



# Release Notes for Dovecot Pro Patch release 2.2.31.1

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## 1. Shipped Products and Versions

Dovecot Pro 2.2.31.1

Including Object Storage Plug-In, Pigeonhole Sieve and Virtual Plug-In

Important Changes and Bugs fixed since previous Public Release

### 1.1. Dovecot Pro Core

- **BUG DOV-958:** Plugins can't easily use `mail_add_temp_wanted_fields()`
  - **FIX:** lib-storage: `mail_add_temp_wanted_fields()` - delay opening stream
    - Allows plugins to call it in `mail.get_stream()` without infinite loop.
- **BUG DOV-986:** IMAP NOTIFY: Parameter parsing was broken in v2.2.31
  - **FIX:** IMAP NOTIFY - Fix parameter parsing
- **BUG DOV-994:** imapc: `mail_prefetch()` initializes cached istream even if it's not needed
  - **FIX:** imapc: Prefetch - Initialize cached stream only if needed
    - If the mail is immediately accessed for other purposes (e.g. fetching message flags), there's no need to go through all the trouble of initializing the mail stream.
- **BUG DOV-749:** `quota_warning = -storage=.` is never executed with `quota=count`
  - **FIX:** quota: Fix negative `quota_warnings` with count backend
    - Finishes the fix in v2.2.31, which fixed this for "messages" but not for "storage".
- **BUG DOV-658:** Panic: file `mail-index.c`: line 931 (`mail_index_file_set_syscall_error`): assertion failed: (`filepath != NULL`)
  - **FIX:** lib-index: Fix `mail_index_get_modification_time()` to work when index isn't open.
    - This could have happened in race conditions when mailbox was attempted to be opened while it was being deleted.

- **BUG DOV-962:** mail\_namespaces\_added/created() error handling may cause crashes. For example if object storage couldn't be accessed, the initialization may have crashed.
  - **FIX:** lib-storage: Remove namespaces on init error
  - **FIX:** lib-storage: Changed mail storage initialization.
- **BUG DOV-987:** fts: Do not attempt to deinitialize backend if it's not set
  - **FIX:** If FTS backend initialization fails or does not happen, flist->backend might end up being NULL, and attempt to deinitialize NULL won't end well.
- **BUG DOV-1111:** imapc: Large mails aren't cached
  - **FIX:** imapc: Fix caching >= 32 kB mail bodies
    - When closing the mail, only in-memory mail bodies were stored to cache.

## 1.2. Object Storage Plug-in

- **BUG DOV-1084:** v2.2.29..v2.2.31 crashes for users with many (~200+) folders
  - **FIX:** fs-plugins: Fix crash reading diff lines in buckets cache
- **BUG DOV-1077:** metacache cleaning isn't working correctly:
  - Prioritized metacache cleaning was enabled somewhat randomly due to uninitialized variable.
    - **FIX:** metacache: Fully initialize userdb\_settings struct
  - Users weren't removed from metacache process after they were successfully cleaned.
    - **FIX:** metacache: Remove user when its disk space is 0 after cleaning
    - **FIX:** lib-metacache: Make sure disk usage sent to metacache is 0 only if user is cleaned
  - User's last access timestamp was updated by metacache flush/clean, which wrongly affected further cleaning decisions.
    - **FIX:** metacache: If service name is empty, don't update last\_access in user\_client deinit
  - Users may have gotten into an infinite cleaning loop, when .usage file listed folders that were already cleaned. This caused metacache to think that there would be something to clean, but cleaning never cleaned it.
    - **FIX:** lib-metacache: Remove nonexistent mailboxes from .usage on upload/flush/clean
    - **FIX:** lib-metacache: Make sure .usage is updated after user is successfully partially cleaned
    - **FIX:** metacache: Make sure cleaning updates bytes\_used
- **BUG DOV-993:** doveadm metacache flushall command fails: Users keep changing
  - **FIX:** metacache: Fix handling worker commands when user is already cleaned from metacache
    - Especially UPLOAD/FLUSH needs to get the user removed from metacache, so it won't try to flush the user again.
  - **FIX:** metacache: Fix crash if worker command fails due to internal error.

## 1.3. Pigeonhole Sieve

- **BUG DOV-1085:** sieve-filter died with segmentation fault
  - **FIX:** sieve-tools: sieve-filter: Forgot to clean up script binary at end of execution.
- **BUG DOV-1070:** managesieve-login: Multiple AUTHENTICATEs crash due to accessing freed memory
  - **FIX:** managesieve-login: authenticate command: Make sure client->auth\_mech\_name\_parsed is reset properly upon command error.

- **FIX:** managesieve-login: managesieve\_client\_input\_next\_cmd(): Fix handling of command continuation.

## 1.4. Virtual Plug-in

- **IMPROVEMENT DOV-991:** Use mailbox\_notify\_list API when mailbox\_list\_index is enabled
  - **This improves performance since the backend mailboxes can be left closed.**
- **BUG DOV-655:** 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 be caught by all plugins.
- **BUG DOV-815:** Virtual plugin fails to match multiple metadata conditions for the same pattern
  - **FIX:** virtual: Match any metadata condition
    - The old code ignored succesful earlier matches for patterns, and stopped looking on first non-matching metadata pattern. Now it breaks on error or on first matching pattern.
- **BUG DOV-816:** Virtual plugin does not correctly update RECENT counts from backend mailboxes.
  - **FIX:** Synchronization code now correctly counts RECENT values
- **BUG DOV-839:** Virtual plugin: Panic: file mail-storage.c: line 1751: unreachable
  - **FIX:** obox: Make sure mailbox\_get\_open\_status(items==0) doesn't fail.
  - **FIX:** virtual: Avoid assert-crash if backend mailbox's have\_guid lookup fails
- **BUG DOV-988:** Virtual plugin fails to initialize index header properly when creating it in the first place.
  - **FIX:** When index is missing or corrupted, rewrite the whole header.
- **BUG DOV-989:** Appending multiple mails via virtual folder crashes with: Panic: file mail-index.c: line 417 (mail\_index\_keywords\_unref): assertion failed: (keywords->refcount > 0)
  - **FIX:** Manage save context correctly during save in virtual plugin
- **BUG DOV-990:** virtual: Panic: file mail-storage.c: line 2311 (mailbox\_save\_context\_reset): assertion failed: (!ctx->unfinished)
  - **FIX:** Manage save context correctly during save in virtual plugin
- **BUG DOV-1020:** Mailbox ID # unexpectedly lost
  - **FIX:** When index is missing or corrupted, rewrite the whole header.

## 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.