

NAME

tlsproxy - Postfix TLS proxy

SYNOPSIS

tlsproxy [generic Postfix daemon options]

DESCRIPTION

The **tlsproxy(8)** server implements a server-side TLS proxy. It is used by **postscreen(8)** to talk SMTP-over-TLS with remote SMTP clients that are not whitelisted (including clients whose whitelist status has expired), but it should also work for non-SMTP protocols.

Although one **tlsproxy(8)** process can serve multiple sessions at the same time, it is a good idea to allow the number of processes to increase with load, so that the service remains responsive.

PROTOCOL EXAMPLE

The example below concerns **postscreen(8)**. However, the **tlsproxy(8)** server is agnostic of the application protocol, and the example is easily adapted to other applications.

After receiving a valid remote SMTP client STARTTLS command, the **postscreen(8)** server sends the remote SMTP client endpoint string, the requested role (server), and the requested timeout to **tlsproxy(8)**. **postscreen(8)** then receives a "TLS available" indication from **tlsproxy(8)**. If the TLS service is available, **postscreen(8)** sends the remote SMTP client file descriptor to **tlsproxy(8)**, and sends the plaintext 220 greeting to the remote SMTP client. This triggers TLS negotiations between the remote SMTP client and **tlsproxy(8)**. Upon completion of the TLS-level handshake, **tlsproxy(8)** translates between plaintext from/to **postscreen(8)** and ciphertext to/from the remote SMTP client.

SECURITY

The **tlsproxy(8)** server is moderately security-sensitive. It talks to untrusted clients on the network. The process can be run chrooted at fixed low privilege.

DIAGNOSTICS

Problems and transactions are logged to **syslogd(8)**.

CONFIGURATION PARAMETERS

Changes to **main.cf** are not picked up automatically, as **tlsproxy(8)** processes may run for a long time depending on mail server load. Use the command "**postfix reload**" to speed up a change.

The text below provides only a parameter summary. See **postconf(5)** for more details including examples.

STARTTLS SUPPORT CONTROLS**tlsproxy_tls_CAfile (\$smtpd_tls_CAfile)**

A file containing (PEM format) CA certificates of root CAs trusted to sign either remote SMTP client certificates or intermediate CA certificates.

tlsproxy_tls_CApath (\$smtpd_tls_CApath)

A directory containing (PEM format) CA certificates of root CAs trusted to sign either remote SMTP client certificates or intermediate CA certificates.

tlsproxy_tls_always_issue_session_ids (\$smtpd_tls_always_issue_session_ids)

Force the Postfix **tlsproxy(8)** server to issue a TLS session id, even when TLS session caching is turned off.

tlsproxy_tls_ask_ccert (\$smtpd_tls_ask_ccert)

Ask a remote SMTP client for a client certificate.

tlsproxy_tls_ccert_verifydepth (\$smtpd_tls_ccert_verifydepth)

The verification depth for remote SMTP client certificates.

tlsproxy_tls_cert_file (\$smtpd_tls_cert_file)

File with the Postfix **tlsproxy(8)** server RSA certificate in PEM format.

tlsproxy_tls_ciphers (\$smtpd_tls_ciphers)

The minimum TLS cipher grade that the Postfix **tlsproxy(8)** server will use with opportunistic TLS encryption.

- tlsproxy_tls_dcrt_file (\$smtpd_tls_dcrt_file)**
File with the Postfix **tlsproxy(8)** server DSA certificate in PEM format.
- tlsproxy_tls_dh1024_param_file (\$smtpd_tls_dh1024_param_file)**
File with DH parameters that the Postfix **tlsproxy(8)** server should use with non-export EDH ciphers.
- tlsproxy_tls_dh512_param_file (\$smtpd_tls_dh512_param_file)**
File with DH parameters that the Postfix **tlsproxy(8)** server should use with export-grade EDH ciphers.
- tlsproxy_tls_dkey_file (\$smtpd_tls_dkey_file)**
File with the Postfix **tlsproxy(8)** server DSA private key in PEM format.
- tlsproxy_tls_eccert_file (\$smtpd_tls_eccert_file)**
File with the Postfix **tlsproxy(8)** server ECDSA certificate in PEM format.
- tlsproxy_tls_eckey_file (\$smtpd_tls_eckey_file)**
File with the Postfix **tlsproxy(8)** server ECDSA private key in PEM format.
- tlsproxy_tls_eecdh_grade (\$smtpd_tls_eecdh_grade)**
The Postfix **tlsproxy(8)** server security grade for ephemeral elliptic-curve Diffie-Hellman (EECDH) key exchange.
- tlsproxy_tls_exclude_ciphers (\$smtpd_tls_exclude_ciphers)**
List of ciphers or cipher types to exclude from the **tlsproxy(8)** server cipher list at all TLS security levels.
- tlsproxy_tls_fingerprint_digest (\$smtpd_tls_fingerprint_digest)**
The message digest algorithm to construct remote SMTP client-certificate fingerprints.
- tlsproxy_tls_key_file (\$smtpd_tls_key_file)**
File with the Postfix **tlsproxy(8)** server RSA private key in PEM format.
- tlsproxy_tls_loglevel (\$smtpd_tls_loglevel)**
Enable additional Postfix **tlsproxy(8)** server logging of TLS activity.
- tlsproxy_tls_mandatory_ciphers (\$smtpd_tls_mandatory_ciphers)**
The minimum TLS cipher grade that the Postfix **tlsproxy(8)** server will use with mandatory TLS encryption.
- tlsproxy_tls_mandatory_exclude_ciphers (\$smtpd_tls_mandatory_exclude_ciphers)**
Additional list of ciphers or cipher types to exclude from the **tlsproxy(8)** server cipher list at mandatory TLS security levels.
- tlsproxy_tls_mandatory_protocols (\$smtpd_tls_mandatory_protocols)**
The SSL/TLS protocols accepted by the Postfix **tlsproxy(8)** server with mandatory TLS encryption.
- tlsproxy_tls_protocols (\$smtpd_tls_protocols)**
List of TLS protocols that the Postfix **tlsproxy(8)** server will exclude or include with opportunistic TLS encryption.
- tlsproxy_tls_req_ccert (\$smtpd_tls_req_ccert)**
With mandatory TLS encryption, require a trusted remote SMTP client certificate in order to allow TLS connections to proceed.
- tlsproxy_tls_security_level (\$smtpd_tls_security_level)**
The SMTP TLS security level for the Postfix **tlsproxy(8)** server; when a non-empty value is specified, this overrides the obsolete parameters `smtpd_use_tls` and `smtpd_enforce_tls`.

Available in Postfix version 2.11 and later:

tlsmgr_service_name (tlsmgr)

The name of the [tlsmgr\(8\)](#) service entry in master.cf.

OBSOLETE STARTTLS SUPPORT CONTROLS

These parameters are supported for compatibility with [smtpd\(8\)](#) legacy parameters.

tlsproxy_use_tls (\$smtpd_use_tls)

Opportunistic TLS: announce STARTTLS support to remote SMTP clients, but do not require that clients use TLS encryption.

tlsproxy_enforce_tls (\$smtpd_enforce_tls)

Mandatory TLS: announce STARTTLS support to remote SMTP clients, and require that clients use TLS encryption.

RESOURCE CONTROLS**tlsproxy_watchdog_timeout (10s)**

How much time a [tlsproxy\(8\)](#) process may take to process local or remote I/O before it is terminated by a built-in watchdog timer.

MISCELLANEOUS CONTROLS**config_directory (see 'postconf -d' output)**

The default location of the Postfix main.cf and master.cf configuration files.

process_id (read-only)

The process ID of a Postfix command or daemon process.

process_name (read-only)

The process name of a Postfix command or daemon process.

syslog_facility (mail)

The syslog facility of Postfix logging.

syslog_name (see 'postconf -d' output)

The mail system name that is prepended to the process name in syslog records, so that "smtpd" becomes, for example, "postfix/smtpd".

SEE ALSO

[postscreen\(8\)](#),
Postfix zombie blocker
[smtpd\(8\)](#),
Postfix SMTP server
[postconf\(5\)](#),
configuration parameters
[syslogd\(5\)](#), system logging

LICENSE

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HISTORY

This service was introduced with Postfix version 2.8.

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