Release Notes for Dovecot Pro Minor release 2.2.32

1. Shipped Products and Versions

Dovecot Pro 2.2.32
Including Object Storage Plug-In, Full Text Search Plug-In, Virtual Plug-In and Pigeonhole Sieve Plug-in.
Important Changes and Bugs fixed since previous Public Release

1.1. Dovecot Pro Core

- **IMPROVEMENT DOV-952:** Adds VOLATILEDIR path to mail_location, which is used for creating some temporary files such as lock files. This is especially useful with NFS to avoid writing the locks to the NFS server. The path needs to point to a user-specific directory. To avoid its size growing excessively, it's a good idea to implement a cronjob that deletes very old files inside it and attempts to rmdir all the old directories. The location does not need to be persistent across restarts or reboots.
    - Example usage:
      mail_location=sdbox:~/sdbox:VOLATILEDIR=/tmp/volatile/%2.256Nu/%u

- **IMPROVEMENT DOV-961:** quota-status service should support recipient_delimiter
    - quota-status should support recipient_delimiter setting in the same way as lda and lmtp do, otherwise posfix cannot query quota status

- **IMPROVEMENT DOV-963:** Mailbox list index shouldn't be opened on mailbox sync if nothing has changed
    - Optimization: If nothing changes, there's no need to check if dovecot.list.index is up-to-date. Especially if the index isn't even opened yet. So for example a read-only "fetch mail X from INBOX" shouldn't need to access dovecot.list.index.
    - Also disable autoexpunging when IMAP connection is hibernated. This would also open dovecot.list.index and in general there shouldn't be much behavioral difference between hibernating and non-hibernating IDLE.

- **IMPROVEMENT DOV-972:** pop3-migration: Drop lines with only spaces or tabs from comparison
    - pop3-migration: Drop lines with only spaces or tabs from comparison

- **IMPROVEMENT DOV-983:** Add BROKENCHAR setting to mail_location. This can be useful with imapc to access folder names that aren't valid mUTF-7 charset from remote servers. For example if mail_location = imapc::BROKENCHAR=^, migrating "&test-" named folder would be changed to "^26test-".
- **IMPROVEMENT DOV-1074:** Avoid refreshing list of folders in the mailbox list index if mailbox_list_index_very_dirty_syncs=yes
    - o This allows LIST to be performed only by reading the mailbox list index, without stat()ing every folder on the filesystem.

- **IMPROVEMENT DOV-1112:** Change lib-sql's driver-cassandra code to support Cassandra driver's paging feature
    - o Change lib-sql's driver-cassandra code to support Cassandra driver's paging feature. Currently when doing a SELECT query towards Cassandra it returns all the results that matched. With paging we'll need to add a new setting that controls how many results are returned. Afterwards we'll need to check if there are more results, and if so send another query to Cassandra and continue the results.
    - o The Cassandra cpp-driver API is explained: in http://datastax.github.io/cpp-driver/2.5/topics/basics/handling_results/#paging

- **IMPROVEMENT DOV-1151:** Update INBOX status in mailbox list index with mailbox_list_index_include_inbox=yes
    - o If LISTINDEX resides in tmpfs, INBOX status should be included in list index.

- **IMPROVEMENT DOV-1155:** Avoid accessing mail_home on login
    - o Return chdir=/path from userdb to override chdir()ing to mail_home. This avoids accessing the home directory just for the chdir, which typically isn't needed.

- **IMPROVEMENT DOV-1156:** Avoid stat()ing mailboxes/ directory on login
    - o Avoid stat()ing index root dir with ITERINDEX

- **IMPROVEMENT DOV-1160:** Allow specifying postlogin script path via userdb
    - o lib-master: Allow userdb to return postlogin socket path.
    - o Returning "postlogin=socketpath" as userdb extra field overrides the postlogin socket path in the service { executable } parameter.

- **IMPROVEMENT DOV-1200: config: Log a warning if plugin { key=no } is used explicitly**
    - o config: Log a warning about plugin { ...=no } probably being treated as "yes"

- **BUG 51875:** Panic: file mail-index.c: line 931 (mail_index_file_set_syscall_error): assertion failed: (filepath != NULL)
    - o **FIX:** lib-index: Fix mail_index_get_modification_time() to work when index isn't open.

- **BUG 51882:** Error: Timeout communicating with /var/run/dovecot/imap-master
  - **FIX:** imap: Flush response to client before starting possibly long operation

- **BUG 53433:** dsync/imapc incremental migration fetches all message headers
  - **FIX:** lib-mail: istream-header-filter - Fix HEADER_FILTER_ADD_MISSING_EOH with empty input
    - This fixes calculating hashes for incremental dsync when mail didn't have Date or Message-ID headers

- **BUG 54273:** LMTP crashes with push_notification plugin enabled: Panic: file ioloop.c: line 125 (io_remove_full): assertion failed: (io->callback != NULL)
  - **FIX:** push-notification: Switch to main ioloop while calling drivers' commit callbacks

- **BUG DOV-950:** acl: acl_globals_only shouldn't access dovecot-acl-list
  - **FIX:** acl: Don't read/write dovecot-acl-list with acl_globals_only=yes

    - The dovecot-acl-list file is unnecessary when there are only global ACLs.
- **BUG 54379:** quota_clone plugin with mysql backend does not update quota values properly
  - **FIX:** dict-sql: Do not increment on set

- **BUG DOV-973:** sdbox: If INDEX dir is set, accessing nonexistent mailbox creates index directory for it
  - **FIX:** sdbox: Don't create index directory when trying to open nonexistent mail-boxes

- **BUG DOV-975:** Deleting nonexistent autocreated mailbox creates it temporarily
  - **FIX:** lib-storage: Don't autocreate mailbox during deletion.
    - Trying to delete a nonexistent autocreated mailbox first created it and then immediately deleted it.

- **BUG DOV-982:** If INDEX dir is set, mailbox deletion deletes its childrens' indexes
  - **FIX:** lib-storage: Fix mailbox delete to not delete childrens' INDEX or CONTROL dirs
    - If mail_location had separate INDEX and/or CONTROL set, deleting a mailbox with children caused the childrens' index and/or control directories to be deleted (but the mail/ALT directories weren't).

- **BUG DOV-1135:** Panic: file ldap-connection.c: line 709 (ldap_result_has_failed): assertion failed: ((result->openldap_ret == LDAP_SUCCESS) == (result->error_string == NULL))
  - **FIX:** Ensure input is properly escaped in query strings

- **BUG DOV-1164:** IMAP process crashes if mail namespace initialization fails during un-hibernation: Panic: file master-service.c: line 819 (master_service_client_connection_destroyed): assertion failed: (service->master_status.available_count < service->total_available_count)
  - o **FIX:** Mark IMAP client created early enough to avoid crash later on

- **BUG DOV-1169:** doveadm user shouldn't run any plugins
  - o **FIX:** lib-storage: MAIL_STORAGE_SERVICE_FLAG_NO_PLUGINS wasn't working correctly

- **BUG 54983:** Transaction log changed unexpectedly, can't get modseq / Failed to import client state
  - o **FIX:** Fix modseq tracking in lib-index

- **BUG 54941:** mdbox: "Inconsistency in map index" isn't fixed automatically
  - o **FIX:** mdbox: "Inconsistency in map index" wasn't fixing itself automatically

- **BUG DOV-1233:** director: Rapid reconnection loop on connect failures
  - o **FIX:** director: Fix rapid reconnection on failed outgoing connections
    - ▪ last_network_failure wasn't set, which caused a failed outgoing connection to immediately reconnect to it. This resulted in rapid logging of connect() errors.

1.2.   Object Storage Plug-in

- **IMPROVEMENT DOV-939:** obox: Rescan should drop duplicate OIDs and log about them
  - o obox: Rebuild index if duplicate OIDs are found during rescan

- **BUG DOV-956:** obox2 error handling fixes
  - o **FIX:** Add missing read error handling to fs cache, and metacache error handling

- **BUG DOV-1280:** obox: Namespace prefixes .. have duplicate location
  - o **FIX:** obox: Fix alias_for namespace checks to work correctly
    - ▪ It was possible to set alias_for for ns1 -> ns2, but not ns2 -> ns1 without failing.

1.3.   Full Text Search Plug-In

- **IMPROVEMENT DOV-1202:** fts-jp-kuromoji-plugin: Add tokenization delimeters.
  - Added tokenization delimeters.
  - Added several Fullwidth and Halfwidth punctuation characters and Katakana.

- **IMPROVEMENT DOV-1205:** fts-jp-kuromoji-plugin: Enable libkuromoji search mode.
  - **IMPROTANT**: Enabled libkuromoji search mode by default. For existing installations the feature should be disabled, unless the FTS indexes are to be recreated. The search mode can be disabled by adding fts_tokenizer_kuromoji = kuromoji_split_compounds=No into the plugin configuration section of Dovecot.

- **IMPROVEMENT DOV-1206:** fts-jp-kuromoji-plugin: Make ICU transliterator id configurable.
  - Made ICU transliterator id configurable.

- **BUG 55032:** fs-fts-cache unnecessarily refreshes an up-to-date cache
  - **FIX:** fs-fts-cache: Don't try to strdup() and store already freed refresh_id
    - This fixes writing refresh-id correctly to cache.log. Wrong refresh-id caused unnecessary fts cache refreshes.

1.4.   Virtual Plug-In

- **BUG 51871:** virtual plugin: Panic: file virtual-storage.c: line 452 (virtual_mailbox_close_internal): assertion failed: (mbox->backends_open_count == 0)
  - **FIX:** obox: Closing mailbox properly if mailbox_open() fails
    - The mailbox_open() and mailbox_opened hook has been called by all the plugins already, so the closing needs to do a full close that can becaught by all plugins.

- **BUG 52500:** virtual plugin: Panic: file mail-storage.c: line 1751: unreached
  - **FIX:** obox: Make sure mailbox_get_open_status(items==0) doesn't fail.
    - virtual plugin was using this to get the have_* fields for backend mailboxes.

- **BUG 51320:** virtual plugin: Mailbox ID # unexpectedly lost
  - **FIX:** Expunge virtual mails if backend box is deleted

- **BUG DOV-1163:** virtual: Flag syncing is broken
  - **FIX:** virtual: Update flags on sync

1.5. Pigeonhole Sieve Plug-In

- **BUG DOV-1296:** sieve-filter does not work with Japanese folder name
    - **FIX:** sieve-filter: Removed (now) duplicate utf8 to mutf7 mailbox name conversion.

- **BUG 54310:** CMD_REDIRECT_DUPLICATE_KEEP should be configurable
    - To prevent mail loops, the Sieve "redirect" action remembers certain identifiers about emails it has seen before. These identifiers are stored in the .dovectot.lda-dupes database file. Unfortunately, the retention period for these duplicate identifiers is not configurable. For accounts that perform many redirects in a short time frame, the lda-dupes database could grow to impractical sizes.
    - **FIX:** lib-sieve: Made the retention period for redirect duplicate identifiers configurable using the "sieve_redirect_duplicate_period" setting.
    - **FIX:** changed the default retention period from 24 to 12 hours.

1.6. Dovemon

- **BUG 53134:** dovemon's deep inspection resulting in flapping due to split brain
    - **FIX:** in dovemon.conf.yml you can now set: poll_unknown_backends: no to stop polling backends that do not exist in dovemon.testusers.yml

2. Tests

The Dovecot QA team has successfully verified all bug fixes that could be reproduced within a lab environment.

To avoid side effects, the shipped packages have gone through automated regression test on both, a Continuous Integration System and a dedicated server setup for system and integration testing.

All changes have been checked for potential side-effects and effect on behavior. Unless explicitly stated within this document, we do not expect any side-effects.