

# StudentWeb/FS integration with institutional repositories for Master's Thesis submission

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# Background

- new IR system platform - DSpace
- old ideas become new: Integration of student info system (StudentWeb) with IR
- national and institutional scope:
  - re-use of authoritative metadata
  - StudentWeb = one-stop shop for students and staff
  - national solution
  - transition from print to electronic



# What is StudentWeb?



DEMO University of Oslo - StudentWeb

## Home

Every semester you must complete the semester registration, apply for courses and pay the semester fee. See [course registration deadlines](#). The final deadline is 1 September for the autumn semester and 1 February for the spring semester.

Previous  
logon:













04-nov-2011, 12:04


- You have not completed the semester registration or confirmed your individual education plan for Autumn 2011.
- The semester fee has not been paid Autumn 2011.
- Your admission to a programme of study has expired. You may be eligible for 'enkeltemner', [read about admissions](#).

- Please note that you can not use your browser's back-button in the StudentWeb. Always navigate by using the menu on the left.
- If left without any activity for more than 10 minutes the service will be broken for security reasons.
- By clicking the question mark next to the headlines on all pages, you will find an explanatory text.

 Hide menu

Pin1234 Testperson  
Studentnr. 405841

-  Log out
-  Home
-  Registrations
  -  Semester registration
  -  Address
  -  Acceptance
  -  Questionnaires
  -  Language
  -  Transcript
  -  Your status
  -  Payment
  -  Change PIN code

Text: English 

**DUO**

Digitale Utgivelser ved UiO



# Why integrate StudentWeb/FS with institutional repository

- Ensure all Master's Theses are archived, irrespective of grade
- Ensure quality of data
- Be able to deliver the relevant theses on to other systems such as Riksarkivet
- Be able to make those Master's Theses which make a pass grade available Open Access



# Technical solution proposal - It began ...

DSpace workshop, Oslo, September:

- StudentWeb/FS - *Systems owner*
- University of Oslo - *Nye DUO project*
- Cottage Labs - *Domain Expert, Independent 3rd Party*
- University of Bergen - *Stakeholder*
- Cristin - *Interested Party*
- University College Oslo - *Stakeholder*



# Technical Approach

- SWORD 2.0 for transport protocol
  - <http://www.swordapp.org/>
- BagIt for content packaging
  - <http://tools.ietf.org/html/draft-kunze-bagit-06>
- Open Source Software for DSpace
  - <https://github.com/nye-duo>



# What is SWORD 2.0

- 1.x developed by JISC in the UK for basic repository deposit
- 2.0 developed to support full CRUD for a range of scholarly systems
- Client implementations: Java, Python, PHP, Ruby, (C#)
- Server implementations: DSpace, EPrints, Fedora, Connexions



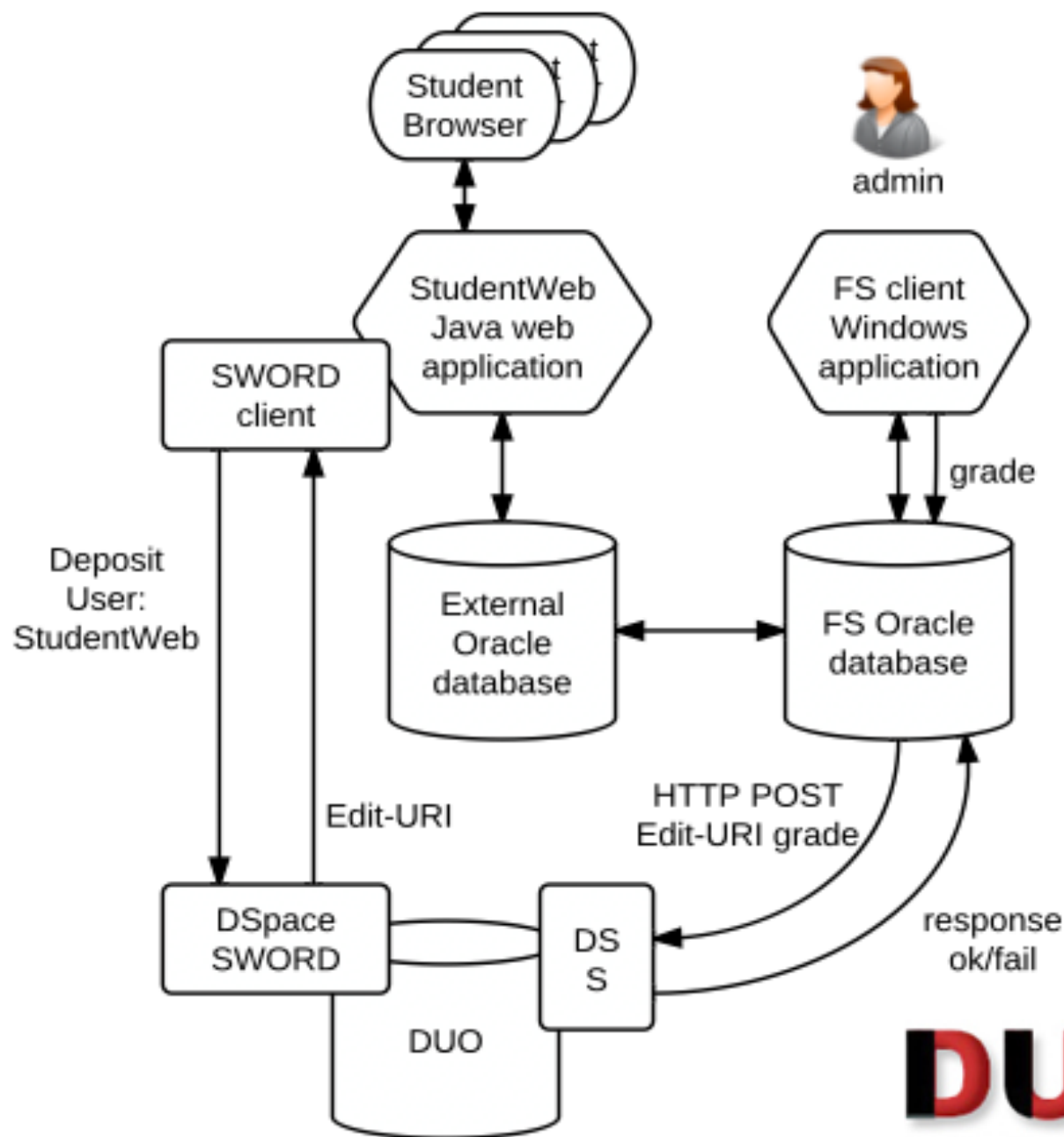
# Why use SWORD 2.0 here?

- Supports full CRUD over a RESTful web service, so is functionally rich enough to provide the solution
- Is an emerging standard in our sector
- Has implementations for the major open source repository platforms
- Has existing client libraries already written
- No obvious competitor (WebDAV, CMIS, AtomPub?)

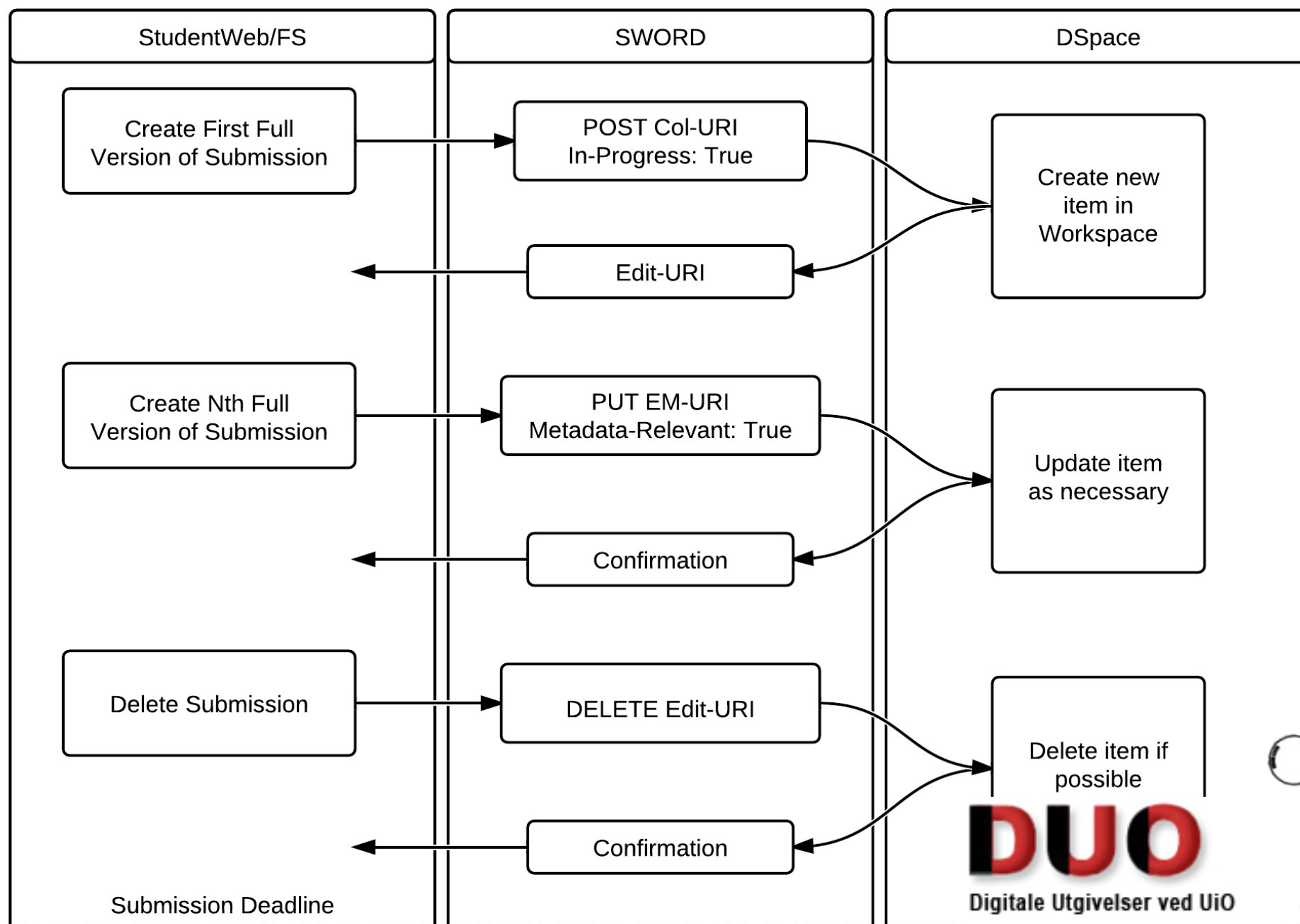




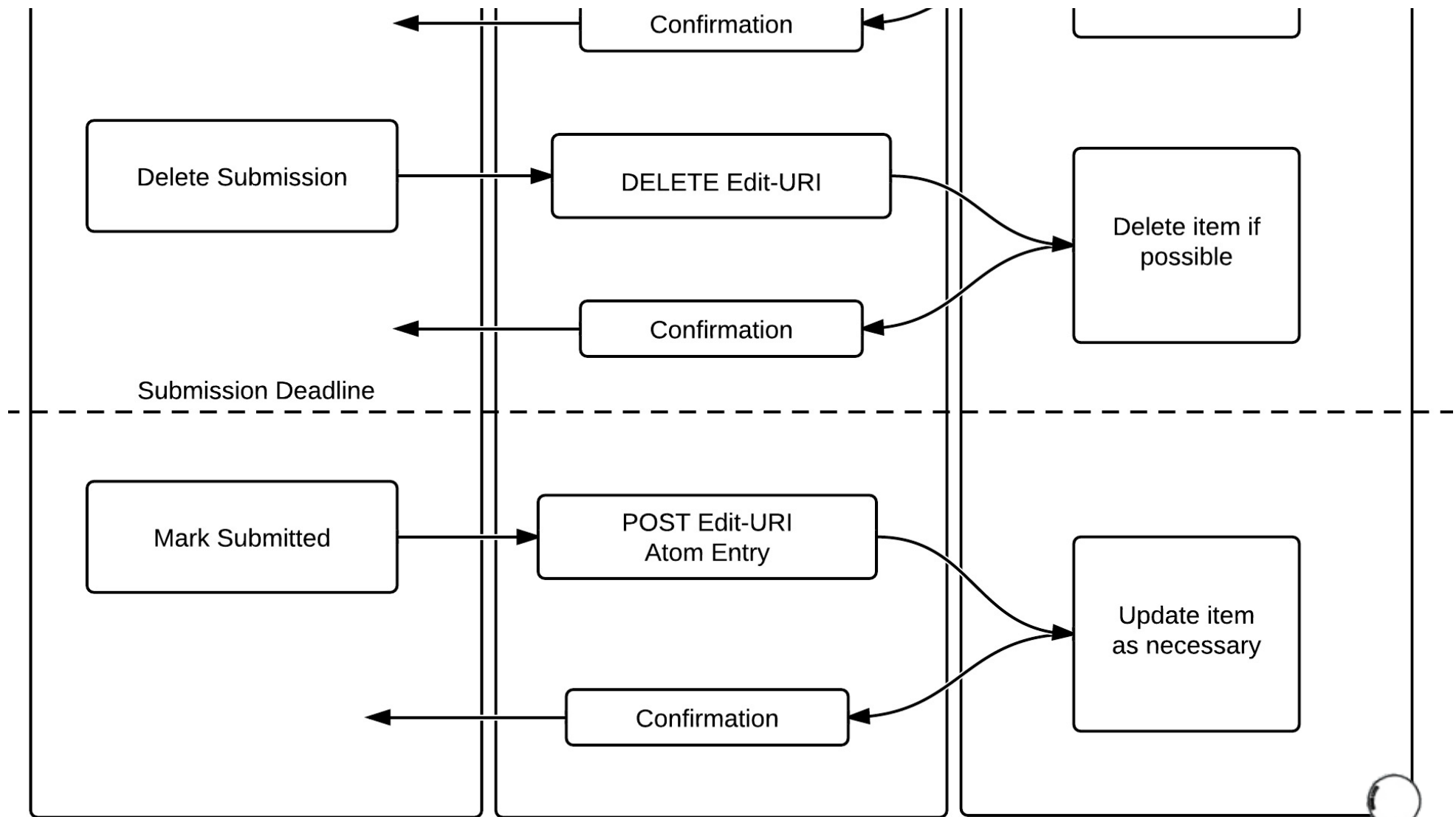
# Usage of SWORD 2.0



# Before Submission Deadline ...



# After Submission Deadline ...



# BagIt Packaging

- Primary/Final Content Files (PDFs + Attachments)
- Secondary and Source Files (Any Formats)
- Licence (Plain Text)
- Metadata (XML)

```
<base directory>/
|   bagit.txt
|   manifest-md5.txt
|   tagmanifest-md5.txt
\--- data/
      \--- final
            |   [final version files]
      \--- supporting
            |   [supporting files]
      \--- licence/
            |   licence.txt
      \--- metadata/
            |   metadata.xml
\--- tagfiles/
      |   supporting.access.txt
      |   formats.txt
      |   final.sequence.txt
      |   supporting.sequence.txt
```



# Available Metadata

- Student:
  - Name
  - Student Number
  - Institutional Username
  - Fodselsnummer
  - Postal Address
  - Telephone Number
  - Email Address
- Subject
  - Code
  - Name
- Unit Code
- Title
- Abstract
- Language
- Embargo Date
- Grade

Encoded as a custom XML format, due to lack of clear schema for the data



# Where are we up to?

- **Requirements** have been drafted for both **StudentWeb/FS** side and **DSpace** side developments
- **Development** of the **code libraries** to deploy a **pilot** service
- **Integrated** the code libraries into **DSpace** and **StudentWeb/FS**
- Just finished running the **pilot**



# After the Pilot?

Once the pilot completes, samarbeidstiltaket FS has indicated that there will be a national meeting organised by StudentWeb/FS.

It will be possible for all Norwegian institutions to hook their StudentWeb instance up to a SWORD 2.0 compliant Digital Repository.



# Thanks for listening!

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