# Cyrus IMAP 3 and JMAP development

Please see: blogpost16-WikiSuite-will-now-support-all-major-Linux-distros. While ClearOS's mail stack is powered by Cyrus IMAP, Virtualmin's mail stack is with Dovecot, so we will focus on efforts there. This page is kept for posterity.

WikiSuite will add support for JMAP via a combination of contributions to Cyrus, Cypht and the IETF standardization process.

Cyrus 3.2 with JMAP support is planned for March 2020.

On July 14 and 15, 2018, WikiSuite team members were at the July 2018 JMAP IETF Hackathon in Montréal , which was a follow-up to the March 17 and 18, 2018 event, where WikiSuite team members joined Fastmail at the IETF 101 Hackathon to work on JMAP. -> 2018 XMPP, WebRTC and JMAP Hackathons in London

As of 2019, the reference implementation is on ClearOS, but the future production implementation will be using containers.

ClearOS's 7.x's mail server is Cyrus IMAP 2.x This page is to coordinate testing of upcoming Cyrus IMAP 3.x , which brings new features such as CalDAV, CardDAV and JMAP support.

## **Status**

A lot of work is happening on the JMAP spec and associated code. We'll update cyrus.suite.wiki in November or December 2017 January February 2018 before the event to the latest developer snapshot.

# Keep informed of JMAP-related work on Cyrus

- issues related to JMAP on Github
- Weekly updates on the Cyrus-devel Mailing list

## Code

- https://github.com/cyrusimap/cyrus-imapd (Cyrus)
- https://gitlab.com/clearos/upstream/centos/cyrus-imapd/tree/clear7 (Cyrus 2.x app for ClearOS)
- https://gitlab.com/clearos/clearfoundation/app-smtp (Postfix app for ClearOS)

## **Commits**

## JMAP spec

Recent Commits to jmap:master

- Add keywords spec
- Add email push spec
- calendars: Publish -22
- Make ShareNotification headings consistent
- calendars: Match sharing language/formatting
- RFC9670 final version
- calendars: Publish -21 draft
- calendars: Use SVG for diagram
- calendars: Format examples as
- calendars: Update example to be more recent

Recent Commits to cyrus-imapd:master

- Merge pull request #5112 from dilyanpalauzov/remove\_auth\_mech\_krb
- Merge pull request #5142 from ksmurchison/cyr-1395-sieve-snoozelogging
- Imtp\_sieve.c: better snooze failure logging
- Merge pull request #5141 from ksmurchison/issue 5047
- imapd.c: fix proxying UID Search (issue #5047)
- Merge pull request #5086 from benmuellnix/master
- Merge pull request #4805 from caldwell/check-nonexistent-mb-fix
- Merge pull request #5130 from ksmurchison/RFC-updates-incomments
- Update comments with I-Ds to their RFCs
- Merge pull request #5134 from ksmurchison/cyr-1400-shutdown-on-failed...

# What is new in Cyrus 3.x

- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.0.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.1.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.2.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.3.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.4.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.5.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.6.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.7.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.8.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.9.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.10.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.11.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.12.html
- https://www.cyrusimap.org/imap/download/release-notes/3.0/x/3.0.13.html

# cyrus.suite.wiki

cyrus.suite.wiki is a shared development and testing server. Once the testing period is over, the server will be deleted so don't store any real data on this server. If you would like server access, please contact Marc Laporte

## Urls

You can replace **test** with your login and follow the pattern below

## User management

https://cyrus.suite.wiki:81/app/users (you need root access). And users need to login via IMAP for their account to be properly set up.

### CalDAV

https://cyrus.suite.wiki/dav/calendars/user/test

### CardDAV

https://cyrus.suite.wiki/dav/addressbooks/user/test/

### **RSS**

https://cyrus.suite.wiki/rss/user/test

### **IMAP** and **SMTP**

#### **IMAP**

port 143

server: cyrus.suite.wiki

username: login (not full email)

#### **SMTP**

port: 25?

server: cyrus.suite.wiki

username: login (not full email)

not working for me

#### **IMAPS**

SSL port 993

server: cyrus.suite.wiki

username: login (not full email)

not working for me

#### **SMTPS**

SSL

port: 587

server: cyrus.suite.wiki

username: login (not full email)

not working for me

### JMAP webmail

Test URLS, automatically logged in, as a different user:

- http://cyrus.suite.wiki:8080/ (test inbox provided by upstream)
- http://cyrus.suite.wiki:8080/user-nikola.html
- http://cyrus.suite.wiki:8080/user-test.html

### Old non-working attempt

[+]

# Confirmation that JMAP is working

```
[root@cyrus ~]# curl -X POST -H "Content-Type: application/json" -H "Accept: application/json"
--user test:wikisuite -d '[["getCalendars", {}, "#1"]]' http://localhost/jmap/
[["calendars",{"accountId":"test","state":"15","list":[{"id":"Default","x-href":"/dav/calendars/user/test/Default","name":"personal","mayReadFreeBusy":true,"mayReadItems
":true,"mayAddItems":true,"mayModifyItems":true,"mayRemoveItems":true,"mayRename":true,"mayDele
te":true}],"notFound":null},"#1"]]
[root@cyrus ~]#
```

```
[root@cyrus ~]# curl -X POST -H "Content-Type: application/json" -H "Accept: application/json"
--user test:wikisuite -d '[[ "getMailboxes", {}, "#0" ]]' http://localhost/jmap/
[["mailboxes", {"accountId": "test", "state": "23", "notFound": null, "list": [{"id": "23b8b283-54b2-495
3-83b1-
dddfdf50dlab", "name": "Inbox", "mustBeOnlyMailbox": false, "mayReadItems": true, "mayAddItems": true, "
mayRemoveItems":true,"mayCreateChild":true,"totalMessages":1,"unreadMessages":0,"totalThreads":
1, "unreadThreads":0, "parentId":null, "mayRename":false, "mayDelete":false, "role": "inbox", "sortOrd
er":1},{"id":"5e8d9e35-76a6-4a54-9bb4-
e8625f908670", "name": "Drafts", "mustBeOnlyMailbox": false, "mayReadItems": true, "mayAddItems": true,
"mayRemoveItems":true,"mayCreateChild":true,"totalMessages":1,"unreadMessages":1,"totalThreads"
:1, "unreadThreads":0, "parentId":null, "mayRename":true, "mayDelete":true, "role":null, "sortOrder":
10},{"id":"3334d6fb-
f621-4b7b-9634-93eb193023d2", "name": "Trash", "mustBeOnlyMailbox": false, "mayReadItems": true, "mayA
ddItems":true, "mayRemoveItems":true, "mayCreateChild":true, "totalMessages":0, "unreadMessages":0,
"totalThreads":0, "unreadThreads":0, "parentId":null, "mayRename":true, "mayDelete":true, "role":nul
l, "sortOrder":10}]}, "#0"]]
[root@cvrus ~]#
```

# Notes for future documentation page

### How to install

- 1. Set up MX records
- 2. install the eGloo release package: rpm -Uvh http://mirrors.egloo.ca/egloo/clearos/7.3/stable/x86\_64/egloo-release-7-2.noarch.rpm
  - This will be simpler in the future
- 3. Then install the IMAP and SMTP apps:

```
yum --enablerepo=egloo-clearos-devel install app-imap app-smtp
```

- 4. You will also need to do the following:
  - Create the default SSL certificate via the "System Settings Certificate Manager" app.
  - Create a user with IMAP and SMTP enabled.
  - Login via an IMAP client in order to create a mailbox for the user.

Optional: How to install Mail Forwarding on ClearOS

### How to use

- The extra features (CalDAV, CardDAV and JMAP) run on port 80 and/or 443, so Cyrus IMAP interferes with web server. On this dev server, we use port 8080 for the JMAP client
- See URLs patterns above

### Clients tested

#### **DAVdroid**

Automatic detection from email doesn't work but entering username, password and base URL works

## Questions

• Is it possible to have a logout feature? (which would make it easier to test with different accounts)

# Known bugs / limitations

Accounts created in ClearOS are not reliably setup for CalDAV and CardDAV.

Solution: login to the account via IMAP.

# For developers

- https://github.com/cyrusimap/cyrus-imapd/blob/master/docsrc/imap/developer/jmap.rst
- https://www.cyrusimap.org/imap/developer/jmap.html
- https://medium.com/linagora-engineering/you-cant-do-imap-in-the-browser-can-you-208838b0ba17
- http://jmap.io/server.html
- Cyrus release process switching to odd-even release cycle: "3.1.x releases will only ever be snapshots of the master branch, and should be considered for testing purposes and bleeding-edge features only. We will try to release these snapshots at coherent development points, but there will generally be large breaking changes occurring between releases in this series. At some point in the distant future, the next stable release series will be 3.2, which will aim to include the stabilised versions of the features developed/tested in the 3.1 releases."
- https://github.com/r00tat/cyrup