Workshop : «swissbib for the short distance runner»

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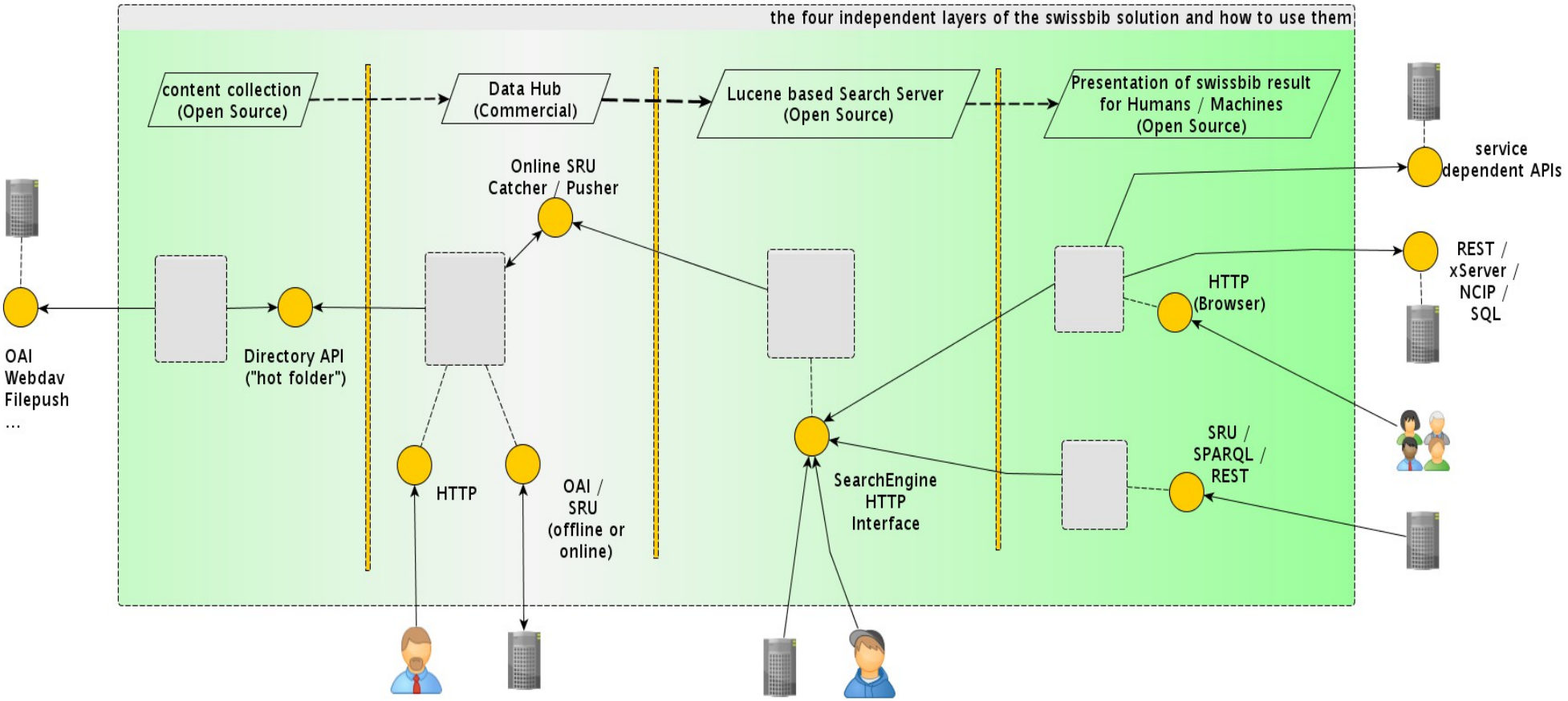
Outline

- **Part I**
  Dusty theory : Overview «Architecture of the swissbib solution»
  (~ 30 minutes)

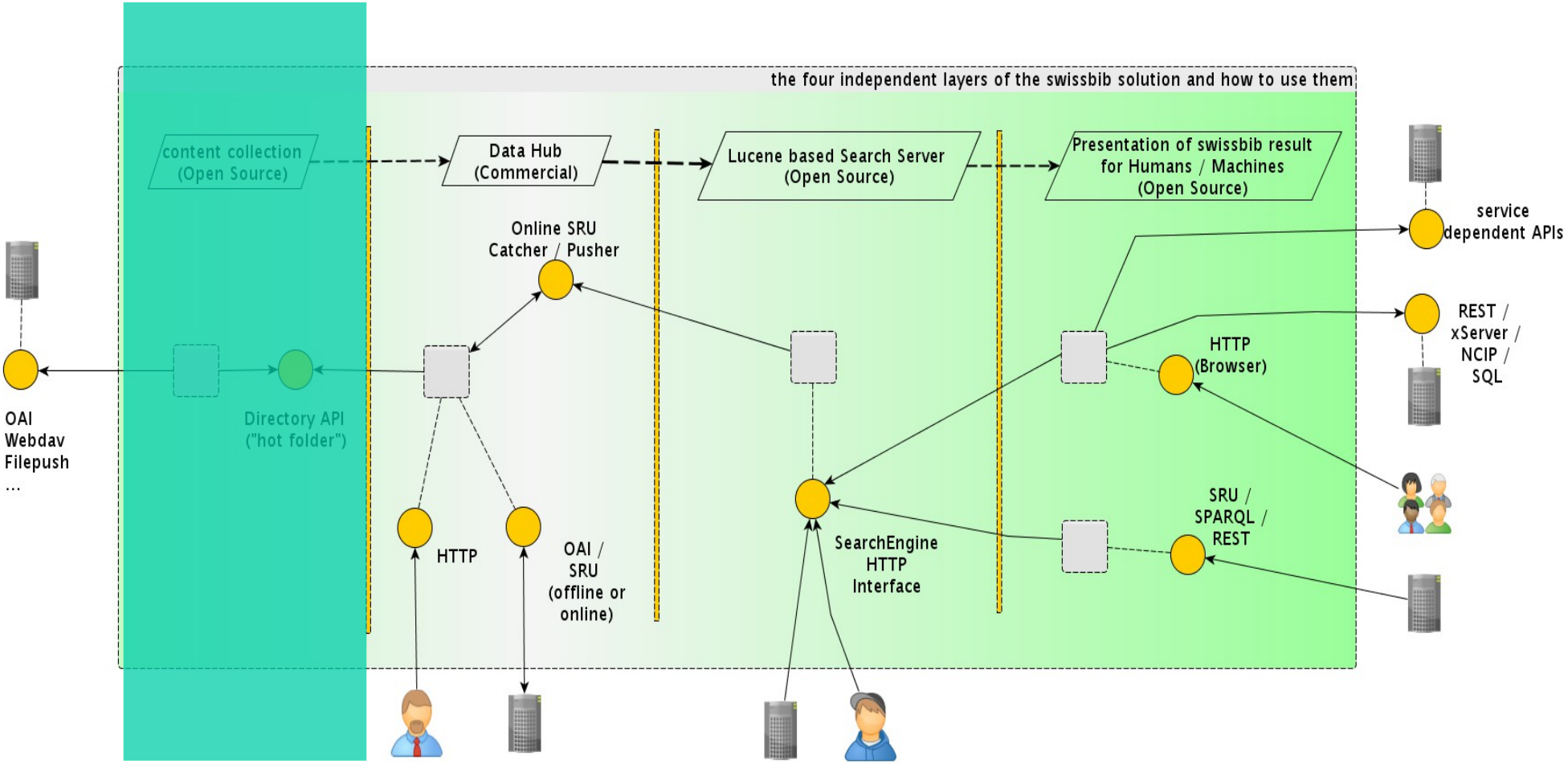
- **Part II**
  «*Hands on» for short distance runners : setup your own presentation component based on the swissbib infrastructure within maximum 40 minutes*

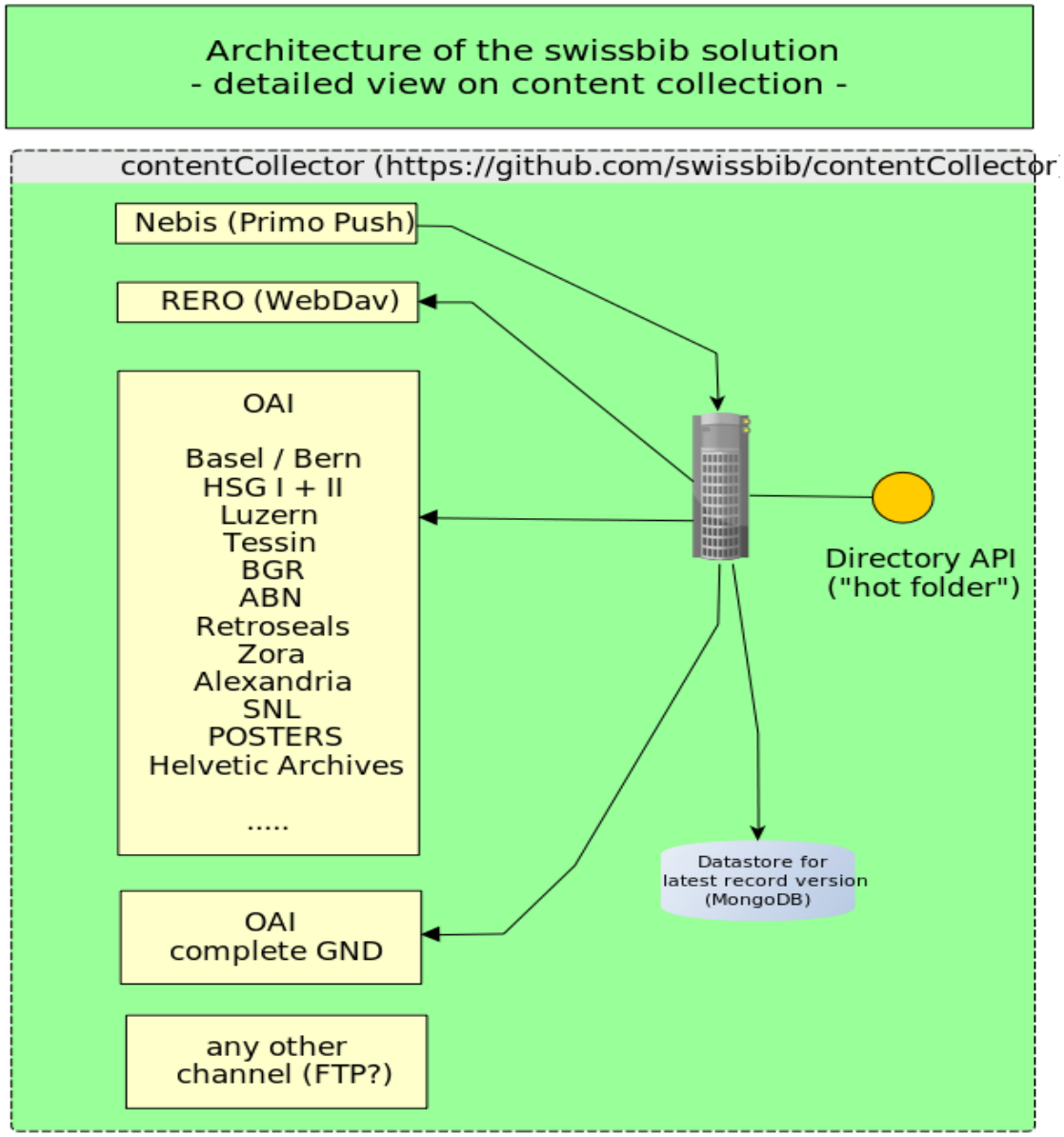
- **Part III**
  Open Discussion –
  swissbib infrastructure as your « working bench » ? !

swissbib architecture: A layered system with open interfaces !



Dive deeper – content collection





Purposes :

- fetches content from a repository (initial / frequently)

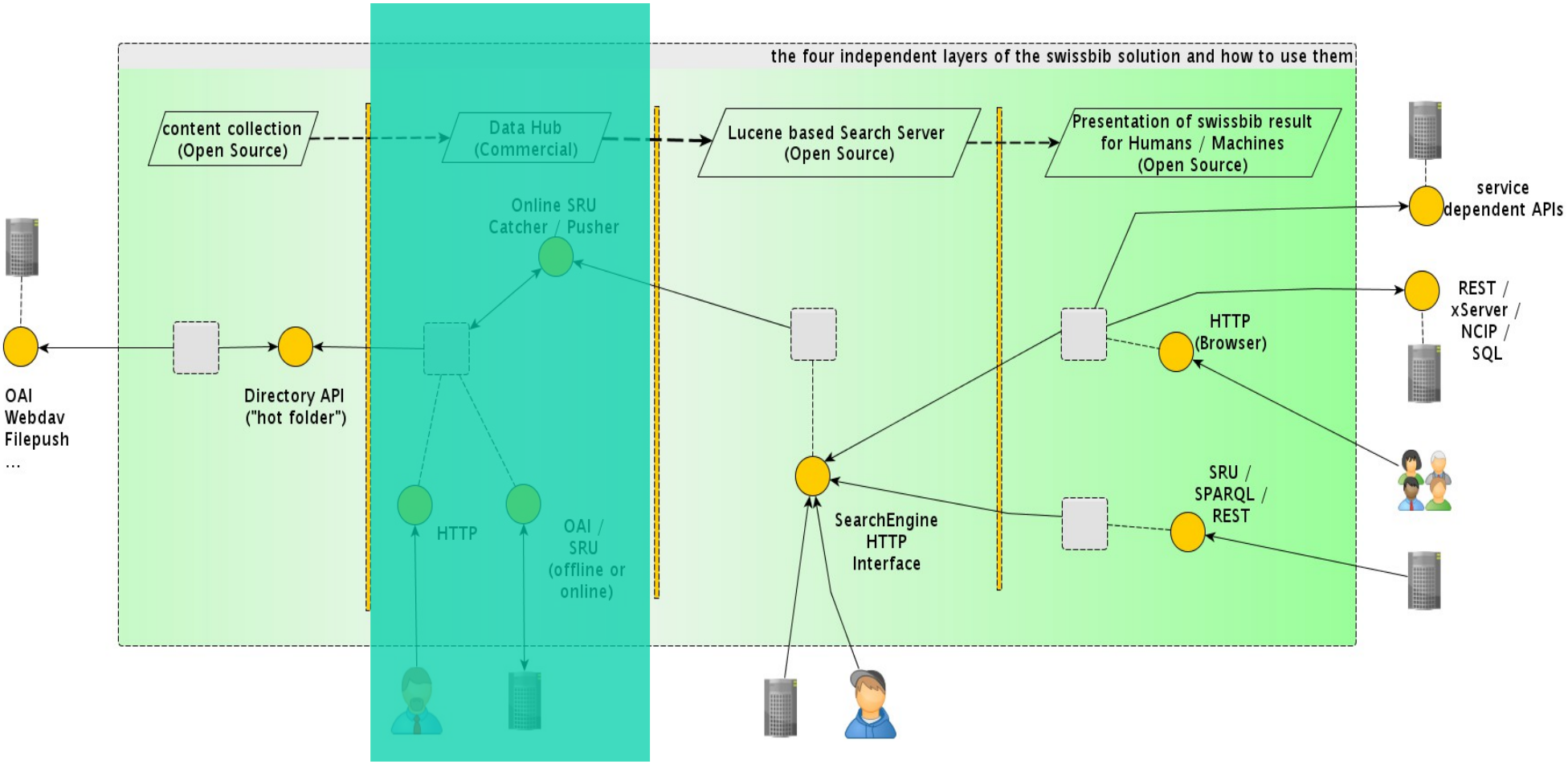
- Pre-processing of content (valid ? / transformation of structure)

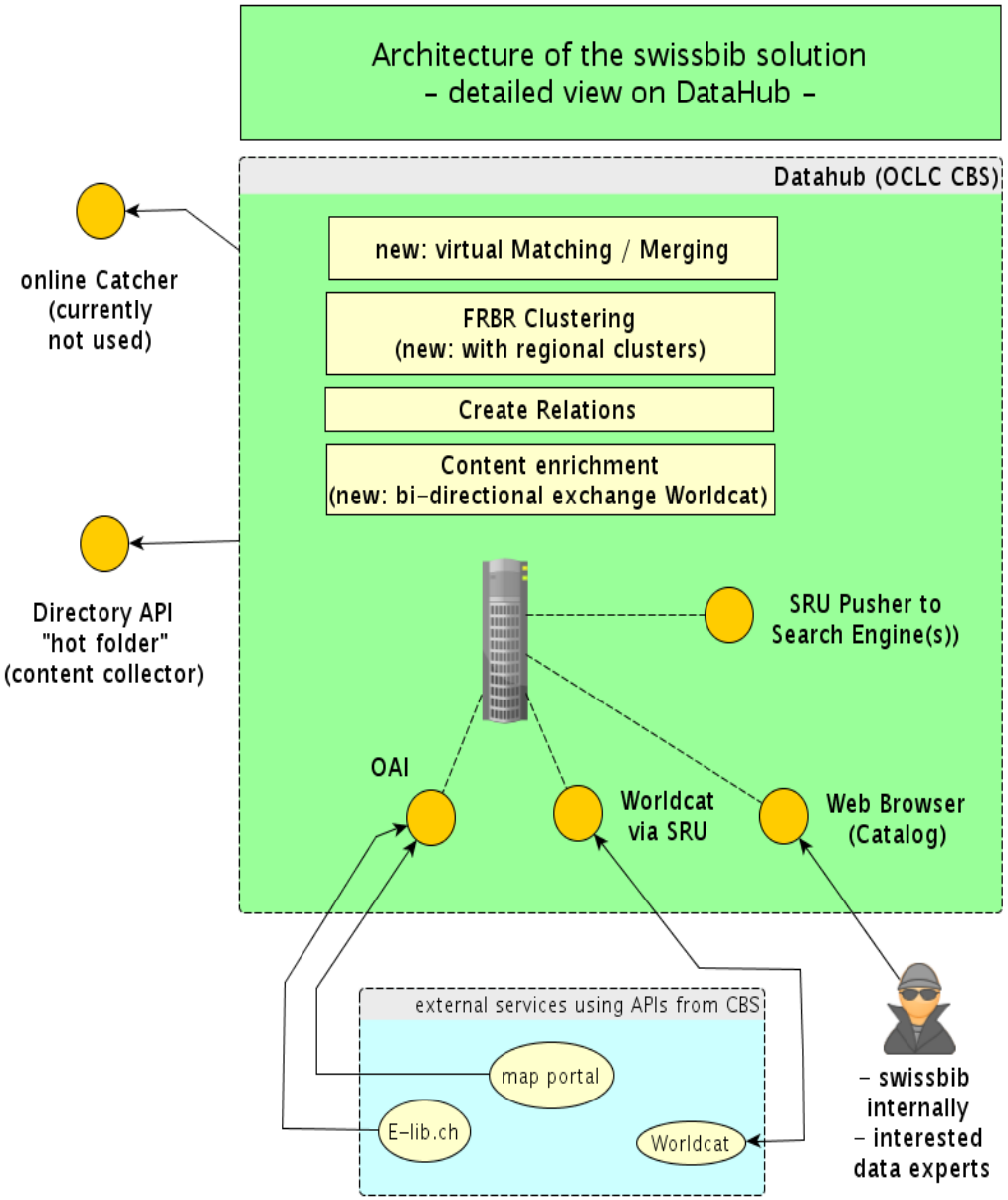
  - store the latest version of every single native record in datastore

- use Directory API to exchange single native records from repositories with DataHub

- extendable via plugins

Dive deeper – Data Hub





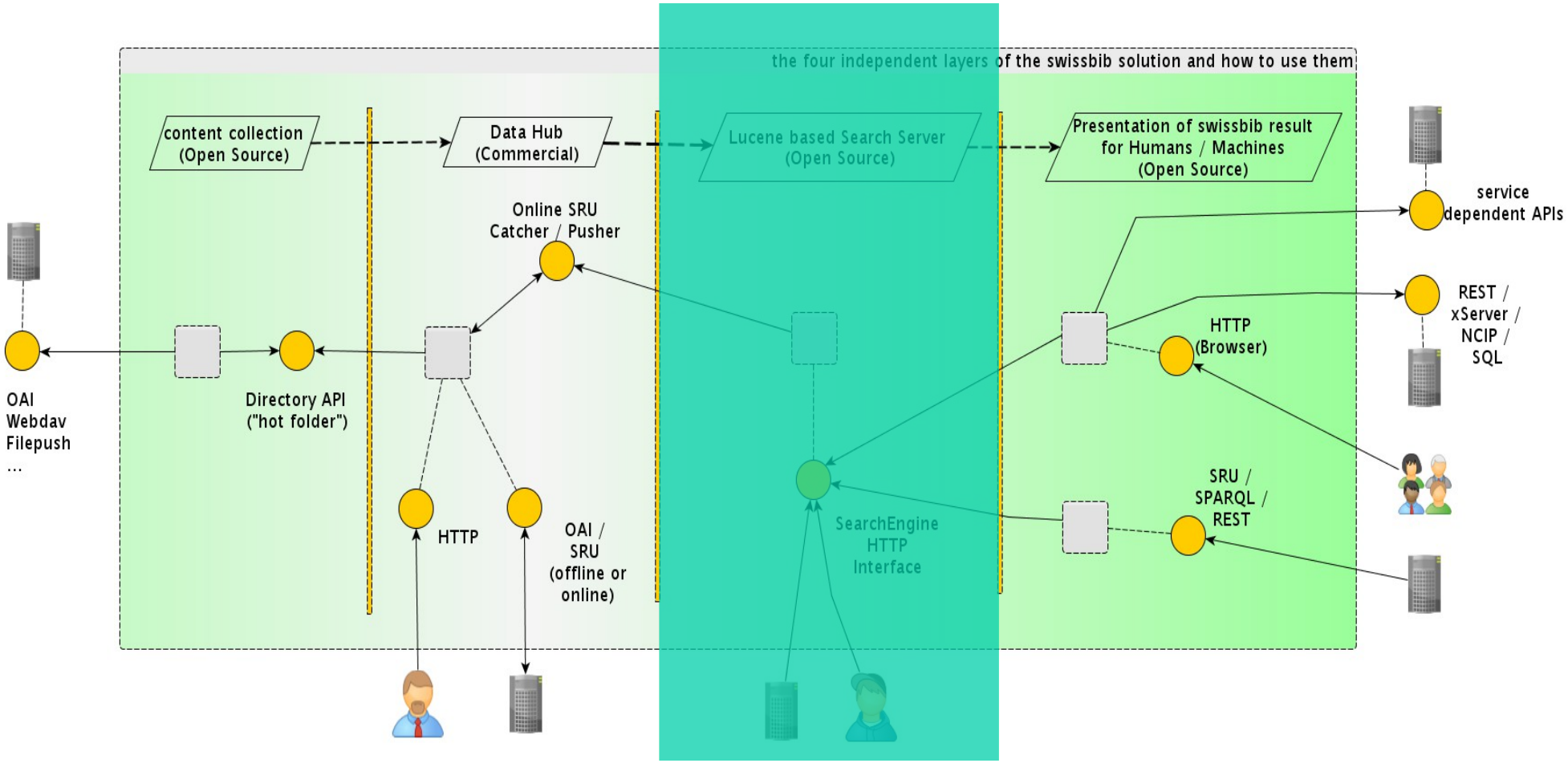
Data processing (refinement, add additional value to incoming content):

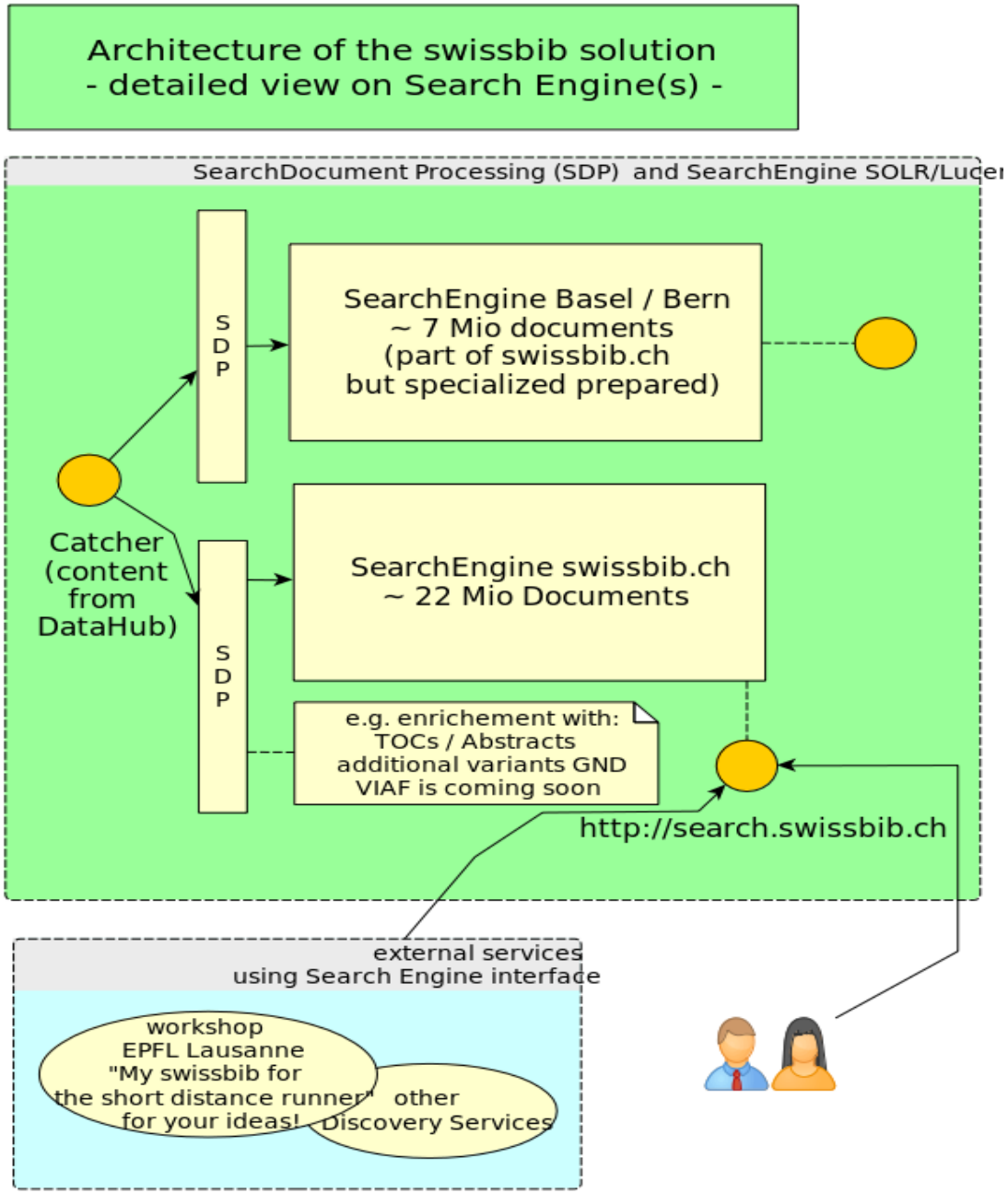
- 1st step : Single native records are **virtually** brought together if duplicates
- 2nd step : Result of 1st step is clustered to look for **similar records (FRBR principals)**
- Build **additional relations** between records
- **Automatic process** is highly flexible and customizabe
- **Enrich** available **content** with external information (e.g. from WordCat)

Why do we call it a «Data Hub» ?

- The result of the processing is **used internally** by swissbib **and** provided **to external services**
- We **connect** a multitude of single **content resources** on a **national and international level**

Dive deeper – To the heart of Search





Purposes:

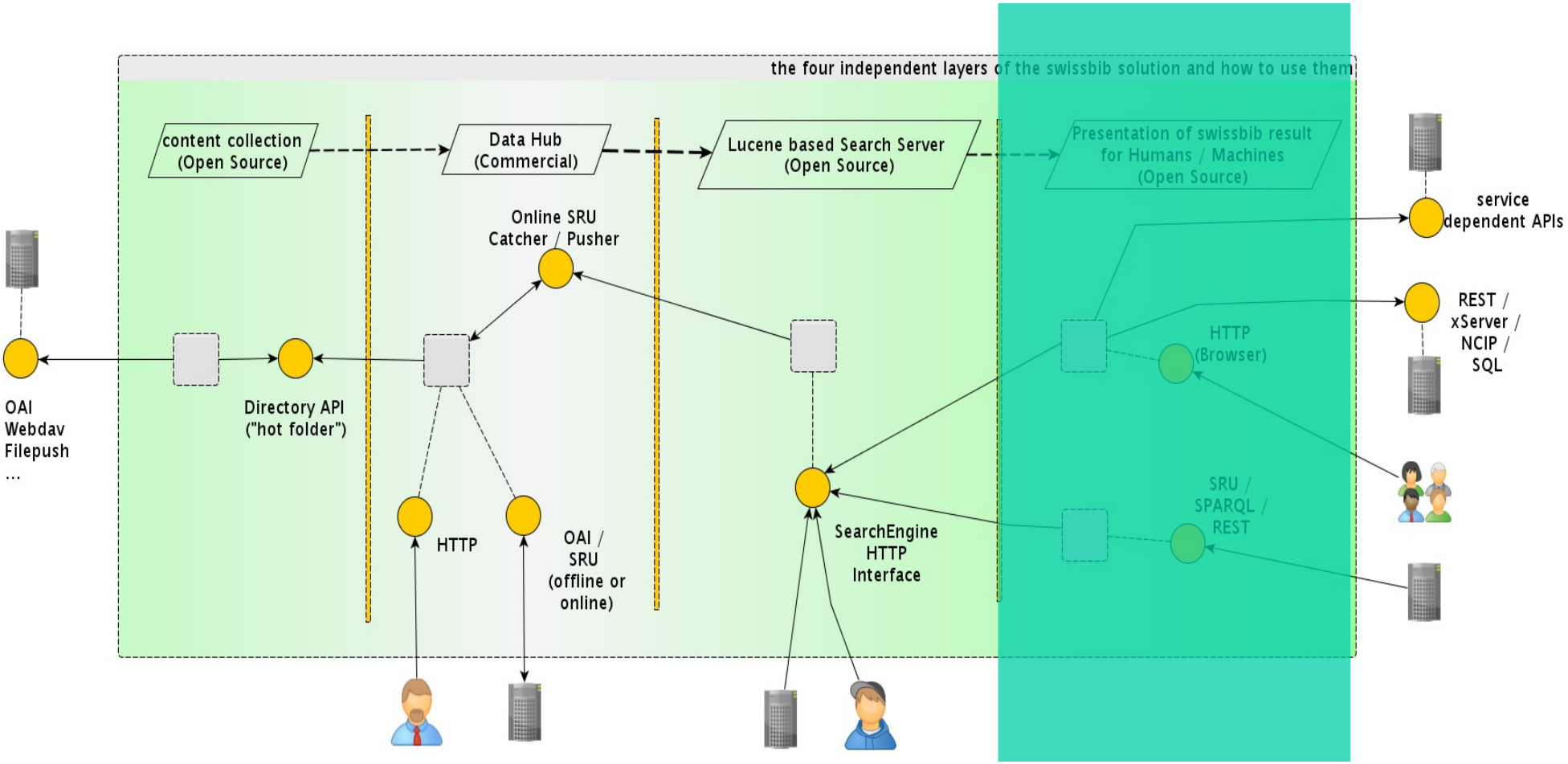
«Heart» of Search (based on Lucene 4.x):

- If you search something: This is the place where it happens to be
- Search Server on top of Lucene is SOLR – could be extended or replaced by ElasticSearch
- Because of it's open character :
  - Library experts are able to adjust search characteristics by their own.
  - Could be used for educational purposes (teach students principals of IR on real systems)

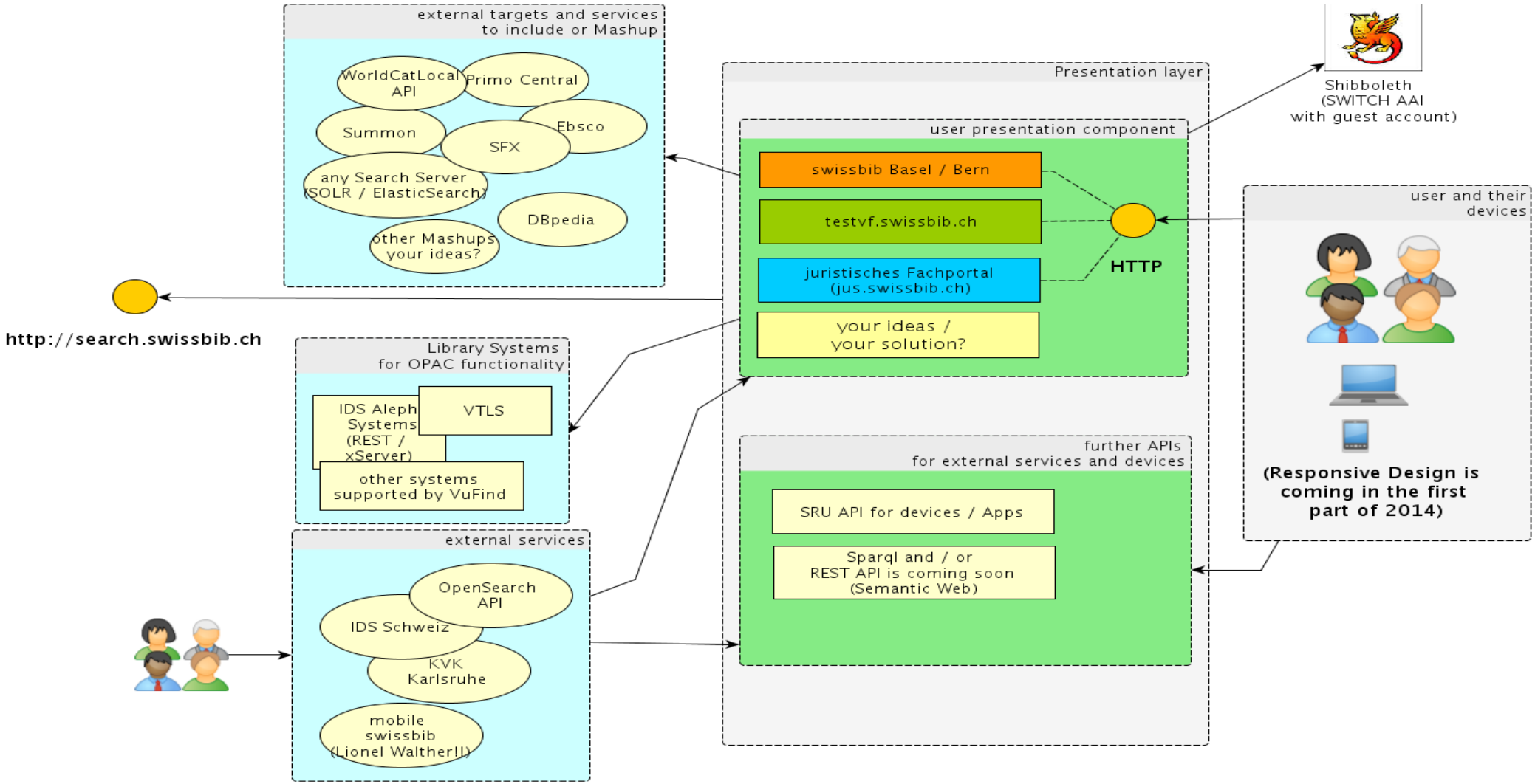
Pluggable Document Processing (SDP):

- Full text enrichment
- Already Enrichment with GND variants (VIAF and MACS soon)
- Tailored for every single Index

Dive deeper – Join the user and their devices!



Architectecture of the swissbib solution
- detailed view on presentation layer -



Part II. Hands on - « swissbib for the short distance runner »

- **Create your own user presentation component on your local machine within maximum 40 minutes by using the swissbib infrastructure!**
- **Well-chosen institutions should be part of defined regions (virtual view) - use of « libadmin » tool (http://admin.swissbib.ch/libadmintest)**
- **As an example how it's used by swissbib: http://jus.swissbib.ch**
- **only single target within the workshop**
- **choose your colour within the swissbib design**

Prerequesites :

- **Linux recommended (CentOS / RedHat / Ubuntu)**
- **MacOs : possible (used by colleague)**
- **Windows : possible but not recommended**
- **Overview of software to be installed:**
  Apache >= 2.2, MySQL >= 5.1, some php extensions, git

- **Installation cookbook for Ubuntu :**
  -> http://www.swissbib.org/doc/vf/cb.pr.ubuntu.odt
- **Cookbook for Mac is coming / Windows is not used by swissbib**

Steps to install a local swissbib presentation component (1) :

0. detailed instructions:

-> http://www.swissbib.org/doc/vf/cb.inst.sbvf.odt

I. General installation (not taylored to the institutional requirements or desires)

- **Fetch the source code from Github**
  git clone https://github.com/swissbib/sbvf2.git .
  (use the git branch feature/epflworkshop)
- **Setup and configure a locale MySQL database**
- **General configuration of the Application**
- **Ready for the first start!**

-> within the workshop these steps are done automatically via script

Steps to install a local swissbib presentation component (2) :

II. Meet your institutional requirements

a) define your local virtual view

- Use admin.swissbib.ch/libadmintest to define a view
  (a prepared view with code *«epflworkshopview»* is already available)
- Adjust your component configuration
- Fetch the defined institutions from admin.swissbib.ch/libadmintest into your component
- Clear the cache and restart the local component to test it

b) define a search restriction

- Because you want to search only for the institutions part of the view
- Restart the local component again to test it

Steps to install a local swissbib presentation component (3) :

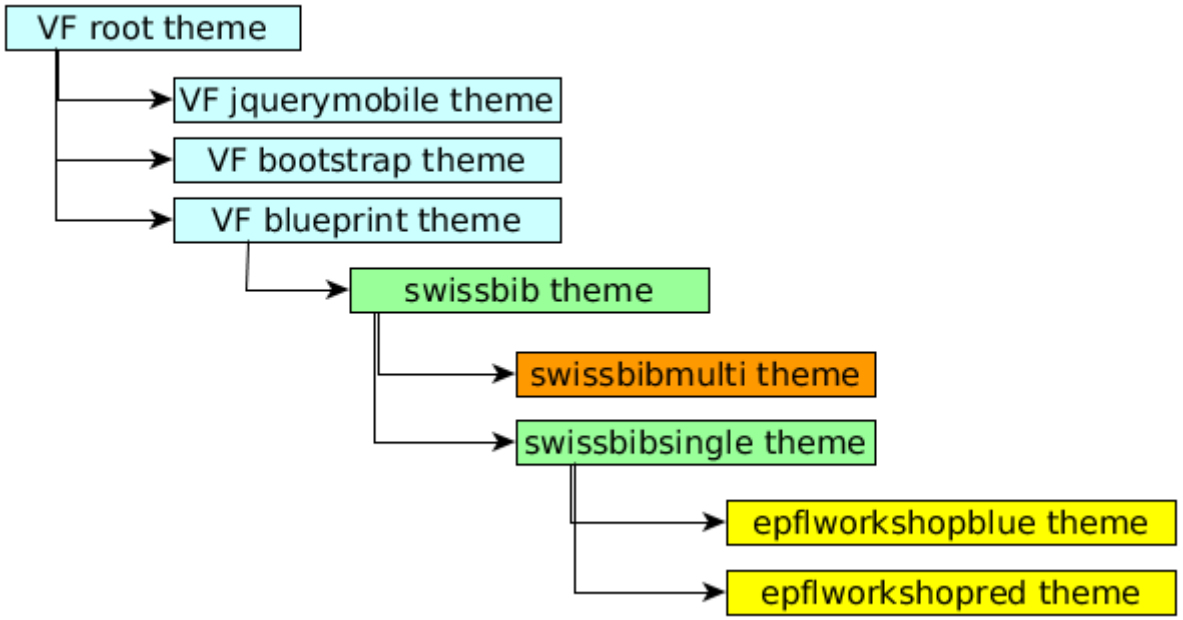
III. Change the design (or create a new theme to use «VuFind language»)

a) the branch feature/epflworkshop already contains two additional themes epflworkshopblue and epflworkshopred

b) configure it and use / play around with the themes

Some basic principles of the View concept in swissbib / VuFind:

- VuFind provides standard themes which are inherited from each other
- customized views are inherited from VuFind views (or you can build your own theme from the scratch)



Summary : Available swissbib (and workshop) resources :

- **www.swissbib.ch (productive presentation service)**
  testvf.swissbib.ch (Beta : next version based on VuFind2)
- **sru.swissbib.ch (productive SRU interface)**
  srutest.swissbib.ch (Test : next SRU version)
- **www.swissbib.org (project wiki)**
- **swissbib.blogspot.ch/ (project blog)**
- **www.twitter.com/swissbib (Twitter account)**
- **https://github.com/swissbib/ (Open Source swissbib source code)**
- **Installation cookbook (prerequisites) Ubuntu:**
  http://www.swissbib.org/doc/vf/cb.pr.ubuntu.odt
- **Detailed installation steps workshop EPFL**
  http://www.swissbib.org/doc/vf/cb.inst.sbvf.odt

Part III. Discussion !

1) Your comments, ideas and desires about the swissbib infrastructure and how to use it?

2) Possibilities to get envolved in the further swissbib development?

Proposals :

- develop your own service based on the swissbib infrastructure e.g. :
  -> «hands on» in this workshop
  -> mobile swissbib from Lionel Walter
- help us to create better and more documentation
- speak with your «neighbour» about the pros and cons of swissbib
- make it known to your customers
- other fancy ideas ? - it's up to you!

Thanks for your participation and thanks to the organizers of the «Free software in libraries» day !

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