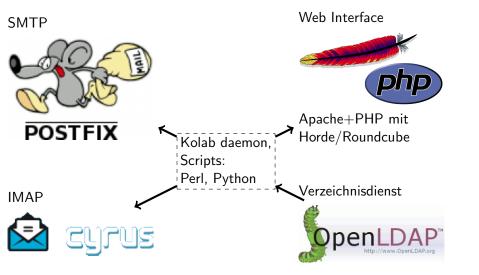
A REST API for the groupware Kolab with support for different Media Types

Bachelor Thesis

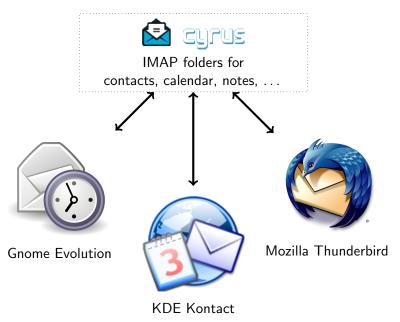
Thomas Koch

April 23, 2012

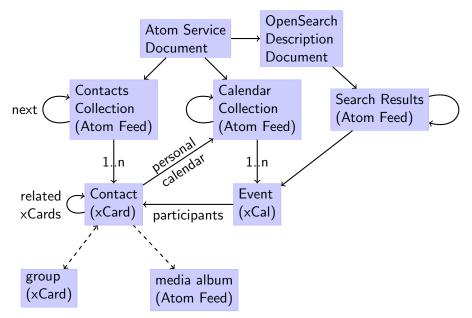
Kolab



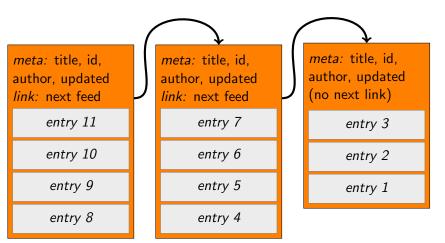
Kolab clients via connectors



Hyperlinks



feed after 11 POSTs



http://myapi.org/.../contacts?offset=0|4|8

POST new entry to feed

meta: title, id, author, updated link: next feed entry 12 entry 11 entry 10 entry 9

meta: title, id, author, updated link: next feed entry 8 entry 7 entry 6 entry 5

meta: title, id, author, updated (no next link) entry 4 entry 3 entry 2 entry 1

PUT updated entry 6

meta: title, id, author, updated link: next feed entry 6 entry 12 entry 11 entry 10

meta: title, id, author, updated link: next feed entry 9 entry 8 entry 7 entry 5

meta: title, id, author, updated (no next link) entry 4 entry 3 entry 2 entry 1

DELETE entry 2

meta: title, id, author, updated link: next feed deleted 2 entry 6 entry 12 entry 11

meta: title, id, author, updated link: next feed entry 10 entry 9 entry 8 entry 7

meta: title, id, author, updated (no next link) entry 5 entry 4 entry 3 entry 1

Many more changes

meta: title, id, author, updated link: next feed entry 7 entry 4 entry 10 deleted 11

meta: title, id, author, updated link: next feed entry 8 deleted 9 entry 1 entry 3

meta: title, id, author, updated (no next link) entry 5 entry 12 deleted 2 entry 6

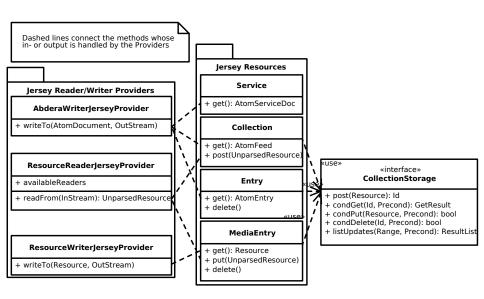
update of entry 6

meta: title, id, author, updated link: next feed entry 6 entry 7 entry 4 entry 10

meta: title, id, author, updated link: next feed deleted 11 entry 8 deleted 9 entry 1

meta: title, id, author, updated (no next link) entry 3 entry 5 entry 12

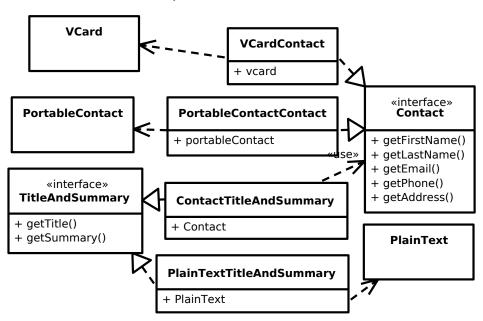
Execution flow overview



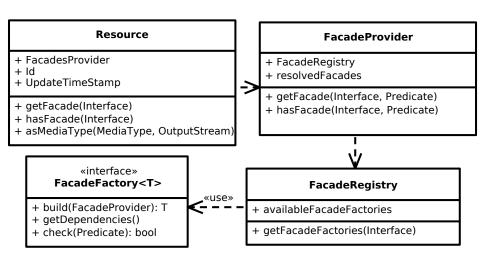
Resource Properties

- essential administration properties: unique ID, last update time, HTTP entity tag
- generic meta properties: title, summary, author
- ▶ a media type independent interface corresponding to the concept represented by the resource, e.g., a person, location, event, product, ...
- ▶ a media type specific serialization (representation) of the resource

Facades and their dependencies



Facades implementation



Dependency Injection

