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hkml: A tool for working on mailing lists-driven projects without subscribing

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Mailing Lists Driven Development

- Communicate with plain/text mails Cc-ing public mailing lists
  - Patch submission/review, issue reporting, discussion
  - Linux kernel uses this approach: Arguably good enough to be used
- Pros: Flexible and decentralized
- Cons: (Arguably) high learning curve, no dedicated tool
  - Explosive amount of mails
  - Gmail-like cloud email clients are usually not optimized for this usage
  - Self email setup is a sort of lost technologies to some cloud-natives
  - Email clients are not developed for only this purpose anyway

Public-inbox: sharing of an email inbox via git

- Provides a modern web UI and a tool for searching and importing mails: lei
- Linux kernel uses public-inbox (lore.kernel.org)
- Motivated many kernel developers to unsubscribe mailing lists
  - Use of multiple tools (web or lei + mbox-supporting mail client + b4) is common
  - Still _some_ feels not comfy
- Why not hack a single tool using public-inbox that just works?
  - Learning one tool is easier than learning >=1 tools for new contributors
  - Just for fun

hkml

- A tool that developed for public mailing lists based developments
- Goal: just work with minimum preparations (git)
- Optimized for public-inbox and Linux use case
    - Supports general mbox imports and exports, though
- Officially committed to support DAMON and Linux kernel developers

Installation

- `git clone https://github.com/sjp38/hackermail`
  - https://git.kernel.org/pub/scm/linux/kernel/git/sj/hkml.git is also available
  - Consider setting `$PATH` to point it
- If you will use this for linux kernel, that’s it
  - Otherwise, please read the doc: https://github.com/sjp38/hackermail/blob/master/USAGE.md#initialization

Writing a new mail: `hkml write`

- Opens a text editor (`$EDITOR` is respected) to wirteup the mail and send it
  - Use git `send-email` for sending the mail
  - (`git send-email` is a pre-requisite)

Reading Mails: `hkml list <mailing list name or mbox file>`

- Opens a list of mails for given mailing lists, mbox files, and/or “message id”s
- Supports command line options for filtering and decorating mails
  e.g., `--subject PATCH --body mm/damon/core.c`
- Most mail management can be done on the list in interactive ways
  - Replying, forwarding
  - Listing complete thread of a mail
  - Exporting the mails as an mbox file
- Do “`hkml list damon --fetch`” and press “q” key. That’s it.

Organizing Mails: Tagging and Remote backup/restore

- Tagging
  - Add and remove arbitrary tags to mails from ‘`hkml list`’, or ‘`hkml tag {add,remove}`’
  - List existing tags via ‘`hkml tag list`’
  - List mails of a given tag via ‘`hkml list <tag name>`’
- Remote backup/restore
  - Backup and sync personal information including the tags using a personal git repo
  - `hkml sync --remote <personal git repo>`

Formatting and Sending Patches

- `hkml patch cv_commit`
  - Create a commit for storing cover letter of the patch series
  - Not a mandate
- `hkml patch format`
  - Format patches, auto-fill cover letter using the cv commit or a given file
  - Add recipients using `get_maintainer.pl` (add all recipients to cover letter only)
  - Run `checkpatch.pl` for each patch and summarize the results
  - Summarizes the recipients in a condensed way
  - Send the patches to the recipients

Collecting and Reviewing Patches

- Patch mails show diff lines with git’s color scheme
- From the list or command line, users can do below to patch mails on the list
  - Run ‘`checkpatch.pl`’ and show the result
  - Apply patches on the local git repo
  - Save as patch files
    - ‘`Reviewed-by:`’, ‘`Acked-by:`’ like tags and ‘`Link:`’ are collected and added

Summary

- Mailing lists driven development works (if appropriate tooling exists)
- hkml is a tool for the development model, optimized for public-inbox and Linux
- hkml is publicly committed to support DAMON and Linux kernel developers

Questions?

- https://github.com/sjp38/hackermail
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