



Shared and not shared: Providing repository services on a national level

Open Repositories 2012 / July 10, 2012

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<http://urn.fi/URN:NBN:fi-fe201207066182>

This presentation deals with shared services in a very concrete form, from the point of view of a national service provider from a small Northern European country...

- A country of 5 million people
- With a relatively uniform higher education sector
- With a government committed to building cost-efficient national infrastructures (with varying degrees of success)





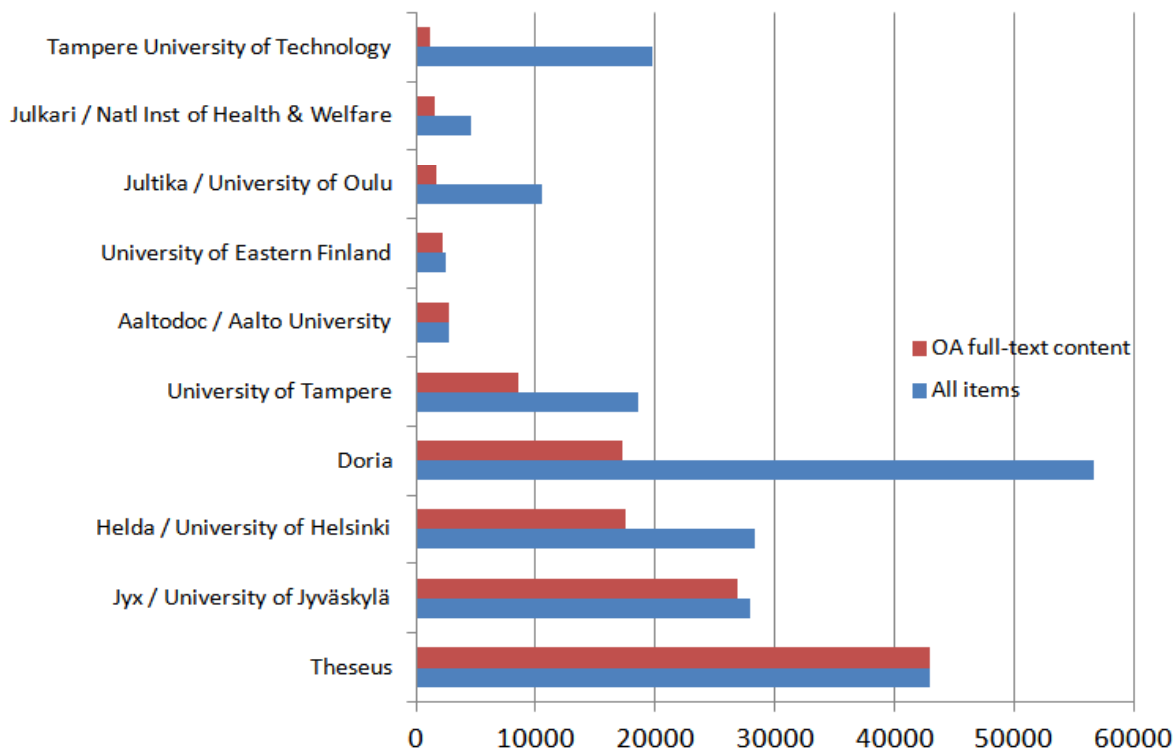
The National Library of Finland

- An independent institute within the University of Helsinki
- Among many other things, the National Library is also an important service provider for the whole Finnish library network
- With about 70 of its employees working on things like integrated library systems, discovery portals and acquisition of e-materials
- Of course, not forgetting repositories...

Repositories in Finland

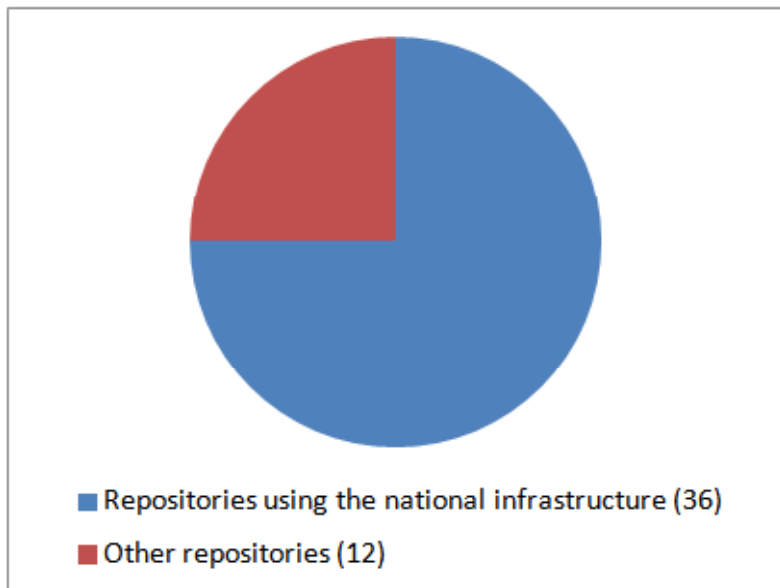
- Currently there are 48 Finnish organizations with an institutional repository
 - Universities, universities of applied sciences (polytechnics), state research institutes, government agencies, scholarly societies
- On the other hand, there are only 10 public repository instances
 - The National Library of Finland runs four public DSpace instances for 36 customer organizations (not counting the National Library itself)
 - Six of the bigger research universities have their own locally-run DSpace/Fedora instances, mostly for their own stuff

Finnish repositories and their content, June 2012 (items)

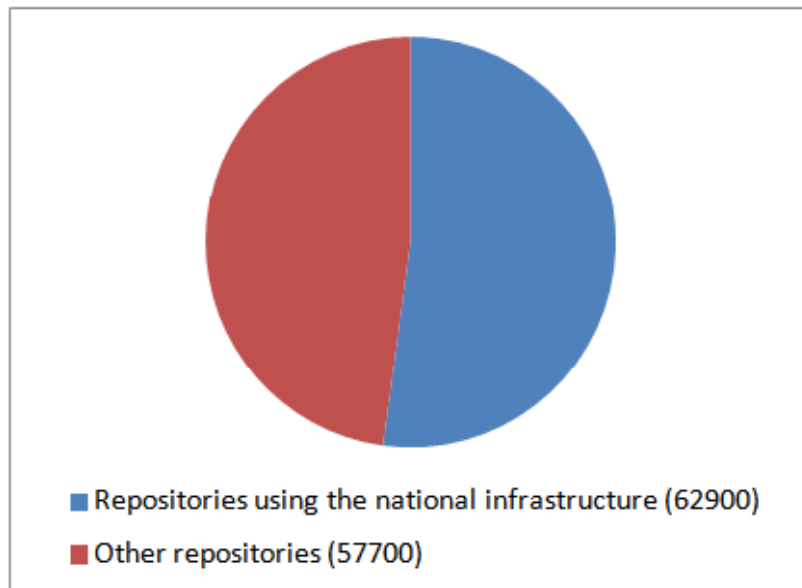


The "market share" of the National Library as a repository service provider

Of organizations with a repository (organizations)



Of repository content (OA full-text items)



Shared repository services in general: why aren't there more of them?

- The original vision: institutional repositories are built on a local level and harvested via OAI-PMH to search engines specializing on scholarly content
 - "Do it yourself"-oriented ideology: anyone can set up a repository instance, every organization should have one
 - As a result we have a large global network of mostly separately-hosted repository software instances (= a lot of duplication of work)
 - Some of the repositories are poorly resourced, some have little content
- Does this always make sense?
 - The use of shared or hosted services would be in many cases worth consideration, and might provide significant advantages (including cost savings, better-resourced services)

Is Finland a special case?

- There seems to be much more sharing going on than in many other countries
 - Finnish university libraries have a long tradition of building shared services
 - As the main funder of universities, Ministry of Culture and Education has strongly supported the creation of centralized national infrastructures
- Repositories are one of the centralized services provided by the National Library
 - On the other hand, although we have the tradition to build on, we don't have permanent central funding for repository services
 - There has been only relatively small, temporary project money; at the moment the funding for repository services comes directly from the customer organizations

National repository services: historical background

- Many of the Finnish repositories started out publishing theses and serial publications (late 90s/early 00s)
 - The concept of institutional repository was introduced only a few years later
- The National Library and the idea of a “digital object management system” as an integral part of a new system architecture for the Finnish library network (2003)
 - The first attempt to build it was made with a proprietary software platform
 - It didn’t work out as had been planned
- Evaluation of open source repository software at the National Library (2006)
 - DSpace chosen (quick implementation, suitability for multi-institutional use)

There were some challenges early on

- Originally the idea was to collect all of the stuff and all of the organizations into one big DSpace instance: Doria (opened in February 2007)
- The new service was not an instant success
 - We started out with about ten customers, both large and small, which wouldn't have been enough to sustain the service
 - Many universities chose to upgrade the repositories they already had
- Some of the local repository managers criticized the creation of a national service
 - National repository services may have been perceived as a threat to local plans
 - The advantages of the shared or hosted model sometimes have more appeal to funders and library leaders than to repository managers

Then we got lucky...

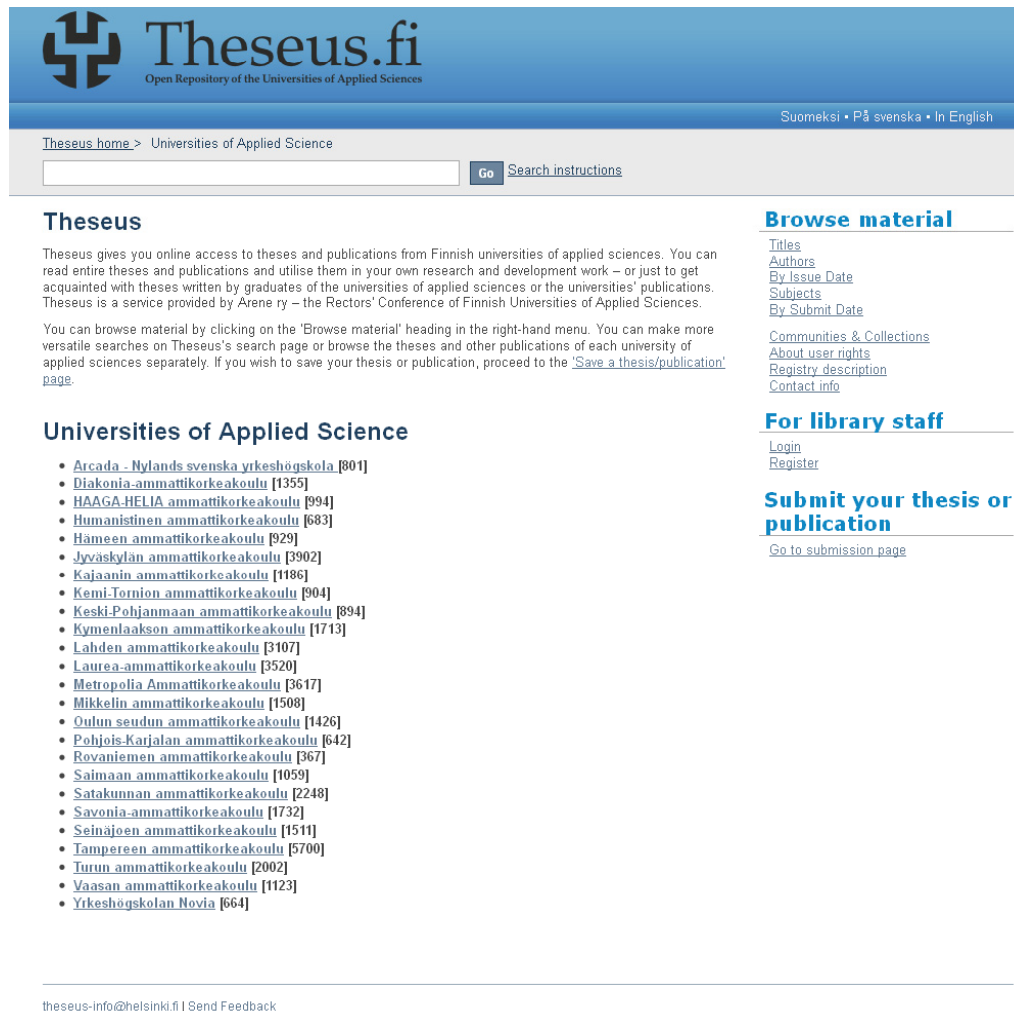
- In late 2007 the Rectors' Conference for Finnish Universities of Applied Sciences got a two-year funding for Theseus
 - The National Library was chosen to be the service provider
 - The new service was adopted in all 25 organizations by 2010
- Cultural Materials Depositing and Preservation Act (2008) gave the National Library new duties in web archiving and long-term preservation
 - Funding for a new server infrastructure; a chance to rebuild the repository services in a new environment (and do it right!)
 - Standardized virtual servers; SVN version control of the DSpace code (2010)

Our current service model(s)

- The work is divided between the customer organizations and National Library
 - The curation of publications and collections is done locally (=most of the work)
 - The National Library is responsible for the development and maintenance of the technical platform
- The customers may use either one of the multi-institutional repository instances or their own DSpace instance hosted by the National Library
 - The technical maintenance of all instances is highly centralized
 - However, there are a lot of differences in the processes and the level of standardization

1. Theseus: a multi-institutional repository instance with standardized processes

- <http://publications.theseus.fi>
- The common repository for all of the 25 universities of applied sciences
 - Growing fast, 13.000+ new publications submitted by students each year
- All organizations use the same tools, formats and processes, and have the same uniform appearance



The screenshot shows the homepage of Theseus.fi, the Open Repository of the Universities of Applied Sciences. The header is blue with the Theseus.fi logo and navigation links in Finnish, Swedish, and English. Below the header is a search bar with a 'Go' button and a link to 'Search instructions'. The main content area is divided into two columns. The left column has a section titled 'Theseus' with a paragraph explaining the repository's purpose and a link to 'Browse material'. Below this is a section titled 'Universities of Applied Science' with a list of 25 universities and their corresponding publication counts. The right column has a section titled 'Browse material' with links to 'Titles', 'Authors', 'By Issue Date', 'Subjects', and 'By Submit Date'. Below this is a section titled 'For library staff' with links to 'Login' and 'Register'. At the bottom of the right column is a section titled 'Submit your thesis or publication' with a link to 'Go to submission page'.

Theseus

Theseus gives you online access to theses and publications from Finnish universities of applied sciences. You can read entire theses and publications and utilise them in your own research and development work – or just to get acquainted with theses written by graduates of the universities of applied sciences or the universities' publications. Theseus is a service provided by Arene ry – the Rectors' Conference of Finnish Universities of Applied Sciences.

You can browse material by clicking on the 'Browse material' heading in the right-hand menu. You can make more versatile searches on Theseus's search page or browse the theses and other publications of each university of applied sciences separately. If you wish to save your thesis or publication, proceed to the '[Save a thesis/publication](#)' page.

Universities of Applied Science

- [Arcada - Nylands svenska yrkeshögskola](#) [801]
- [Diakonia-ammattikorkeakoulu](#) [1355]
- [HAAGA-HELIA ammattikorkeakoulu](#) [994]
- [Humanistinen ammattikorkeakoulu](#) [683]
- [Hämeen ammattikorkeakoulu](#) [929]
- [Jyväskylän ammattikorkeakoulu](#) [3902]
- [Kajaanin ammattikorkeakoulu](#) [1186]
- [Kemi-Tornion ammattikorkeakoulu](#) [904]
- [Keski-Pohjanmaan ammattikorkeakoulu](#) [894]
- [Kymenlaakson ammattikorkeakoulu](#) [1713]
- [Lahden ammattikorkeakoulu](#) [3107]
- [Laurea-ammattikorkeakoulu](#) [3520]
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- [Rovaniemen ammattikorkeakoulu](#) [367]
- [Saimaan ammattikorkeakoulu](#) [1059]
- [Satakunnan ammattikorkeakoulu](#) [2248]
- [Savonia-ammattikorkeakoulu](#) [1732]
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- [Tampereen ammattikorkeakoulu](#) [5700]
- [Turun ammattikorkeakoulu](#) [2002]
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[Communities & Collections](#)
[About user rights](#)
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Theseus: a multi-institutional repository instance with standardized processes

- Essentially a big group effort, with 200+ librarians and administrators participating in 25 organizations
- Due to standardization of processes, the technical maintenance of the service requires relatively little dedicated work
- The cost of managing 25 repositories separately in each organization would be several times higher

The screenshot shows the homepage of the Theseus.fi Open Repository. The header features the Theseus.fi logo and the text "Open Repository of the Universities of Applied Sciences". Navigation links for "Suomeksi", "På svenska", and "In English" are present. A search bar with a "Go" button and a link to "Search instructions" is located below the header. The main content area is titled "Browsing THESEUS by Submit Date" and includes a "Jump to a point in the index" section with dropdown menus for "(Choose month)" and "(Choose year)". Below this is a section for "Or type in a year:" with a text input and a "Go" button. A "Sort by:" section shows "submit date" selected, with "Order:" set to "descending" and "Results:" set to "20". An "Update" button is also present. A status bar indicates "Now showing items 1-20 of 43580" with a "Next Page" link. The list of items shows PDF icons, titles, authors, and dates. On the right side, there are links for "Browse material" (Titles, Authors, By Issue Date, Subjects, By Submit Date), "Communities & Collections" (About user rights, Registry description, Contact info), "For library staff" (Login, Register), and "Submit your thesis or publication" (Go to submission page).

Theseus.fi
Open Repository of the Universities of Applied Sciences

Suomeksi • På svenska • In English

Theseus home > Browsing by Submit Date

Go Search instructions

Browsing THESEUS by Submit Date

Jump to a point in the index: (Choose month) (Choose year)

Or type in a year: Go

Sort by: submit date Order: descending Results: 20 Update

Now showing items 1-20 of 43580 Next Page

Item 1:
Title: [Pieksämäen kaupungin työikäisen väestön hyvinvointikertomus](#)
Author: Ylönen, Paula
Date: 2012

Item 2:
Title: [TUETUN ASUMISEN PERHEYKSIKKÖ JYVÄSKYLÄSSÄ : : kuvaus lastensuojelun avohuollon työmuodon kehittämisestä](#)
Author: Pollari, Tuula
Date: 2012

Item 3:
Title: [Osaamisen varmistaminen terveydenhuollon työnjaossa](#)
Author: Rantanen, Laura; Hiekkavirta, Mirva
Date: 2012

Item 4:
Title: [LAATUA LASTENSUOJELUUN : Jyväskylän kaupungin nuorisokotien laatuprojekti](#)
Author: Partti, Anne
Date: 2012

Item 5:
Title: ["Työyhteisön positiivinen innostaja" : Alaistaidot päivähoidon esimiestyön tukena](#)
Author: Riihinen, Saija
Date: 2012

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2. Doria: a multi-institutional repository instance with diverse processes

- <http://www.doria.fi>
- The original idea (in 2006) was to create a neutral technical platform that any organization could easily adopt
- All of the customer organizations have their own communities
- The organizations are given relatively free hands in managing their communities

Doria
Suomeksi
På svenska
In English

Doria home > Lappeenranta University of Technology > LUTPub > Doctoral dissertations > View Item

[Search instructions](#)

☒ This Collection
☐ Search Doria

Making Sense of Software Product Requirements

Jantunen, Sami (2012-06-06)

The permanent address of the publication is <http://urn.fi/URN:ISBN:978-952-265-218-8>



Name: isbn 9789522652188.pdf
Size: 3.133Mb
Format: PDF

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Title:	Making Sense of Software Product Requirements
Author:	Jantunen, Sami
Other author:	Lappeenranta teknillinen yliopisto, Teknistaloudellinen tiedekunta Tietotekniikka / Lappeenranta University of Technology, Faculty of Technology Management
Date:	2012-06-06
Abstract:	<p>One of the most crucial tasks for a company offering a software product is to decide what new features should be implemented in the product's forthcoming versions. Yet, existing studies show that this is also a task with which many companies are struggling. This problem has been claimed to be ambiguous and changing. There are better or worse solutions to the problem, but no optimal one. Furthermore, the criteria determining the success of the solution keeps changing due to continuously changing competition, technologies and market needs.</p> <p>This thesis seeks to gain a deeper understanding of the challenges that companies have reportedly faced in determining the requirements for their forthcoming product versions. To this end, product management related activities are explored in seven companies. Following grounded theory approach, the thesis conducts four iterations of data analysis, where each of the iterations goes beyond the previous one. The thesis results in a theory proposal intended to 1) describe the essential characteristics of organizations' product management challenges, 2) explain the origins of the perceived challenges and 3) suggest strategies to alleviate the perceived challenges.</p> <p>The thesis concludes that current product management approaches are becoming inadequate to deal with challenges that have multiple and conflicting interpretations, different value orientations, unclear goals, contradictions and paradoxes. This inadequacy continues to increase until current beliefs and assumptions about the product management challenges are questioned and a new paradigm for dealing with the challenges is adopted.</p>
Subject:	market-driven requirements engineering; grounded theory; product management; wicked problems; sensemaking

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This item appears in the following Collection(s)

- [Doctoral dissertations](#) [375]

This Collection

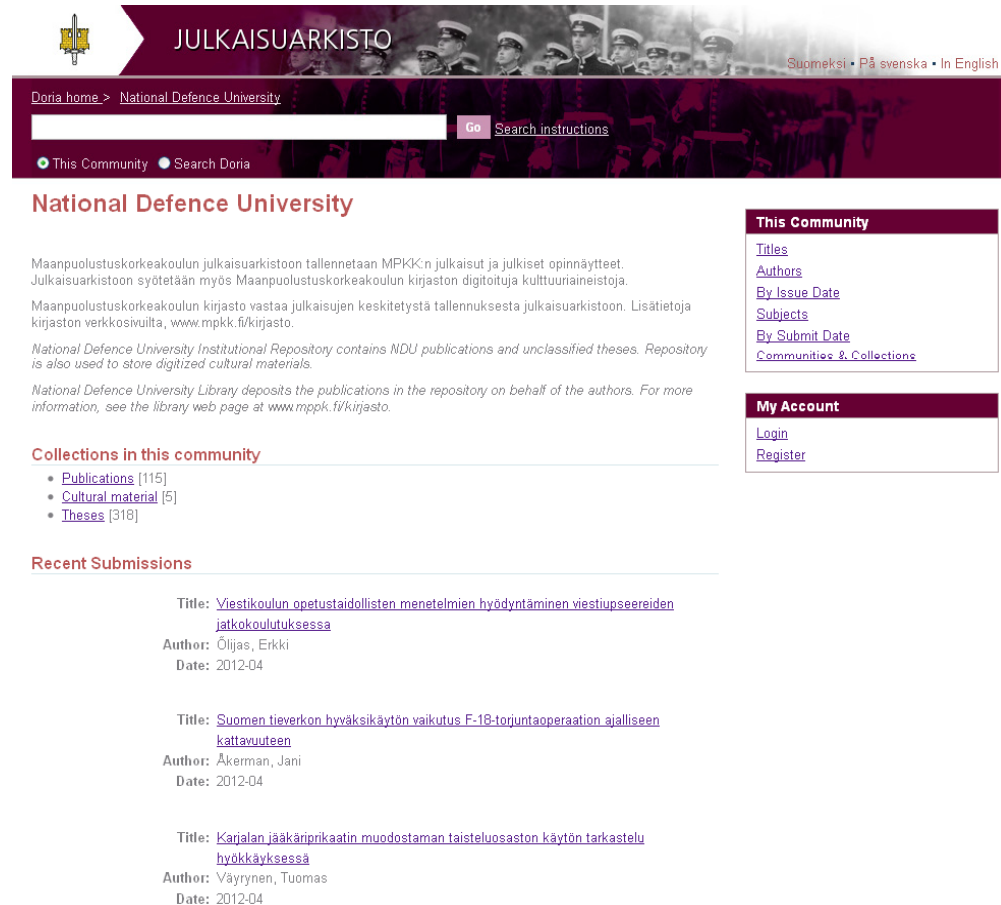
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Doria: a multi-institutional repository instance with diverse processes

- Many different submission processes, using either built-in or external submission tools
- Many of the communities have their own visual themes and metadata formats
- There are downsides to this
 - The quality of metadata is not uniform
 - Customized community-level user interfaces may appear confusing to end users



JULKAISUARKISTO

Suomeksi • På svenska • In English

Doria home > National Defence University

Go Search instructions

This Community Search Doria

National Defence University

Maanpuolustuskorkeakoulun julkaisuarkistoon tallennetaan MPKK:n julkaisut ja julkiset oppinnäytteet. Julkaisuarkistoon syötetään myös Maanpuolustuskorkeakoulun kirjaston digitoituja kulttuuriaineistoja.

Maanpuolustuskorkeakoulun kirjasto vastaa julkaisujen keskitetystä tallennuksesta julkaisuarkistoon. Lisätietoja kirjaston verkkosivulta, www.mppk.fi/kirjasto.

National Defence University Institutional Repository contains NDU publications and unclassified theses. Repository is also used to store digitized cultural materials.

National Defence University Library deposits the publications in the repository on behalf of the authors. For more information, see the library web page at www.mppk.fi/kirjasto.

Collections in this community

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- [Cultural material](#) [5]
- [Theses](#) [318]

Recent Submissions

Title: [Viestikoulun opetustaidollisten menetelmien hyödyntäminen viestiupseereiden jatkokoulutuksessa](#)

Author: Öljjas, Erkki

Date: 2012-04

Title: [Suomen tieverkon hyväksikäytön vaikutus F-18-torjuntaoperaation ajalliseen kattavuuteen](#)

Author: Äkerman, Jani

Date: 2012-04

Title: [Karjalan jääkäriprikaatin muodostaman taisteluosaston käytön tarkastelu hyökkäyksessä](#)

Author: Väyrynen, Tuomas

Date: 2012-04

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Doria: a multi-institutional repository instance with diverse processes

- Doria also contains a number of collections from one of our major customers, the National Library itself


Suomeksi På svenska In English

[Doria home](#) > [The National Library of Finland](#) > [Dissertations of the Royal Academy of Turku](#)

[Search instructions](#)

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Dissertations of the Royal Academy of Turku

Väitöskirjakokoelma sisältää tässä vaiheessa 1778 teosta (n. 45000 sivua). Ne on valittu Jorma Vallinkosken luettelon, *Turun Akatemian väitöskirjat 1642-1828*, numeroista 70-2065. Hanketta jatketaan vuonna 2012.

Väitöskirjat on digitoitu [Ilkka ja Ulla Paateron rahaston](#) varoilla. Kokoelmaan on myös sisällytetty [Pelasta Kirja-hankkeessa](#) digitoituid Pehr Kalmin väitöskirjat.

Dissertationer vid Kungliga akademien i Åbo

Samlingen innehåller 1778 tryck, ca. 45000 sidor. De är utvalda bland numren 70-2065 i Jorma Vallinkoskis katalog *Turun akademien väitöskirjat 1642-1828*. Digitalisering vill fortsätta under året 2012.

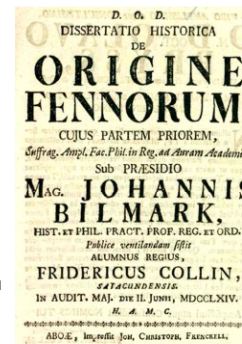
Digitalisering har skett med stöd av [Ilkka och Ulla Paateros fond](#).

Samlingen innehåller också i [programmet Rädgå boken](#) digitaliserade Pehr Kalm's dissertationer.

Dissertations of the Royal Academy of Turku

This collection contains 1778 digitized dissertations that were defended at the Royal Academy of Turku between 1642 and 1828. They were chosen from numbers 70-2065 in Jorma Vallinkoski's catalogue of the dissertations. The digitalization project will continue in 2012.

The funding for the project was provided by Ilkka and Ulla Paatero's fund. The collection also includes a number of Pehr Kalm's dissertations, which were digitized within the fund-raising program Save the book.



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Recent Submissions



Title: [De gradibus academicis](#)
Author: Alander, Christiernus Caroli
Date: 1700




Title: [Causae discessus reginae viduae Mariae Eleonorae, e Suecia](#)
Author: Bilmark, Johannes
Date: 1795



Title: [De voluntate humana](#)
Author: Halin, Petrus Olai
Date: 1700

3. Separate repository instances for individual customer organizations

- Some organizations prefer to have their own hosted instance
- Currently easy to provide, for a small extra cost
- Julkari, <http://www.julkari.fi> (National Institute for Health and Welfare, may be expanded to include other related organizations)
- TamPub, <http://tampub.uta.fi> (University of Tampere, replaces three previous locally-run repositories)


**UNIVERSITY
OF TAMPERE**

TamPub Institutional repository
 Suomeksi
In English

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Journal Article

Driving ability in stroke patients with residual visual inattention: A case study

The permanent address of the publication is <http://urn.fi/URN:NBN:fi:uta-201206201010>



Post print
352.5Kb
Restricted access until: 2012-07-27

[View/Open](#)

Author(s): Jehkonen, Meri; Saunamäki, Tiia; Alzamora, Anna-Kaisa; Laihosalo, Mari; Kuikka, Pekka

Title: Driving ability in stroke patients with residual visual inattention: A case study

Year: 2011

Journal Title: *Neurorcase*

Vol and number: 18 : 2

ISSN: 1355-4794

Discipline: Neurology and psychiatry

School /Other Unit: School of Social Sciences and Humanities

Item Type: Journal Article

Language: en

DOI: <http://dx.doi.org/10.1080/13554794.2011.568504>

URN: URN:NBN:fi:uta-201206201010

Abstract: Driving ability of three patients having a right hemisphere infarct and residual visual inattention was examined. The neuropsychological examination included the Peripheral Perception Test and the Signal Detection Test from the Vienna Test System, and the Behavioural Inattention Test (BIT). Driving ability was assessed with an on-road evaluation. The patients had no neglect based on the BIT and had normal visual fields, but they showed slightly poorer visual search on the left side. All patients passed the official on-road driving test and were considered capable of driving. This study ra

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Instructions and links

[Self-archive / Publish](#)
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How to sell repository services?

- There is a strong practical need in many organizations for an affordable system that can be used for the storing and dissemination of digital publications
 - Long-term access and persistent addresses have been good selling points
 - You should be able integrate the repository with the other systems and processes of the organization
- While the current repository software platforms have their limitations, they are suitable for the management of several kinds digital content
 - Much of the discourse on repositories has concentrated on one very specific use case, green OA
 - However, there are other use cases that are just as legitimate (if done properly)

Does it cost something? Yes, it does!

- We are not trying to make a profit, but we still have to make the ends meet
 - Establishing a coherent pricing scheme for all customers has not been easy
 - Some of the early deals made while we still had project funding (and were hoping for more) were quite generous
- We are trying to keep the basic services affordable
 - Many of the customers are relatively small and do quite well with the basic repository functionalities, with minimal customization
- The National Library can also provide consulting and other services (conversions, extensive customization, technical interfaces to other systems, etc.)
 - These cost more, but we're trying to come up with solutions that benefit other customers as well

Growth of the customer-base: new challenges

- Negotiating contracts separately with each customer often time-consuming
- How to balance customer projects with the development of the basic infrastructure?
 - Customer projects bring in money, but they also take up a lot of developer time
 - The infrastructure is getting more complicated with each new project
- Need for new and improved services
 - The new, customizable external ingest-system (long overdue)
 - Dark archiving on a national level? Connections to long-term preservation?
 - Standardized interfaces to other systems/processes (library catalog, CRIS, etc.)

Shared and not shared: towards common goals

- Some of the Finnish universities are going to host their own repositories even in the future
- Co-operation between repositories would benefit us all, both in technical development and policy issues
- There's a lot of interest in national co-operation, but we are still looking for better ways to make it work
- Contributions to the international community?



Measures of success for repositories?

- There is a repository
- Repository is filled with meaningful content
- The content is being disseminated (downloaded by users)

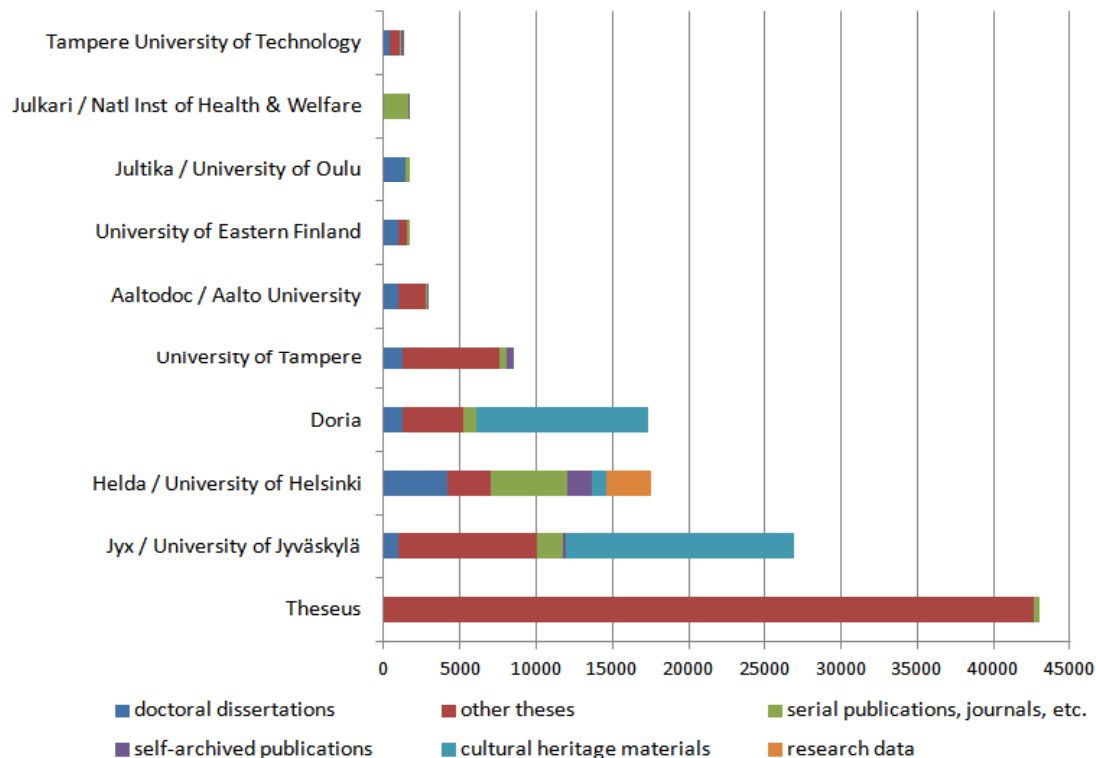
Monthly download statistics

	1 / 2012	2 / 2012	3 / 2012	4 / 2012	5 / 2012	6 / 2012	Total
The entire DSpace (43605 items, 45394 bitstreams, 92577 megabytes)	907982	651147	736132	690223	686343	512788	4184615

Source: <http://publications.theseus.fi/simplestats>

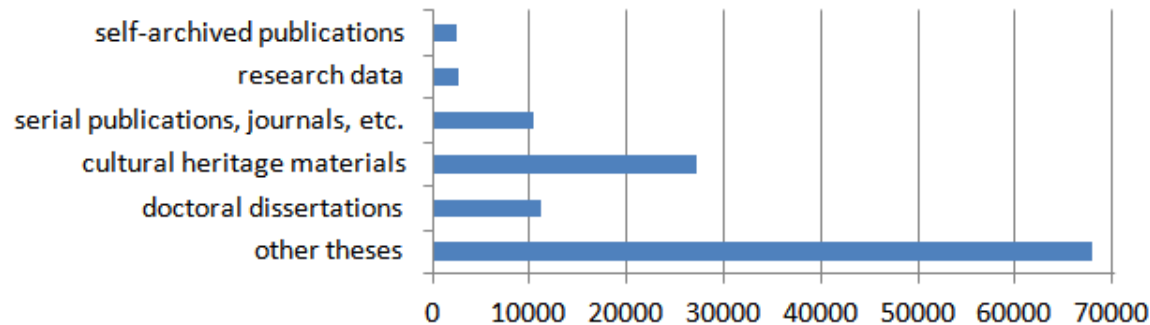
- The content has some kind of scientific or cultural impact
- By storing and disseminating the content the repository has an effect on the way we publish and access these materials

Content types in each Finnish repository, June 2012 (OA full-text items)



We are not very far yet

Types of OA full-text content in all of the Finnish repositories in June, 2012 (items):



- Self-archiving ("green OA") has been important in creating publicity and getting funding for the repositories, but even with four institutional mandates in effect, the actual number of submitted articles has grown only slowly
- On the other hand, the open access publication of theses and dissertations is clearly a success story and has changed the way scholarly publishing works in Finland

