

Czech Technical University in Prague  
Central Library & Computing and  
Information Centre

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## SOLVING A PROBLEM OF AUTHORITY CONTROL IN DSPACE DURING ORCID IMPLEMENTATION

Ladies and Gentlemen,

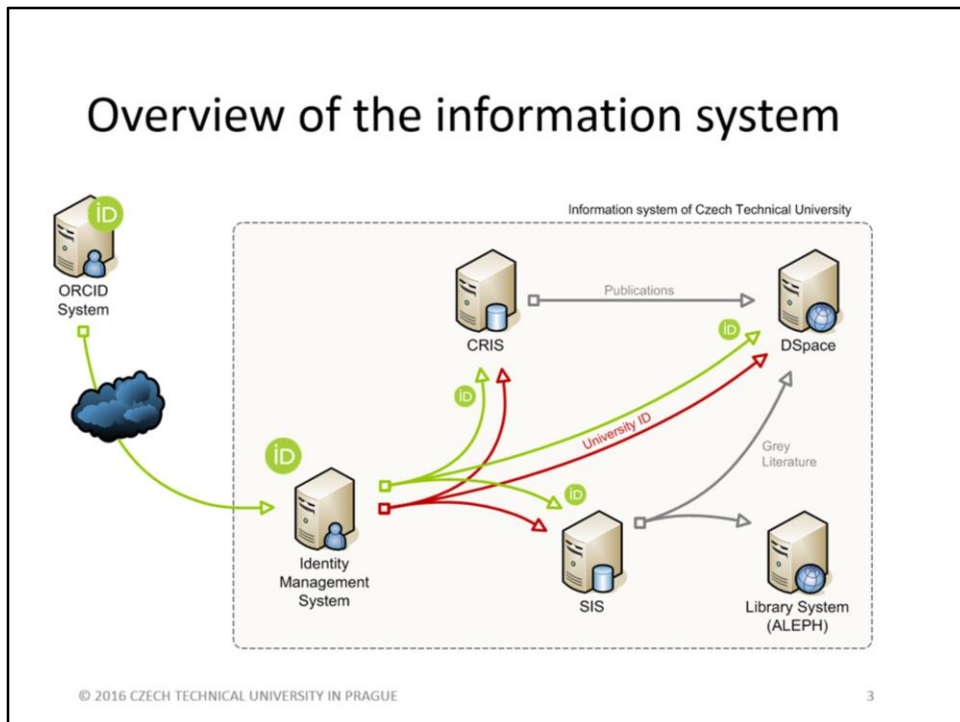
I am from Czech Technical University in Prague, Czech Republic. I am a representative of a group of people from different departments of our university. Namely Central Library and Computing and Information Centre.

# Our background

- Czech Technical University in Prague (CTU)
  - the biggest and oldest technical university in the Czech Republic (since 1707)
  - 8 faculties, 5 specialized institutes
  - 28,000 active users in university system (22,000 students / 2,200 academic staff / 3,800 other staff)
- University repository — <http://dspace.cvut.cz>
  - DSpace platform (open source solution, most common in CZ – large user community)
  - current version: DSpace 5.5 with XML user interface, theme Mirage 2 and RESTful API

In my speech I would like to continue on from a presentation my colleagues had at this forum two years ago in Helsinki. In 2014 my colleagues presented a technical and process solution of the interconnection of university repository on DSpace platform with other parts of the university information system.

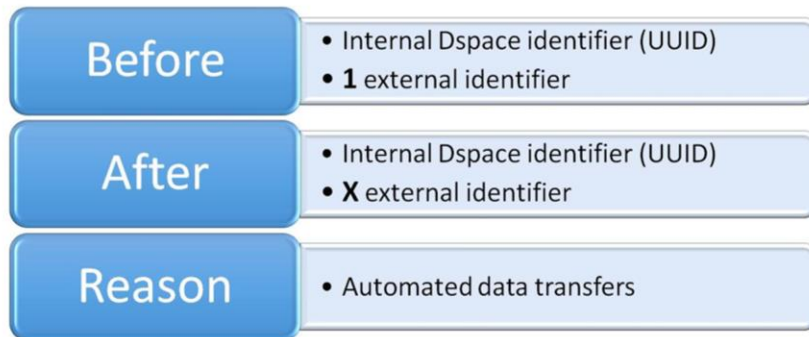
## Overview of the information system



The whole project of interconnection covered typical source systems like a study information system and a research information system. From which we fully automatically filled the target systems like the university repository and library system. The whole system cooperates with the identity management system. That ensures that each user is in every system identified by a personal number (cvutID). All this is possible thanks to the creation of the new RESTfull API for DSpace with the new possibility of a writing operation.

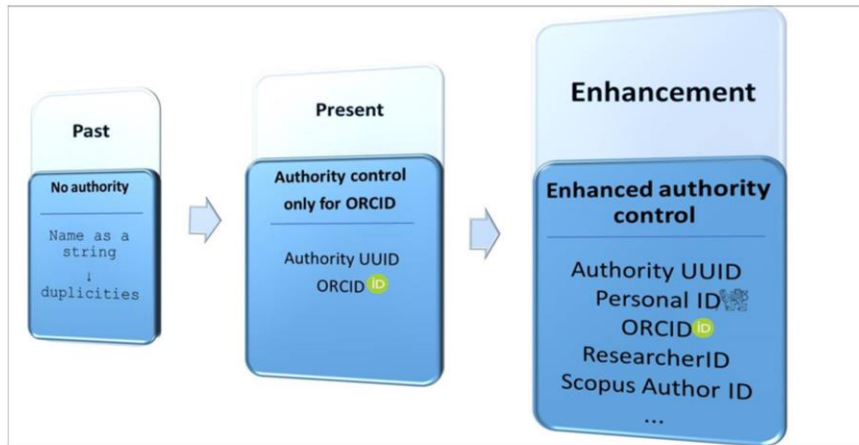
Since 2014 we have moved forward and adopted ORCID ID as another identifier of our scholars next to their personal number - cvutID. We became a member of ORCID and provided our scholars with the possibility of getting an ORCID ID directly from our identity management system. Thanks to this and the steps that we made before, the ORCID ID is automatically downloaded in every system of our university.

# DSpace authority control



Of course during the implementation of ORCID several problems occurred. One of them was how to get the ORCID ID together with the personal number in DSpace. DSpace has an authority module which can assign to the internal DSpace identifier in UUID format only one external identifier. Which might be fine for people who only want to use it for the ORCID ID. But in our case we needed at least two identifiers – the ORCID ID and the personal number. Because only via the personal number can we secure the correct synchronization during the fully automated data transfers.

# DSpace authority control development



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During the process of importing metadata to DSpace the author's name used to be saved just as a string and it resulted in duplicities.

The new authority control allows for putting the name and ORCID ID together. But we changed it and put together name and personal ID. Then during the import it is possible to find out whether the author's personal ID already exists in DSpace or not. UUID is then either assigned and the authority might eventually be updated, or newly created.

Our enhancement means the creation of another process which joins DSpace authority with ORCID ID. But it could be any other ID, e. g. ResearcherID, Scopus Author ID or even just a login name. This process works independently, no matter when the ID or authority was created.

Therefore we extended RESTful API for DSpace, which we already modified before, with the functions that allow searching by IDs and storing data dependent on them.

# Viewing authority record

Show simple item record

## VYUŽITÍ EVOLUČNÍCH TECHNIK PŘI HLEDÁNÍ PARAMETRŮ DOPRAVNÍCH SYSTÉMŮ

Using Evolutionary Techniques in Search o Parameters of Transportation systems

dc.contributor.advisor	Fábera Vít 
dc.contributor.referee	Musil Tomáš 
dc.date.accessioned	2016-05-13T09:47:21Z
dc.date.available	2016-05-13T09:47:21Z
dc.date.issued	2015-08-19
dc.identifier	KOS-587864243005
dc.identifier.uri	<a href="http://hdl.handle.net/10467/63924">http://hdl.handle.net/10467/63924</a>

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And now it's time for some pictures from DSpace. This slide shows how it looks if the author in the record has assigned ORCID ID. It is possible to click on the eye and you can get the full author's record in DSpace.

# Viewing authority record – full record

Musil, Tomáš

×

## Information

**UID:** 35f71943-892a-4a38-b48d-fff40da3405b

## Authorities

key	value
orcid-id	0000-0003-4535-1595
cvut-id	308548

## Items

name	handle	role	community	collection
Návrh a realizace virtuální laboratoře pro výuku programovatelných hradlových polí	10467/64346	author	katedra inženýrské pedagogiky	Bakalářské práce - 32151
Využití evolučních technik při hledání parametrů dopravních systémů	10467/63924	referee	ústav aplikované informatiky v dopravě	Bakalářské práce - 16114

# Submitting/Editing ITEM

## Metadata

Remove	Name	Value	Language
<input type="checkbox"/>	dc.contributor.referee	Musil Tomáš  35f71943-892a-4a38 <span>Lookup</span>	
<input type="checkbox"/>	dc.date.accepted	2015-09-17	
<input type="checkbox"/>	dc.date.accessioned	2016-05-13T09:47:21Z	

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Generally most of the records are being imported to DSpace automatically from different parts of the university information system. In the case we will need to submit a new item in DSpace manually it is possible to look up the author in a new index.



# Submitting/Editing ITEM

Search person ×

Search: mus cvut-id: 308548

Name

- Čemus, Karel
- Musálek, Lubomír
- Mustafina, Elena
- Musil, Petr
- Musil, Tomáš**
- Samusevich, Raman

**Musil, Tomáš**

UID: 35f71943-892a-4a38-b48d-fff40da3405b

Authorities

key	value
orcid-id	0000-0003-4535-1595
cvut-id	308548

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It is possible to look up the author either by name or ORCID ID or personal number. The same look up box appears in case of editing a previously imported record.

# Submitting/Editing ITEM – full record

Search:

Name

Musil, Tomáš

Musil, Tomáš

UID: 35f71943-892a-4a38-b48d-fff40da3405b

## Authorities

key	value
orcid-id	0000-0003-4535-1595
cvut-id	308548

## Items

name	handle	role	community	collection
Návrh a realizace virtuální laboratoře pro výuku programovatelných hradlových polí	10467/64346	author	katedra inženýrské pedagogiky	Bakalářské práce - 32151
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Then you can see all other identifiers together with previous records and it is easier for you to assign the new item.

# Links

- OPEN REPOSITORIES 2014, Helsinki, Finland  
PILECKÁ, Věra, Helena KOVÁŘÍKOVÁ, Lenka NĚMEČKOVÁ, Marta MACHYTKOVÁ, Ivo PRAJER, Petr KAREL. University institutional repository and its place in the university information infrastructure. In: Open Repositories 2014, Helsinki, Finland, June 9-13, 2014. [online]. [Accessed May 12, 2016]. Available at: <http://urn.fi/URN:NBN:fi-fe2014070432324>
- Source codes at GitHub  
<https://github.com/ctu-developers/DSpace-REST-client>  
<https://github.com/ctu-developers/DSpace/tree/dspace-5.5-authority>

If you are interested in what I was talking about, here are links to get know more. The first one links to the previous presentation from Helsinki and the second one links to our enhancement of RESTful API at GitHub.



## QUESTIONS?

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&

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developers@cvut.cz

**THANK YOU FOR YOUR  
ATTENTION!**

Thank you very much for your attention, and if you have any questions you can contact us on these emails.