Memory Log

# Meeting 1

## Notify Presentation and Setup

Date: 25.03.2021

Start: 9.24

End: 10.49

#### Present functionality of notify service (Sharing Monitor of Interviewer)

Workaround authentification:

* Get access\_token temporarily over modified factory login process
  + Later not necessary through to integration with other services

Show Main Notification component with sample Notifications

* Explain possible state of Notifications
* Show how they’re sorted into different categories
* **Feedback:** Looks good

Show User settings

* Different possible apis and how to subscribe to pipelines for each api
* **Feedback:** good customizability

Show setup process

* Enter API with notification route
* Sort notifications into categories
* Define pipelines for the user to subscribe to
  + **Comment to possible problems with entering pipelines requirements in JavaScript code:** Not important for first draft. More important is that it’s functional. Can be adapted later.
  + **Comment to saving pipeline directly from frontend:** security concerns because of possible database injections, need validator
* Build own Frontend widget for presenting the notification data
  + **Comment to components not yet possible to build outside of notify program**: independent web components needless amount of work
  + **Question:** How far widget customizable? – Answer: Prebuild components to use at chosen part of app (Short look into code for notificationTemplate to demonstrate)
  + **Question:** How does data look when it reaches frontend? Same data each time or different data for different templates (meaning: for different services/notification types)?
* **Feedback:** frontend for setup not so important. But cool to have a rough structure for the process.

#### Following procession of notification data

Show notification endpoint

* **Question:** Are all notifications from certain Microservice having the same parameter? (Pointing at layout and matching parameter)? – Answer: No. The parameter can be chosen for each notification type differently. They are not predefined and can be chosen freely.
* **Feedback:** (Create notification endpoints with different programming languages) Should work without problems. Simple to create data in each language as a constant tuple. To mark Microservice with type as identifier is important. In email service a similar build is used scop + key)

Show update process (explained with diagram)

* **Question:** Why not send Notifications with NATS directly? -
* **Comment:** In general, topic of how to transfer data between services of large interest for all developers in Vca.

Different approaches currently used in Pool^2 system. Example: Email data is getting send over NATS. If email is not going out, not overly problematic (is happening at Lieferando as well) and extra request is too much effort.

* + - Idea for additional discussion.
* **Feedback:** Great approach to try out new possibilities to try out new request strategies. For example: Make request only every 5 Minutes to reduce server load.

Show 3rd party notification process

* **Feedback (timer for bundling notifications):** Good solution. The organization is currently already in the process of creating best-practices-guides for timing all outgoing messages (Newsletter etc.)

#### Start setup process for new service (switch to machine of Participant)

Download and setup notify backend and frontend

* Small changes in documentation, env and docker files necessary (outdated variables, unnecessary NATS server, …)
* Run partially outside docker container (start database with docker, backend and frontend on local machine with terminal) to have more logging and changing options
* **Comment:** Security concerns (should remove token, password, etc from github)
* **Time needed:** 18 min

Test current authentication method

* **Problem:** access\_token not showing
  + Reason: problem with workaround method of getting access\_token
  + Solution: spontaneous extension build for direct Login

Test User settings:

* **Problem:** no options showing
  + Reason: “apis” table missing in database
  + Solution: added manually with mongodb client (long-term solution: make mongodb dump to ease setup)

**Feedback:** Setup Easy, Integration works well, easy to extend and customize

# Meeting 2

## Notify Setup Continued

Date: 26.03.2021

Start: 10.25

End: 12.45

Test user settings:

* **Problem:** “Subscribe to pipelines” options not showing
  + Reason: no microservice connected -> no pipelines defined.
  + Solution: Not necessary. Will be done in next section

#### Build notification endpoint to connect to

* Chosen microservice to connect notify to: run4water (campaign that saves distance of runs per user)
* Data for notifications: runs (with route, distance, etc… as parameter)
* **Misunderstanding:** don’t deliver data per user but all valid data
* Using notification route from waves as template
* **Question:** what’s the parameter “valid till” for and what type is it?
* **Comment:** in most cases can use end date of campaign model the organization is already using
* **Feedback:** more precise types for data in documentation would be helpful. Other than that, simple and fast to build route.
* Restart run4water service. Test notification route by sending out data. Works well.
* **Time needed:** 31min

#### Go through Setup process in frontend

* **Problem:** redirecting with routes goes to wrong URL
  + Reason: history mode turned off.
  + Solution: Not necessary. Only in certain development environments.
* **Problem:** Data in request is in payload tag not in data tag as expected
  + Reason: Vca uses own standard for responses
  + Solution: change expected tag name
* Some data in wrong form (misspelled, wrong type)
* **Feedback:** information in frontend very helpful in solving and detecting smaller issues
* **Problem:** data is getting wrapped in additional notification tag in update function
  + Reason: not clear
  + Workaround: added additional notification tag in affected functions
* Setting categories without problem
* Setting pipelines without problem
* **Time needed:** 86 min

#### Test Notify with newly setup Microservice

* Notification are getting shown
* **Problem:** without frontend widget
  + Reason: No widget for run4water notification built. No default chosen
  + Solution: Decided against building own widget, since it’s not a complicated task
* **Feedback to connecting new widget not over interface but in notify code**: not perfect, but easy solutions that probably works fine
* **Feedback to different outputs for different reasons:** good idea
* **Misunderstanding:** chosen pipelines not work by reducing notification load but to choose which ones to subscribe to (increasing notification load)

#### Conclusion

* **Feedback:**
  + Fast and simple setup, less problems than expected
  + Good match for VcAs structure, would be cool to integrate in near future
  + Have to be rebuild in certain places (especially frontend)
* **Comment:** Invitation to make Presentation for vca members (outside of thesis, as volunteer)
* Next goal: break down setup time for new service under one hour, fix some smaller issues
* **Outlook:** brainstorming about data transfer for outlook of thesis -> Most likely with Tobias (Data Protection Supervisor) and let other developer read documentation and try to understand