data.tab* file containing a line like (with real TABs between fields):

```
"!aex"  "/var/MailRoot/bin/glst"  "--mfile"  "@@FILE"
```

In the same directory where the **glst** binary resides, a file named *glst.conf* can be created to allow the user to specify configuration options for the **glst** module (see **FILES** section for more information). Alternatively, when used with MTAs other than XMail, command line options can be specified to supply **glst** with the necessary information it needs to operate. At minimum, the caller should invoke **glst** with the following

options:

```
glst --raddr 10.107.17.1 --sender foo@boo.biz --rcpt whoops@darn.cc
```

The return code of the **glst** binary can be used to detect if the current sender should be blocked or not. The **[--generr *ERR*]** and the **[--rejerr *ERR*]** command line options, or the *generr=ERR* and *rejerr=ERR* configuration file (*glst.conf*) options can be used to set the error code that the **glst** binary should return in case of generic error, and in case of rejection (current message should be blocked). In case the message should not be blocked, and the **glst** binary completes successfully, zero will be returned. The error message can be set using the *rejerr=ERRMSG* configuration option, and such message will be printed on *STDOUT* if no **--mfile *MFIL*** option is specified, while it will be stored in *MFIL.rej* in case the caller specified an input spool/mail file. To enable the **glst** module to perform some cleanup of its database, it is better to invoke it with the **--cleanup** option periodically. I use a script like this in my */etc/cron.daily/glst.sh* file:

```
#!/bin/sh
```

```
/var/MailRoot/bin/glst --cleanup
```

This will perform the necessary cleanups and computations over the **glst** database. Users with very high load might want to issue such command with shorter periodicity than daily.

FILES

glst.conf

The **glst** configuration file is a simple text file using the *VARIABLE=VALUE* format. Currently supported configuration variables are:

root

Specifies the directory where the **glst** databases and configuration files are stored.

rejmsg

Specifies the rejection message that **glst** should report to the caller. The rejection message is either printed on *STDOUT*, or stored inside the *.rej* file associated with the file specified with the **--mfile** option.

generr

See **--generr** command line option.

rejerr

See **--rejerr** command line option.

timeo

See **--timeo** command line option.

exptimeo

See **--exptimeo** command line option.

lametimeo

See **--lametimeo** command line option.

xnet

See **--xnet** command line option.

mnet

See **--mnet** command line option.

BUGS

There are no known bugs. Bug reports and comments to:

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SOURCE

The latest source code is available at:

<http://www.xmailserver.org/glst-mod.html>

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<http://www.gnu.org/licenses/gpl.html>

AUTHORS

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