## Command Progress Notifications

- IMAP search on very large folders and copy/move
- Users can be confused by lack of responses
- Clients often timeout if the server is silent for too long

# Command Progress Notifications

- No formal way for clients to infer the server progress and communicate it to the user
- Proposal: a new Response Code to convey progress updates

# Command Progress Notifications

```
[INPROGRESS ("<CMDTAG>" <DONE> <GOAL>)]
```

- CMDTAG: cmd-tag of the command sending updates
- DONE: the number of items (messages) processed so far
- GOAL: the total amount of items

## Command Progress Notifications

Providing the raw count/goal enables the client to:

- Present the progress as percentage
- Consolidate progresses along multiple commands executing in parallel
- Project an ETA, or a rate of progress,
  based on the time the updates were received and the counts

# Command Progress Notifications

#### Known Issues

Cmd-tags containing ']' cannot be represented cleanly

#### Notes

 GOAL can be omitted if unknown, or expensive to compute beforehand In this client the client loses the ability to derive a completion ratio, but it can still infer progress rates.

5/5 - Marco Bettini, the Dovecot team, Open-XChange