

Wie die Zeit vergeht. . .

Ralf Hildebrandt

Charite

Geschichte

- Postfix 0 (0.8 - 0.9) / September 1998 - Dezember 1999
- Postfix 1 (1.0 - 1.1) / Februar 2001 - Juli 2003
- Postfix 2 (2.0 - 2.11) / Dezember 2002 - Januar 2018
- Postfix 3 (3.0 - 3.10) / Februar 2015 - heute



Ralf Hildebrandt

an

On Wed, Nov 24, 1999 at 03:23:38PM +0100, Mari Jose Mijangos Ugarte wrote:

> I have increased debug_peer_level to 9 in [main.cf](#) but it still doesn't work.

How about some lines from the logfile?

–

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"Those who do not understand UNIX are condemned to reinvent it – badly."

– Henry Spencer

Featuritis

- Protokolle
- Antispam
- Nützliches
- Datenbank-Backends
- Mailbox Support
- Container Support
- Addressmanipulation

Protokolle

- Postfix 3.8 SMTP client support for RFC 2782 service discovery with SRV record lookup.
- Postfix 3.7 Updated defense against remote clients or servers that 'trickle' SMTP or LMTP traffic
- Postfix 3.5 HAProxy v2 support in postscreen and smtpd
- Postfix 3.4 SNI (server name indication) support for both SMTP client and server roles.
- Postfix 3.4 SMTP server support for RFC 3030 CHUNKING (without BINARYMIME).
- Postfix 3.4 Multiple SMTP deliveries over the same TLS-encrypted connection.
- Postfix 3.0 Email Address Internationalization as described in RFC 6531 (SMTPUTF8 Extension), RFC 6532 (Email headers), and RFC 6533 (Delivery status notifications).
- Postfix 3.0 Configurable DNS reply filter for the SMTP client and server.
- Postfix 3.0 Configurable delivery status filter for the SMTP client and other delivery agents.
- Postfix 3.0 RFC 7505 ("Null MX" No Service Resource Record)
- Postfix 2.11 RFC 7672 (SMTP security via opportunistic DANE TLS)
- Postfix 2.10 HAproxy support in postscreen and smtpd
- Postfix 2.9 Defense against remote clients or servers that 'trickle' SMTP or LMTP traffic
- Postfix 2.9 Nginx proxy support in smtpd including SASL credential passing
- Postfix 2.3 DKIM, DomainKeys and SenderID authentication (via Militer plug-in)
- Postfix 2.3 DSN status notifications
- Postfix 2.3 Enhanced status codes
- Postfix 2.3 Plug-in support for multiple SASL implementations (Cyrus, Dovecot)
- Postfix 2.2 Connection cache for SMTP
- Postfix 2.2 IP version 6
- Postfix 2.2 TLS encryption and authentication
- Postfix 2.0 MIME (including 8BITMIME to 7BIT conversion)
- Postfix 1.1 QMQP server
- Postfix 1.0 ETRN on-demand relay
- Postfix 1.0 LMTP client
- Postfix 1.0 Pipelining (SMTP client and server)
- Postfix 1.0 SASL authentication

AntiSpam

- Postfix 3.1 Postscreen DNSBL/WL cache TTL support for non-existent records.
- Postfix 2.8 Postscreen zombie blocker.
- Postfix 2.8 DNS whitelist support in smtpd and in postscreen.
- Postfix 2.5 Stress-dependent configuration
- Postfix 2.3 Sendmail Milter (mail filter) protocol
- Postfix 2.2 SMTP server per-client rate and concurrency limits
- Postfix 2.1 Access control per client/sender/recipient/etc.
- Postfix 2.1 Address probing callout
- Postfix 2.1 Greylisting plug-in
- Postfix 2.1 SPF plug-in
- Postfix 1.1 Content filter (built-in, external before queue, external after queue)

Nützliches

- Postfix 3.5 Forced message expiration.
- Postfix 3.4 Logging to Postfix logfile, without using syslogd or systemd.
- Postfix 2.9 Non-repeating (long) queue IDs
- Postfix 2.8 Server reject “footer” text
- Postfix 2.3 Configurable delivery status notification message text
- Postfix 2.3 Sender-dependent SMTP relay lookup
- Postfix 2.3 Sender-dependent SASL password lookup

Datenbank Backends

- Postfix 3.7 Support for the pcre2 library.
- Postfix 3.7 Support to inline the content of small cidr:, pcre:, and regexp: tables in Postfix parameter values.
- Postfix 3.2 MySQL stored procedure support.
- Postfix 3.0 multi-database operators: pipelining with pipemap:map1, map2, ... and concatenation with unionmap:map1, map2, ...
- Postfix 2.11 LMDB database
- Postfix 2.10 Sendmail-style socketmap
- Postfix 2.9 Gradual degradation: in many cases a Postfix daemon will log a warning and continue providing the services that are still available, instead of immediately terminating with a fatal error.
- Postfix 2.9 Memcache database
- Postfix 2.8 SQLite database
- Postfix 2.2 CDB database
- Postfix 2.0 PostgreSQL database
- Postfix 1.0 LDAP database
- Postfix 1.0 MySQL database
- Postfix 1.0 Berkeley DB database
- Postfix 1.0 DBM database

Mailboxes / Container Support

- Postfix 1.0 Maildir and mailbox format
- Postfix 1.0 Virtual domains

und viel später dann:

- Postfix 3.3 Support to run as PID=1 in a Linux container.
- Postfix 3.4 Logging to stdout from Postfix daemon and non-daemon programs.

Adressmanipulation

- Postfix 2.2 Masquerading addresses in outbound SMTP mail
- Postfix 2.2 Selective address rewriting
- Postfix 1.1 VERP envelope return addresses

- Postfix 0.8 (Final update: September 1999)
- Postfix 0.9 (Final update: December 1999)
- Postfix 1.0 (Final update: February 2001)
- Postfix 1.1 (Final update: July 2003)
- Postfix 2.0 (Final update: April 2002)
- Postfix 2.1 (Final update: May 2005)
- Postfix 2.2 (Final update: October 2007)
- Postfix 2.3 (Final update: August 2009)
- Postfix 2.4 (Final update: March 2011)
- Postfix 2.5 (Final update: February 2012)
- Postfix 2.6 (Final update: February 2013)
- Postfix 2.7 (Final update: January 2014)
- Postfix 2.8 (Final update: February 2015)
- Postfix 2.9 (Final update: October 2015)
- Postfix 2.10 (Final update: October 2016)

- Postfix 2.11 (Final update: January 2018) -> 2.11.11
- Postfix 3.0 (Final update: February 2019) -> 3.0.15
- Postfix 3.1 (Final update: February 2020) -> 3.1.15
- Postfix 3.2 (Final update: April 2021) -> 3.2.22
- Postfix 3.3 (Final update: February 2022) -> 3.3.22
- Postfix 3.4 (Final update: April 2023) -> 3.4.29
- Postfix 3.5 (Final update: February 2024) -> 3.5.25

- Postfix 3.6
- Postfix 3.7
- Postfix 3.8

- Postfix 3.9 stable release
- Postfix 3.9.0

There be dragons...

- Postfix 3.10 experimental release (postfix-3.10-20240310)

Man kann ganz hervorragend Postfix-Code abschreiben und in Python neu implementieren

- “Don’t speculate - measure!”
- Oft hat man eine festgelegte Meinung, aber dann braucht man noch Fakten, die das untermauern. . .

- Beweise/Logs sammeln
- Beweise/Logs für das gegenteilige Verhalten sammeln
- Alles zusammenschreiben
- dabei dann den eigenen Fehler entdecken und alles wieder löschen :/

- Mailgrößen
- Absender / Zeiteinheit
- Empfänger / Zeiteinheit
- Ausführungszeit
- Menge von TLS Handshakes / Zeiteinheit
- Menge von NOOP Kommandos / Verbindung
- Menge von Verbindungen / Zeiteinheit

SMTP smuggling - schön vor Weihnachten!
<https://www.postfix.org/smtm-smuggling.html>

- Aug 14, 2008: Postfix local privilege escalation via hardlinked symlinks.
- Sep 2, 2008: Postfix Linux-only local denial of service.

20001101: FAQ update by Ralf Hildebrandt
20001120: Bugfix: per-destination deferred mail logfiles were case sensitive so that the same site could have multiple deferred mail logfiles, so that not all mail would be flushed with ETRN. Reported by Ralf Hildebrandt.

20020222: Bugfix: off-by-one error, causing a null byte to be written outside dynamically allocated memory in the queue manager with addresses of exactly 100 bytes long, resulting in SIGSEGV on systems with an "exact fit" malloc routine. Experienced by Ralf Hildebrandt; diagnosed by Victor Duchovni.

20020514: Bugfix: the new code for header address quoting sometimes did not null terminate strings so that arbitrary garbage could appear at the end of message headers. Reported by Ralf Hildebrandt.

20020809: Bugfix: the 20020531 bugfix could prepend '.' to lines when it shouldn't (but only when converting 8-bit mail to 7-bit). Problem experienced by Ralf Hildebrandt.

20020924: Bugfix: reject_rhsbl_<mumble> was broken when <mumble> was unavailable, causing the restrictions parser to get out of sync. Spotted by Ralf Hildebrandt

20021112: Robustness: increase the mime_nesting_limit from 20 to 100, so that bounces can't loop. Each bounce increases the MIME nesting level by one. Ralf Hildebrandt and Victor Duchovni.

20030804: Bugfix: the 20030712 safety against invalid DNS results was broken. Reported by Ralf Hildebrandt

20040722: Workaround: LINUX 2.4 has trouble with mixed data and file descriptor traffic on UNIX-domain stream sockets. Specifically, it cannot handle data write (read) followed by file descriptor send (receive): the receiver hangs in recvmsg(). Workaround is to insert an intervening read (write) operation. Presumably, LINUX 2.4 is confusing the data and file descriptor. Lucky Ralf Hildebrandt

20051017: Bugfix: after DSN support was added, smtp_skip_5xx_greeting no longer recognized a 5xx SMTP status as a 4xx one. Found by Ralf Hildebrandt.

20051212: Bugfix: after a failed TLS session, the 20051210 SMTP client code cleanup broke sessions with backup servers, causing the client to get out of step with the backup server. This in turn exposed a one-year old missing exception handling context in the EHLO handshake after sending STARTTLS. Victim was Ralf Hildebrandt, detectives Victor Duvovni and Wietse.

20060124: Bugfix: the virtual(8) delivery agent did not insist on privileged operation as it should; this broke change 20060117. Ralf Hildebrandt.

20061017: Cleanup: removed spurious warning when the cleanup server attempts to bounce mail with soft_bounce=yes. Problem reported by Ralf Hildebrandt.

20110102: Feature: STARTTLS support for the postscreen(8) daemon. With early testing feedback from Victor Duvovni and Ralf Hildebrandt

20110323: Bitrot: qshape regex pattern for long queue file names. Ralf Hildebrandt.

20111025: Bugfix (introduced: Postfix 2.8): postscreen sent non-compliant SMTP responses (220- followed by 421) when it could not hand off a connection to a real smtpd process, causing some remote SMTP clients to bounce mail. The fix redirects the client to the dummy SMTP engine which sends the 421 reply at the first legitimate opportunity. Problem reported by Ralf Hildebrandt

20121022: Bugfix (introduced 20101009) don't complain about stray -m option if none of [-bhm] is specified. Ralf Hildebrandt

20130506: Non-production bugfix: macros must use distinct names for temporary variables, to avoid name collision problems. Problem report: Ralf Hildebrandt.

20170721: Bitrot: updated postconf LDAP database configuration check with SASL and TLS-related parameters. Reported by Ralf Hildebrandt.

20170722: Cleanup: don't log the 'delay_dotcrlf' workaround for CISCO PIX bugs before the smtp_pix_workaround_threshold_time has passed. Reported by Ralf Hildebrandt

20180903: Bugfix (introduced: 20180825): postscreen falsely claimed that the remote SMTP client was pipelining after sending BDAT. Found by Ralf Hildebrandt.

Ab mit den alten Zöpfen!

- `permit_mx_backup`
- `xxx_use_tls`
- `xxx_enforce_tls` – Entsprechende `xxx_security_level`-Einstellung nutzen
- `xxx_per_site` – Entsprechende `xxx_policy_maps`-Einstellung nutzen
- `disable_dns_lookups` – `smtp_dns_support_level` benutzen
- `smtpd_tls_dh1024_param_file` und `smtpd_tls_eecdh_grade` – einfach Defaults nutzen

2004 aus der Doku entfernt:

- `permit_naked_ip_address`
- `reject_maps_rbl`
- `check_relay_domains`

Steht aber alles im `DEPRECATION_README!`

Vielen Dank!

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