

# Http REST api: f2f meeting

## Introduction

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## Goals of the meeting

- Define high priority use cases to start with
  - first prototype expected before M18 (september 2016)
- Find an agreement on interface specifications
- Identify major technical challenges
- Introduce the B2SAFE HTTP API prototype as possible development model
- Develop some endpoints together (hackathon)
- Define a short term (6 months) and medium term (1 year) roadmap (see Mark's plan)
- Assignment: who does what?

Any minute taker volunteer?!

# Tentative agenda

| 23/02 |  |
|-------|--|
| 10.30 | Registration and welcoming                                       |
| 11.00 | Introduction (Roberto)   |
| 11.30 | HTTP API services (Carl Johan)                                   |
| 12.30 | Lunch  |
| 13.30 | B2SAFE HTTP API: “a first prototype proposal” (Paolo)            |
| 15.30 | Coffee break   |
| 15.50 | B2SAFE HTTP API Q&A  |
| 16.30 | Set-up the environment into your local machine and code! (Paolo) |

| 24/02 |  |
|-------|--|
| 09.00 | Discussion on: <ul style="list-style-type: none"><li>• use cases requested at the User Forum</li><li>• authentication (B2ACCESS)</li><li>• PID management</li><li>• roadmap</li><li>• assignment</li></ul> |
| 11.00 | Coffee break   |
| 11.30 | Hackathon  |
| 12.30 | Lunch  |
| 13.30 | Hackathon  |

## High priority use cases

Create an **HTTP REST interface for B2SAFE** able to:

- Authenticate and authorize a user via B2ACCESS
- Upload an object (digital entity)
- Download an object passing the object name/path
- Upload an object and get the PID as response
- Download an object passing the PID

# Roadmap (by Mark van den Sanden)

## **M12 - M18 (Mar 2016 - Sep 2016)**

Pre-production release

- Upload/download basic entities in B2SAFE
- Integration with B2ACCESS

## **M19 - M24 (Oct 2016 - Feb 2017)**

Production release

- Extend support metadata
- Extend support for digital objects
- Extend support for authorization

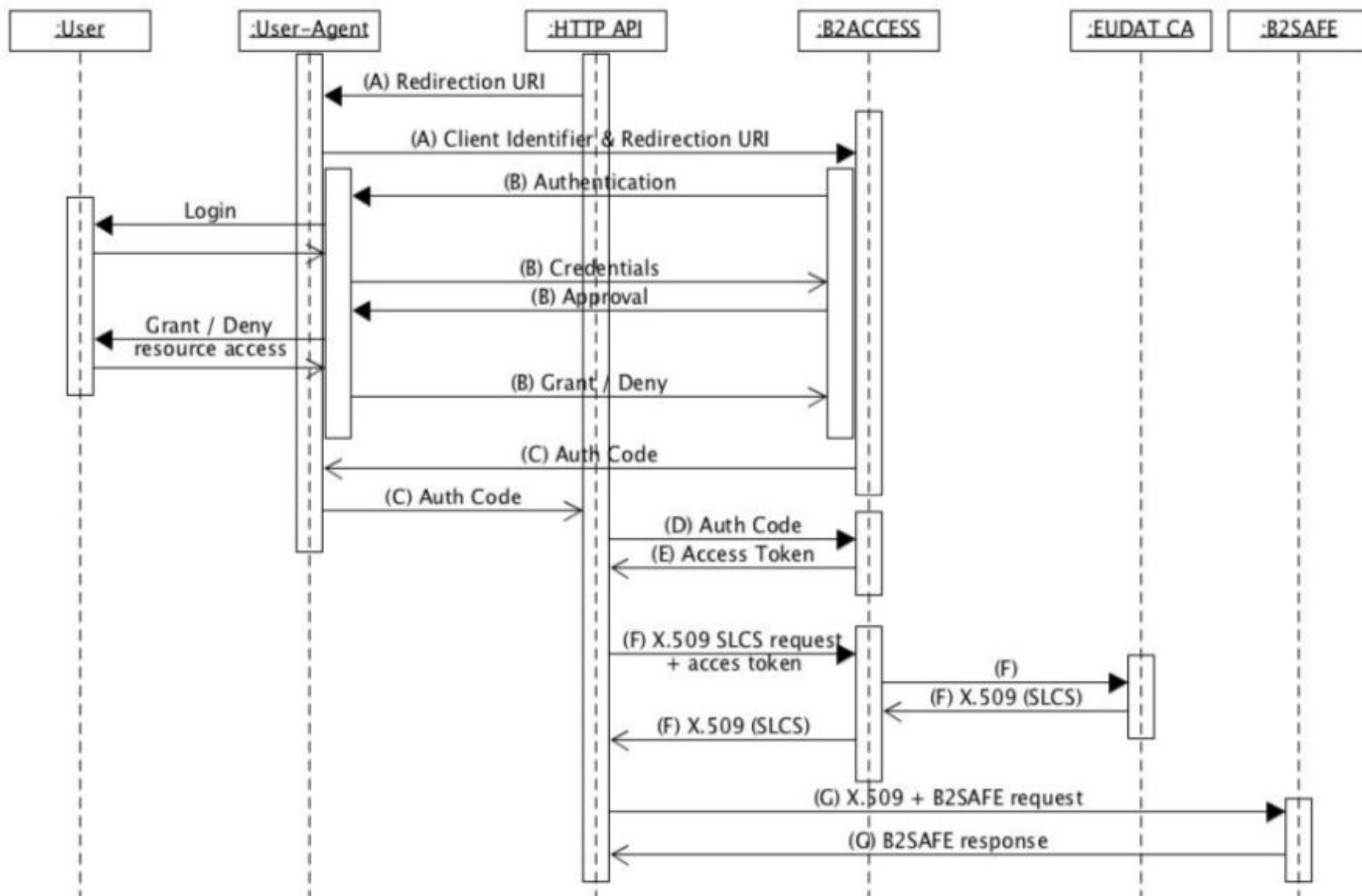
## **+M24 (Mar 2017 - .....)**

- Extend support for digital packages
- Extend support for digital collections

# Technical challenges

1. Interaction with **B2ACCESS** for authentication and authorization:
  - a. B2SAFE uses GSI authentication with **X.509 certificates**
  - b. HTTP API needs to handle **OAuth2** flow to obtain a short lived X.509 certificate
2. Interaction with **B2HANDLE** for PID management:
  - a. currently B2HANDLE offers a python client for interacting with with Handle service: <https://github.com/EUDAT-B2SAFE/B2HANDLE>
  - b. needs credentials to perform operations
  - c. or PID management through **GraphDB**: an alternative scenario!

# B2ACCESS integration



## Other challenges

1. Develop a HTTP REST interface for **B2SAFE** w/o any B2SAFE expert/developer!
2. Be consistent with B2SHARE REST API (harmonization..)
3. Effort:
  - a. from **WP5**:
    - i. 10 PM Cineca (6 months already used for GridFTP interface) from B2STAGE development (Roberto Mucci)
    - ii. 12 PM EUDIN (Amy Krause, Albert Heyrovsky?)
    - iii. .. and Carl Johan
  - b. from **WP9**:
    - i. ~4 PM Cineca (Paolo D'onorio De Meo)
    - ii. Ian Johnson