DSpace JSPUI Reborn

Presented by:

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This work is the result of the DSpace Team lead by Andrea Bollini at Cineca



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Open Repositories, Helsinki 2014, June 9-13



This presentation is about...

User experience improvements available with DSpace 4

Available for the JSPUI, which is our favourite UI

Some of them available for the XMLUI

 Comparison of JSPUI and XMLUI to help you choose which UI better fits your requirements



The big one: JSPUI redesign

Clean and modern look & feel

Contributed to the community by Cineca

Built with professional CSS Frameworks: Bootstrap 3 + JQueryUI 1.10

Theme by





...how JSPUI looked before 4.0





About DSpace Software

Search DSpace Go

Advanced Search

Home

Browse

- Communities
 Collections
- ∃ssue Date
- Author
- <u> Title</u>
- ⊕ Subject
- Researcher
- ⊕ Project
- Organization Unit
- Onferences

Sign on to:

- Receive email updates
- My DSpace authorized users
- ⊕ Edit Account details
- → Help
- About DSpace

DSpace-CRIS at euroCRIS >

DSpace is Live

Welcome to our digital repository of My University research!

More exciting news to appear here.

Search

Enter some text in the box below to search DSpace.

Go

Communities in DSpace

Choose a community to browse its collections.

euroCRIS Research Output

This is a default installation of DSpace!

It can be extensively configured by installing modified JSPs, and altering the site configuration.

RSS Feeds

RSS 1.0 RSS Z.0

RSS

Discover

By people

Andrea Bollini (1)
Ed Simons (1)
Jan Dvořák (1)
Nikos Houssos (1)
Pablo de Castro (1)

By structure

Best Practice TG (1)
CERIF TG (1)
CINECA (1)
CRIS Architecture
and Develop... (1)
euroCRIS (1)
European
Commission - Joint
R... (1)
GrandIR Ltd. (1)
Sapienza University
of Rome (1)

By type

CERIF Class (546)
CERIF Scheme (68)
Items (17)
OrqUnits (8)
Researchers (5)
Events (4)
Collections (2)
Communities (1)

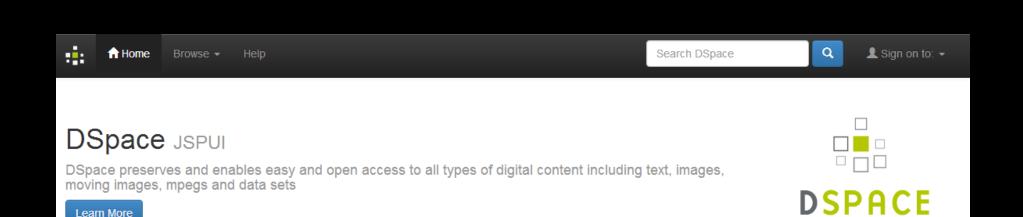


DSpace Software Copyright © 2002-2010 Duraspace - Feedback



How JSPUI looks now!





DSpace Demo Repository

français Deutsch English

Welcome to the DSpace.org demonstration/sample repository JSPUI interface

This repository is currently running DSpace version 4.0

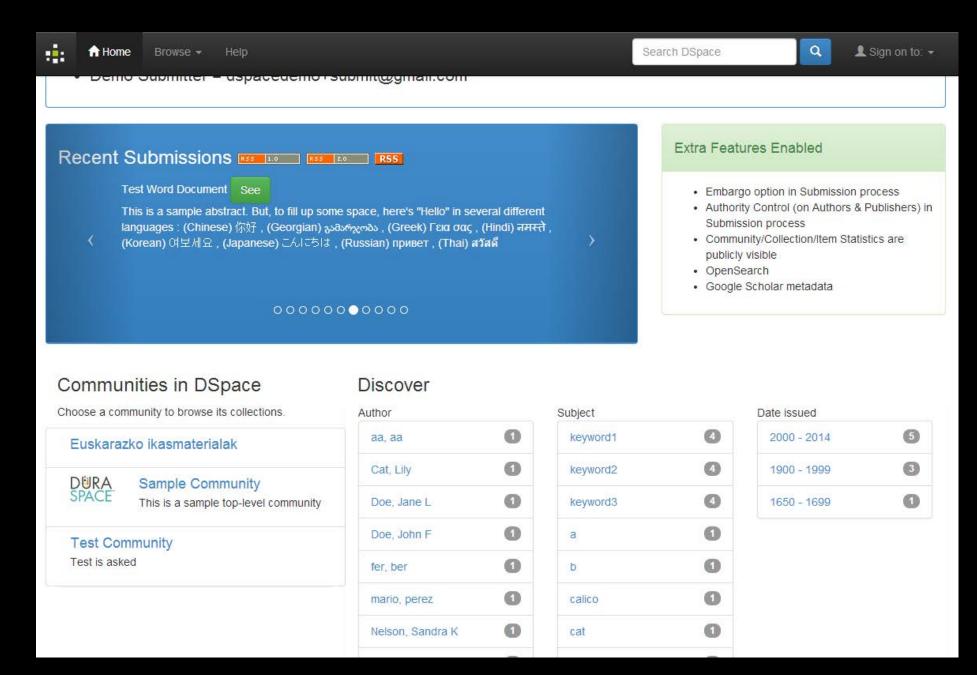
WARNING: All content on this site resets automatically **every Saturday at 23:59 UTC**, at which point any changes are lost.

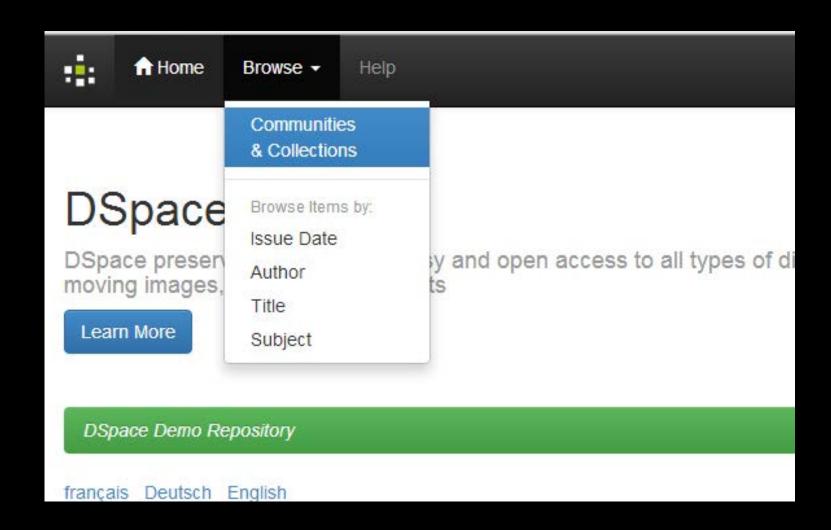
Demo Users are set up in the system

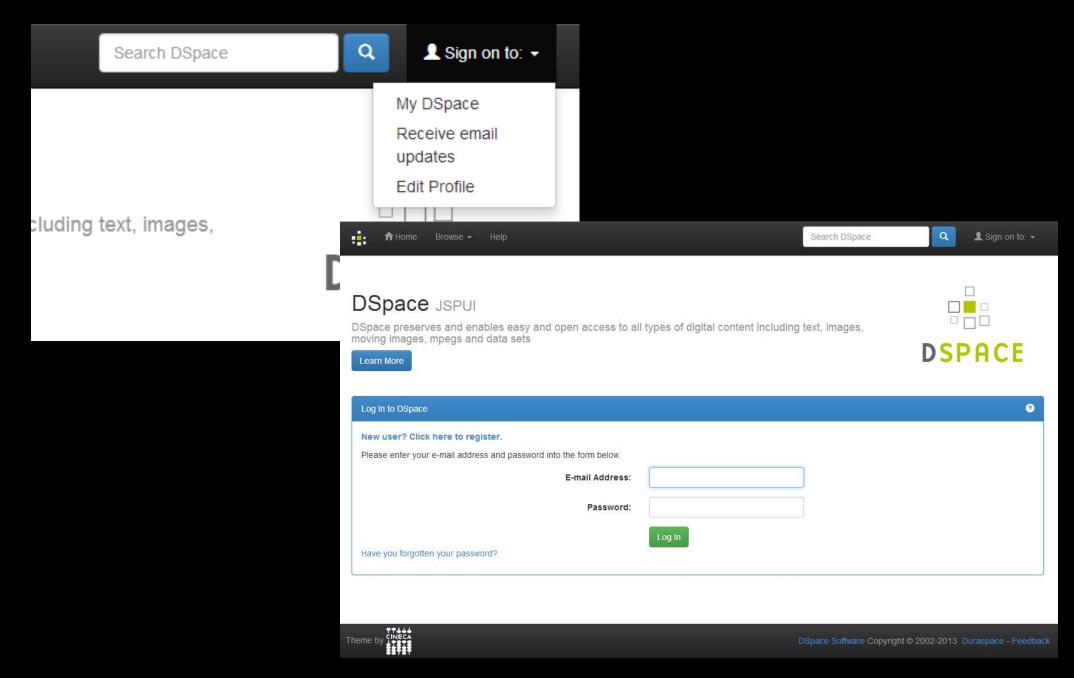
All users have password equal to the lowercase name of this software:

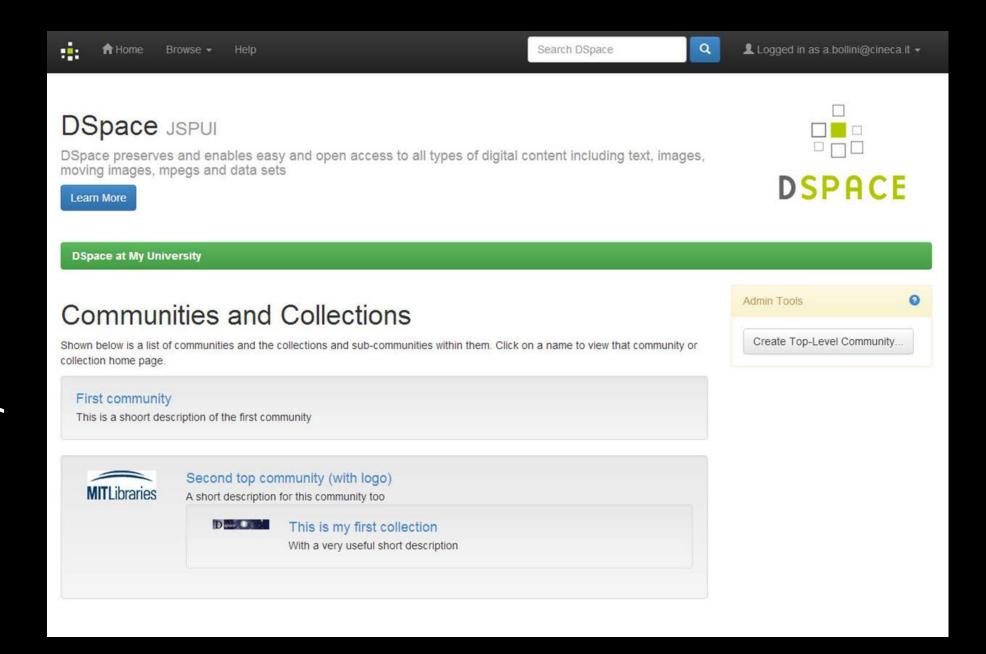
- Demo Site Administrator = dspacedemo+admin@gmail.com
- Demo Community Administrator = denacedemo+commadmin@gmail.com

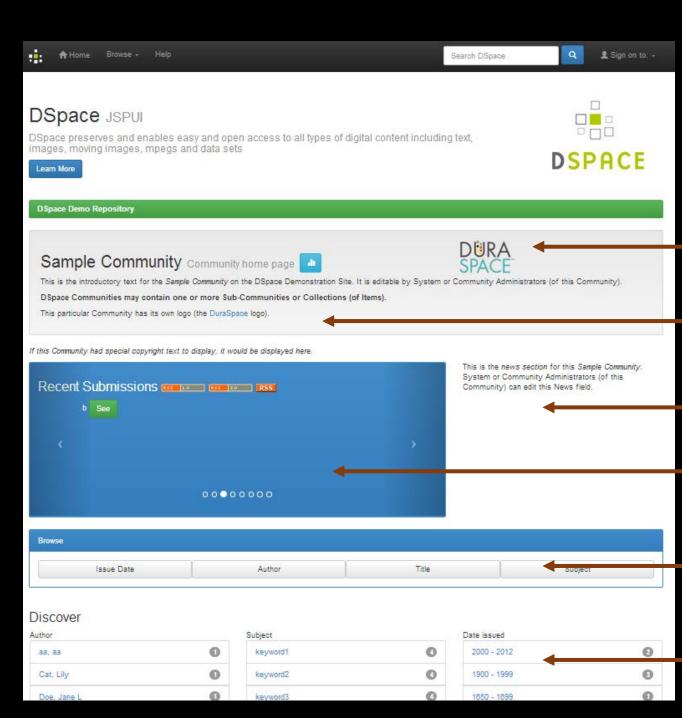












Community logo

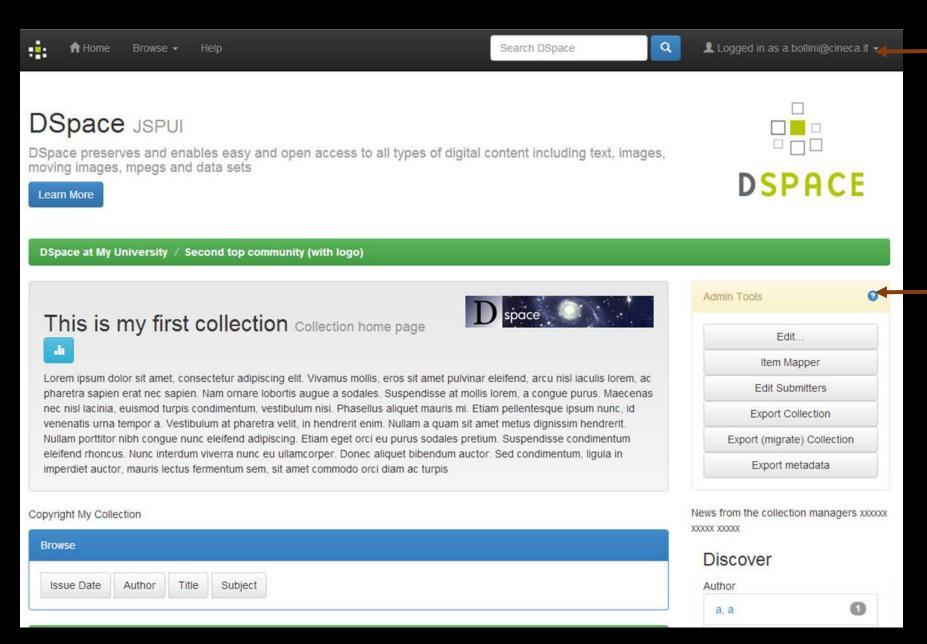
Introductory text

Side news

Recent submission component

Community browse

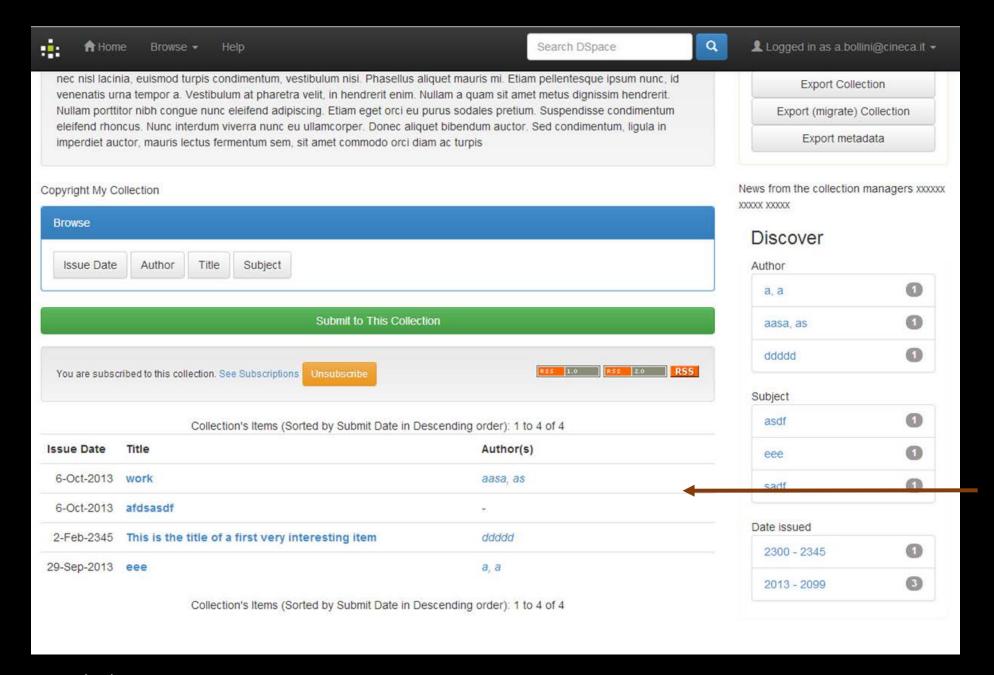
Community facet



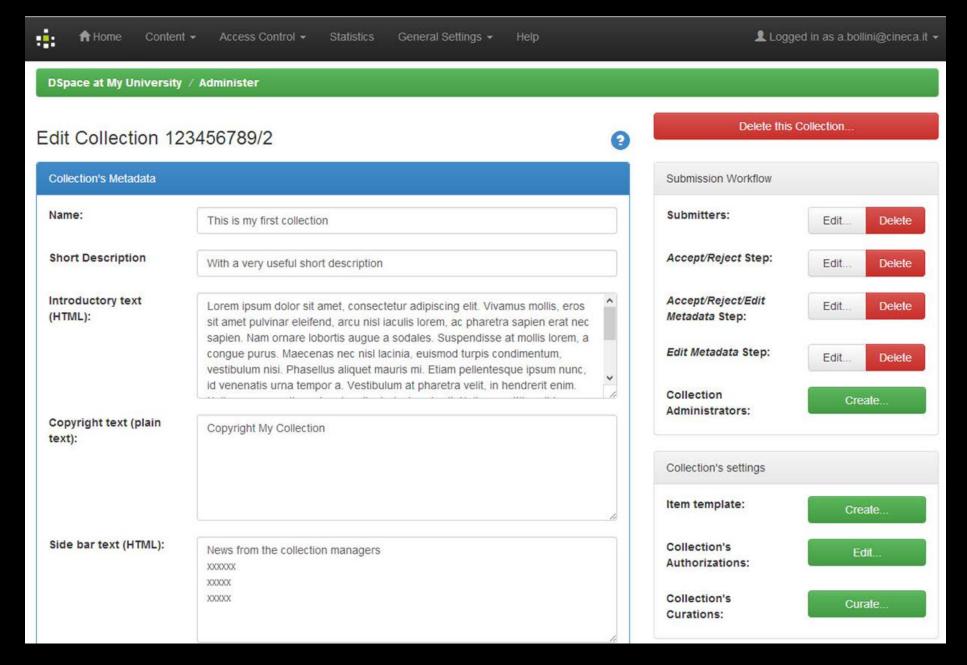
Logged-in

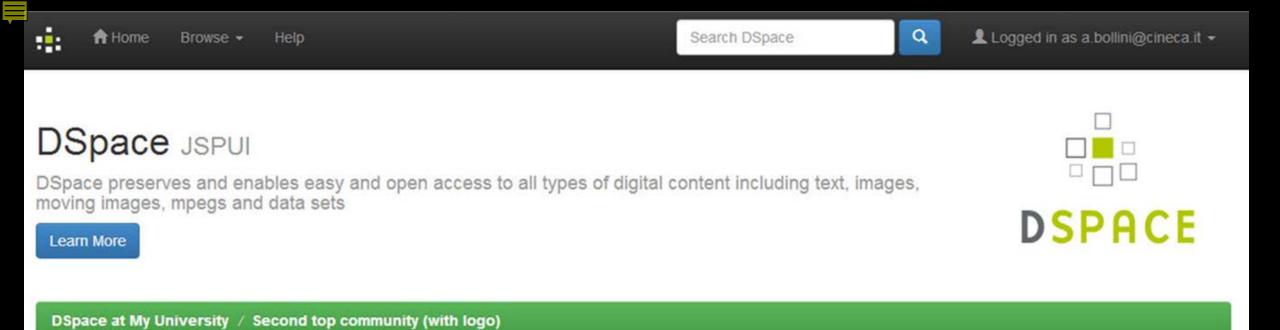
Admin tools
In the sidebar



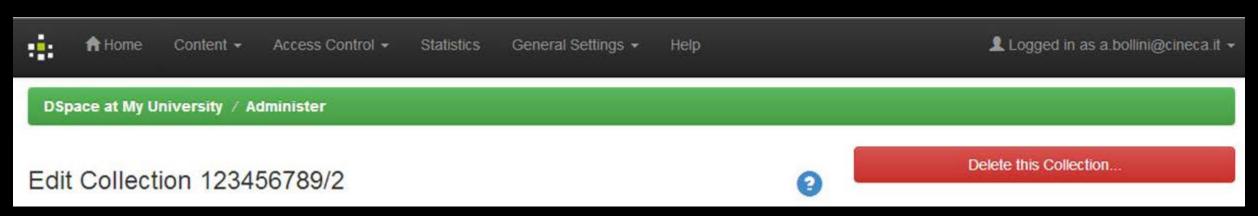


Collection's content

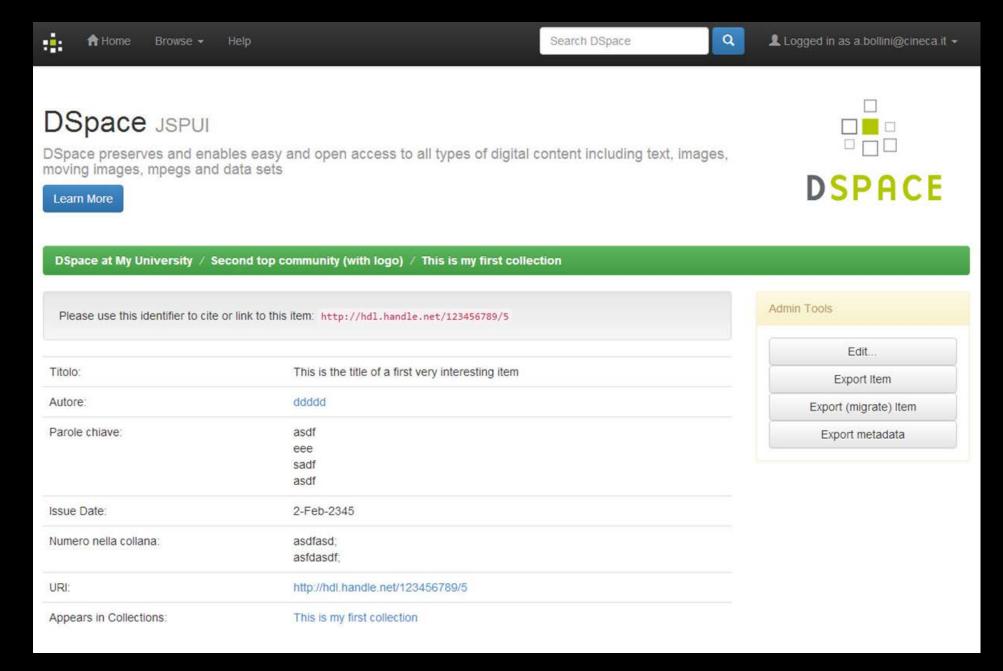




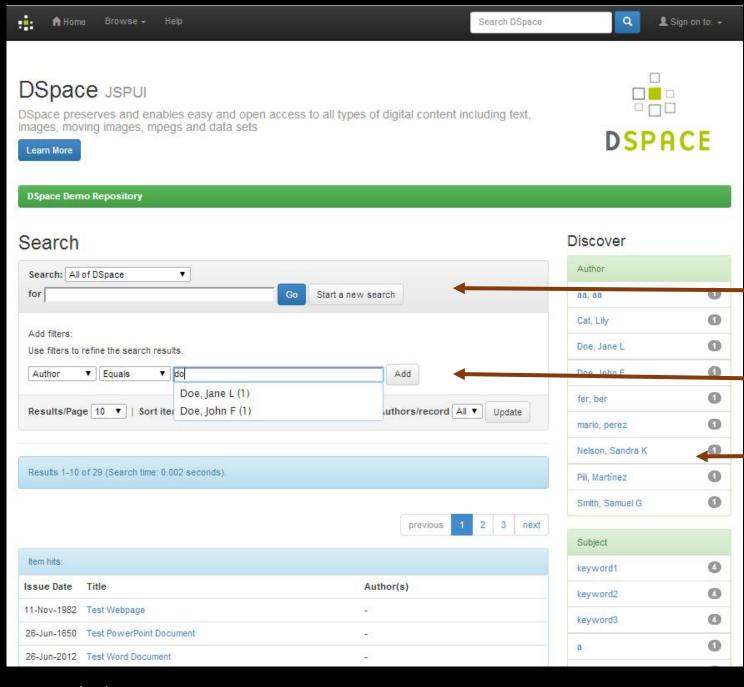
Different headers for public and backend pages









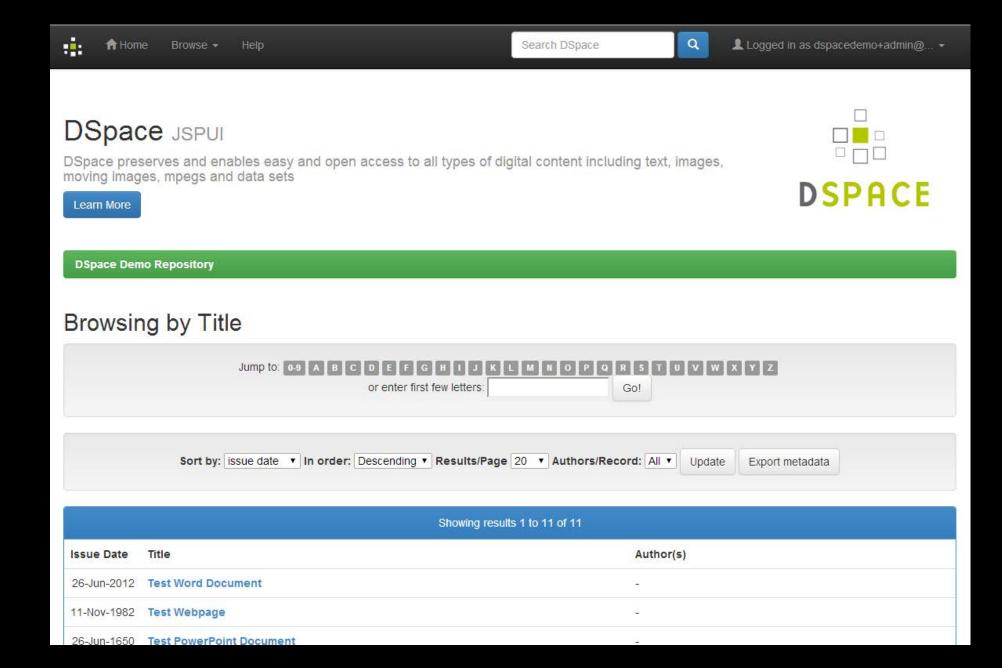


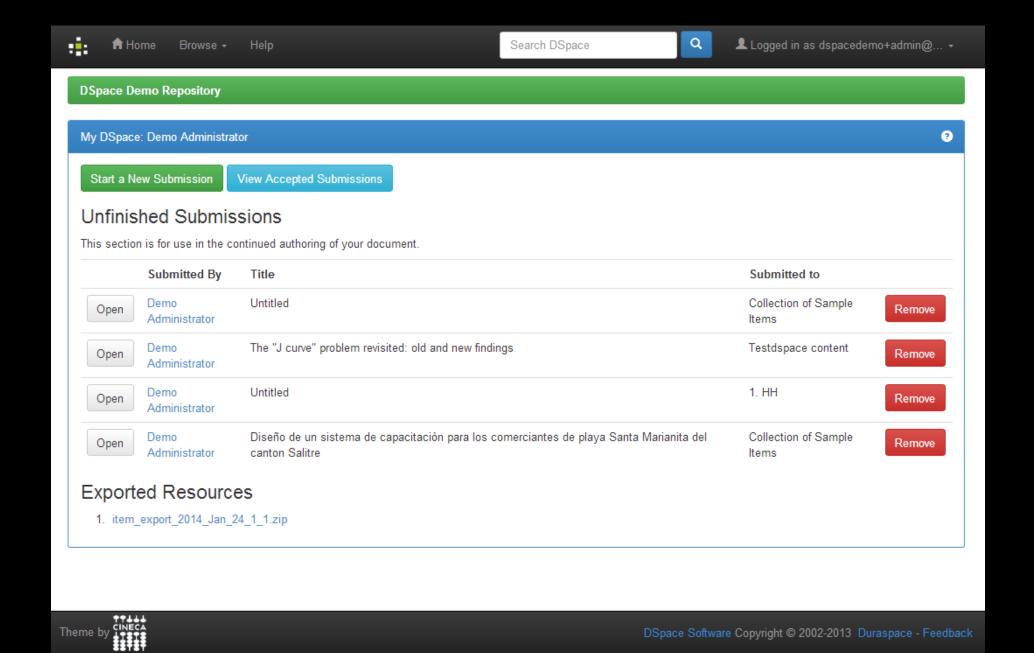
Search query

Filters with autocomplete

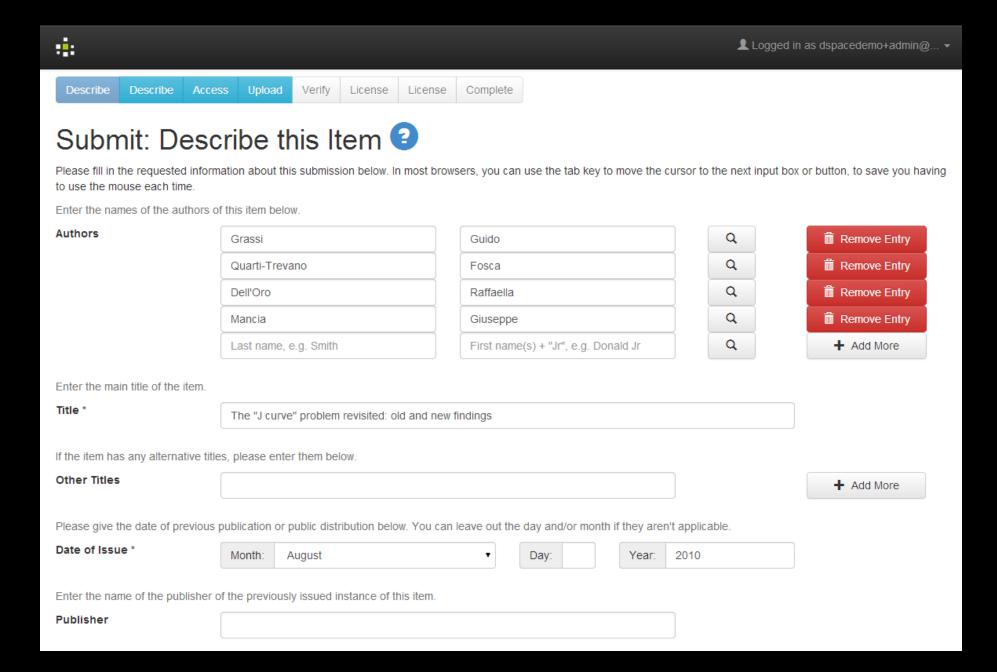
Facets, in the sidebar

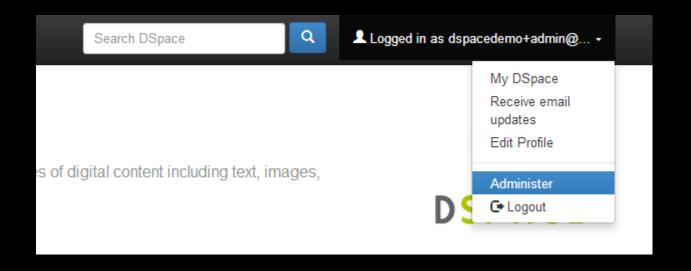


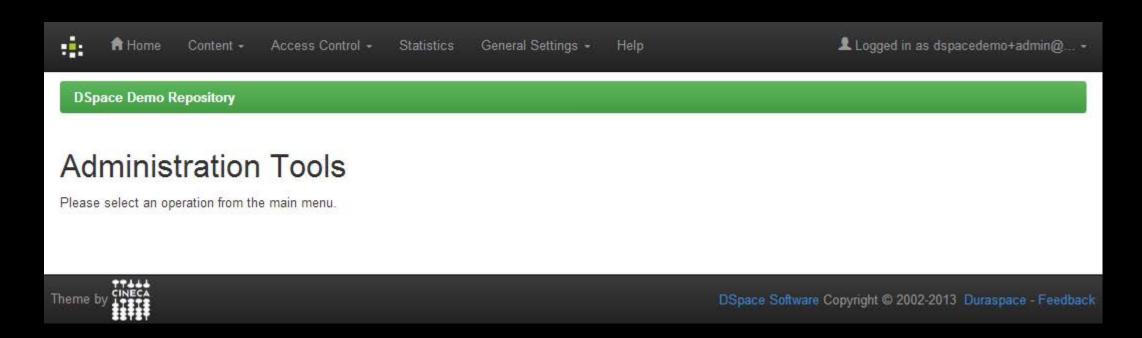


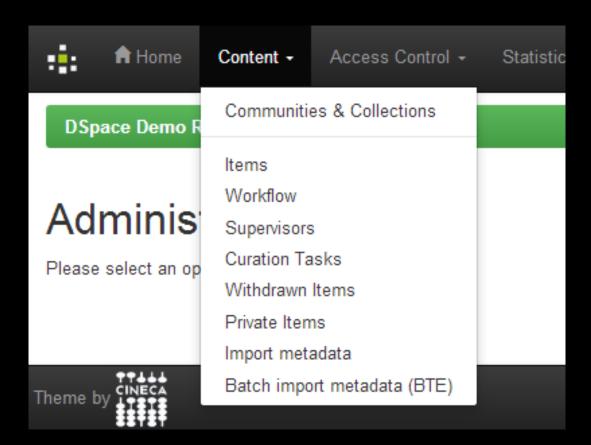


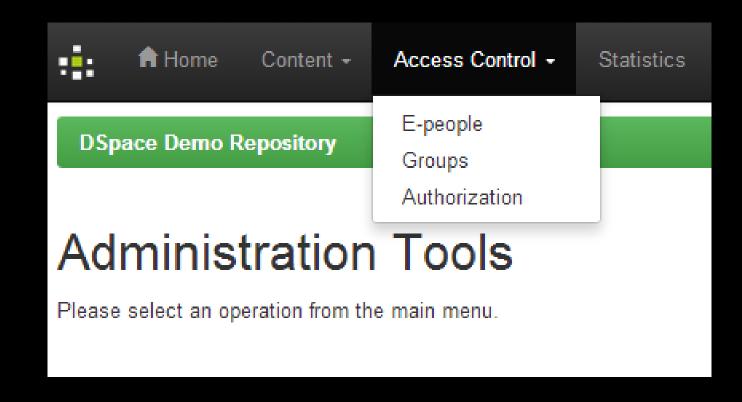


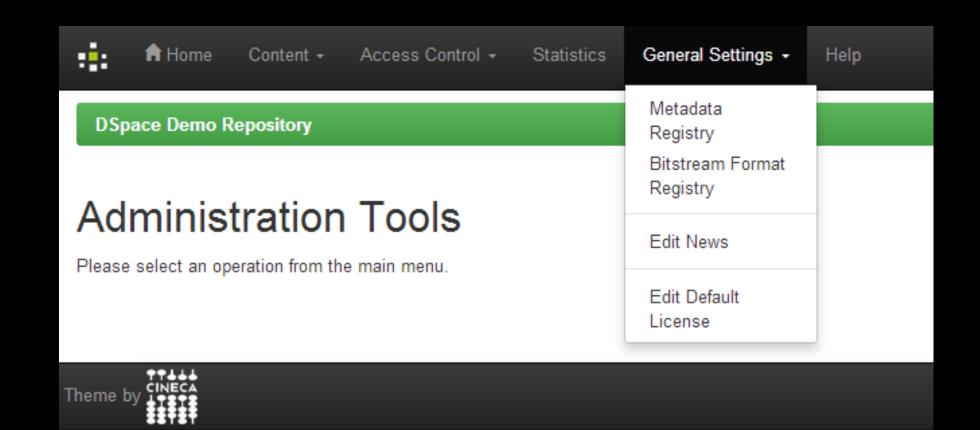














Media Query Browser support

- Chrome, Firefox, Safari, Opera
 - All reasonably recent versions
- IE10 fully supported
- IE9: except for a few CSS enhancements
- IE8: requires respond.js and html5shiv.js (included in DSpace 4)
- IE7: not officially supported, but
 - "should look and behave well enough"

Source "Building Responsive Websites with the Bootstrap 3 Framework", Webvanta https://www.webvanta.com/webinar/1949234-building-responsive-websites-with-the-bootstrap



Change the look & feel





Change the look & feel: step 1/4

Replace the DSpace logo with your institution logo



/jspui/image/dspace-logo-only.png (fixed to a height of 25px)



/jspui/image/logo.gif (width adapted to max 3/12 of the viewport)





Change the look & feel: step 2/4

Replace the Bootstrap CSS theme file...

...with a generated one

2

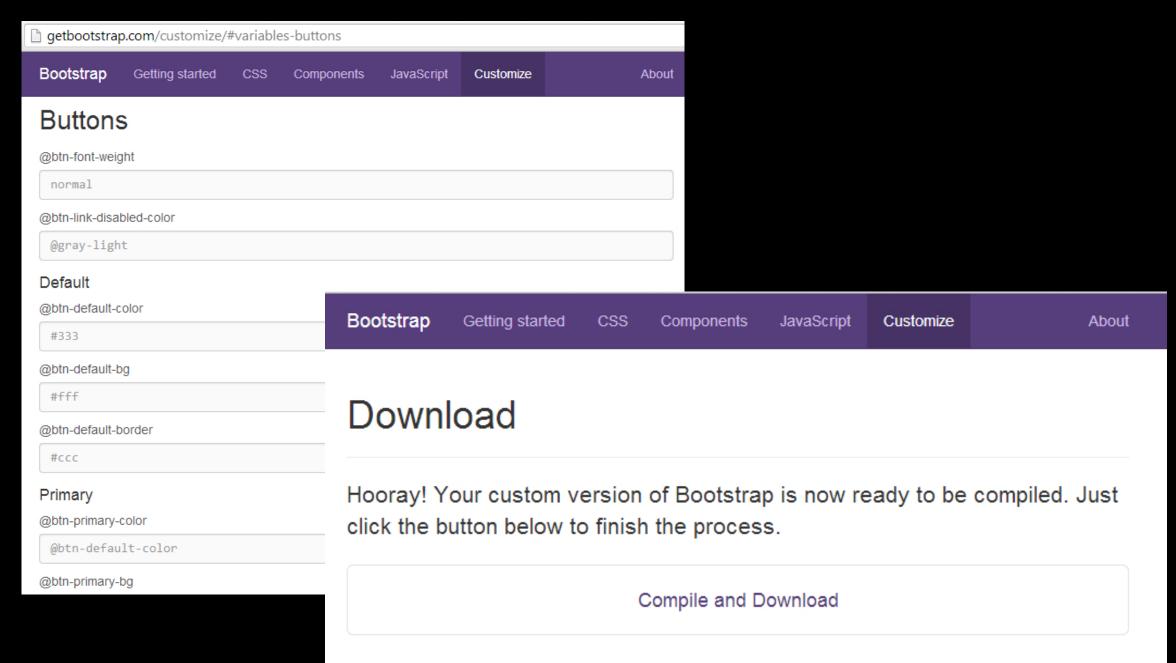
/jspui/static/css/bootstrap/bootstrap-theme.min.css

http://getbootstrap.com/customize/ - the generator form

http://bootswatch.com/ - gallery of free themes

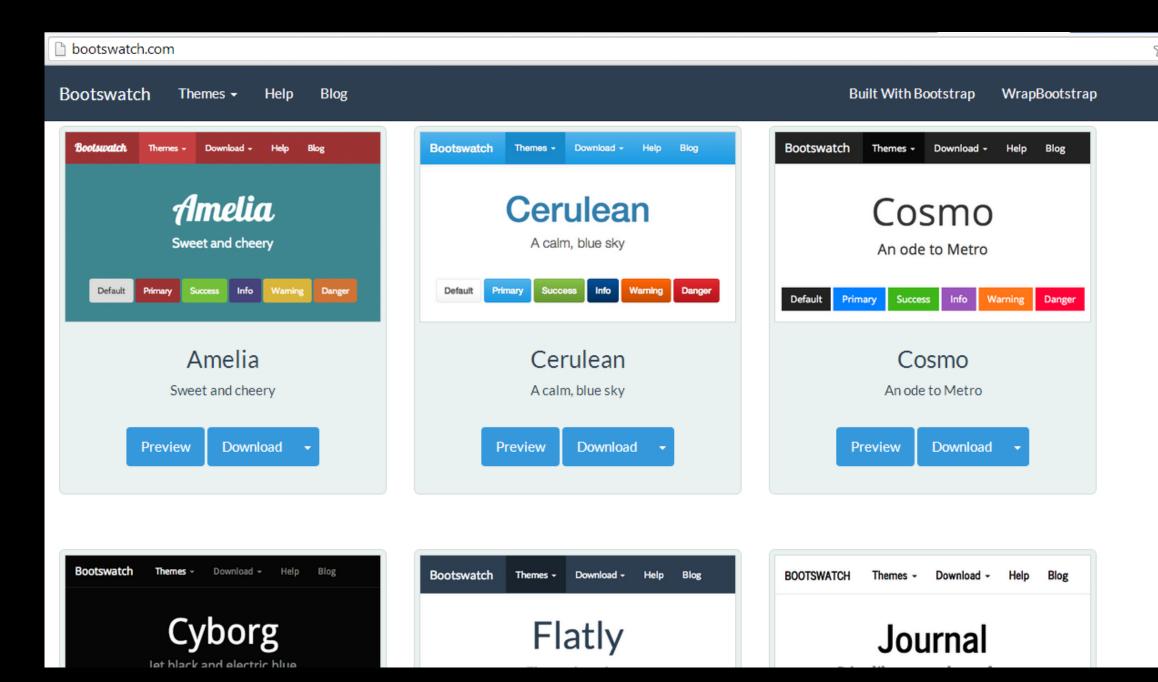
<u>http://www.lavishbootstrap.com/</u> - generate the palette from an image (maybe the Repository logo or banner)



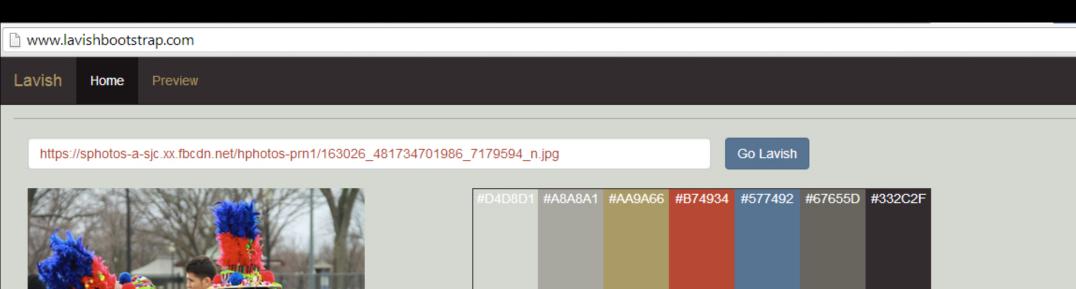


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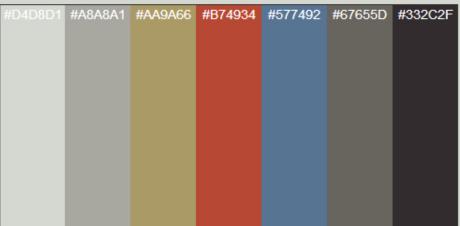












Step 2: Customize everything

body background	#D4D8D1 ▼	D4D8D1
disabled input & button background, input addon background, nav & tabs & pagination link hover background, jumbotron background	#A8A8A1 ~	A8A8A1
disabled link color, input placeholder color, dropdown header color, navbar inverse &	#AA9A66 ~	AA9A66



Change the look & feel: step 3/4

Check the dspace-theme CSS file, <u>maybe</u> you want to make changes

3

/jspui/static/css/bootstrap/dspace-theme.css

```
.banner img {background-color: #FFFFFF;padding:15px;margin:20px;}
.brand h4 {color: #999999}
ol.breadcrumb li {color: white; font-style: italic;}
ol.breadcrumb li a {color: white; font-weight: bold; font-style: normal;}
```



Change the look & feel: step 4/4

Replace JQuery UI CSS & images...

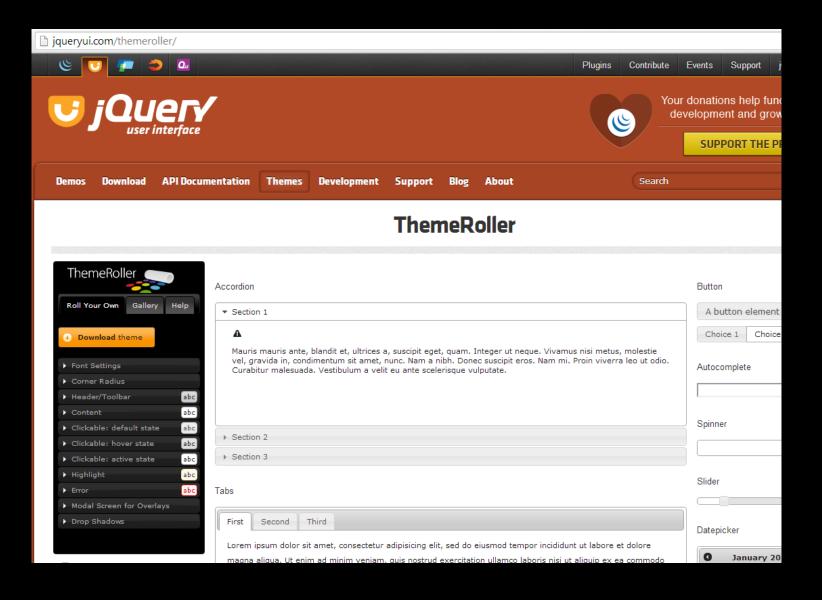
...with a generated one



/jspui/static/css/jquery-ui-1.10.3.custom/redmond/jquery-ui-1.10.3.custom.css /jspui/static/css/jquery-ui-1.10.3.custom/redmond/images/*

http://jqueryui.com/themeroller/ - the generator form & free gallery









Change the look & feel

...done!

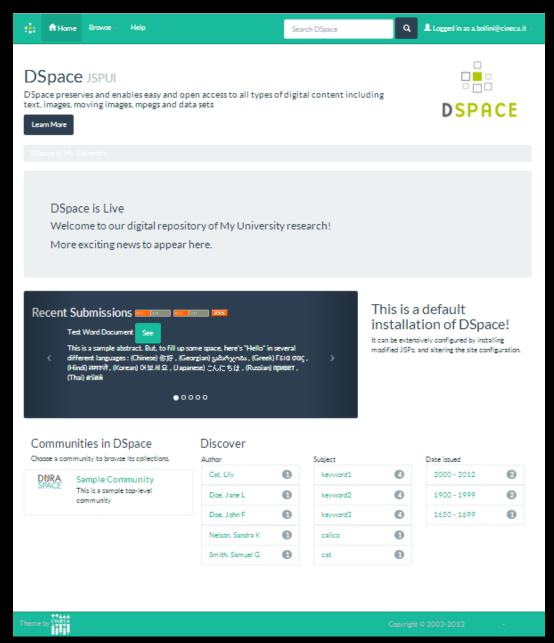
You only need to re-package your JSPUI webapp and deploy it!

mvn package

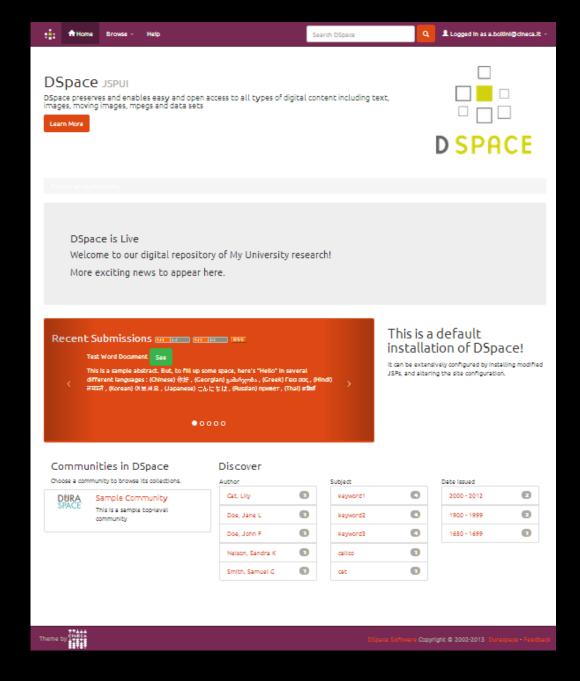


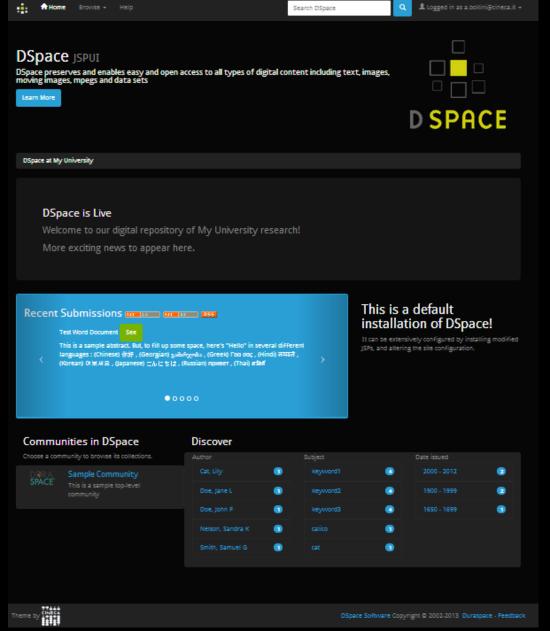
Some examples









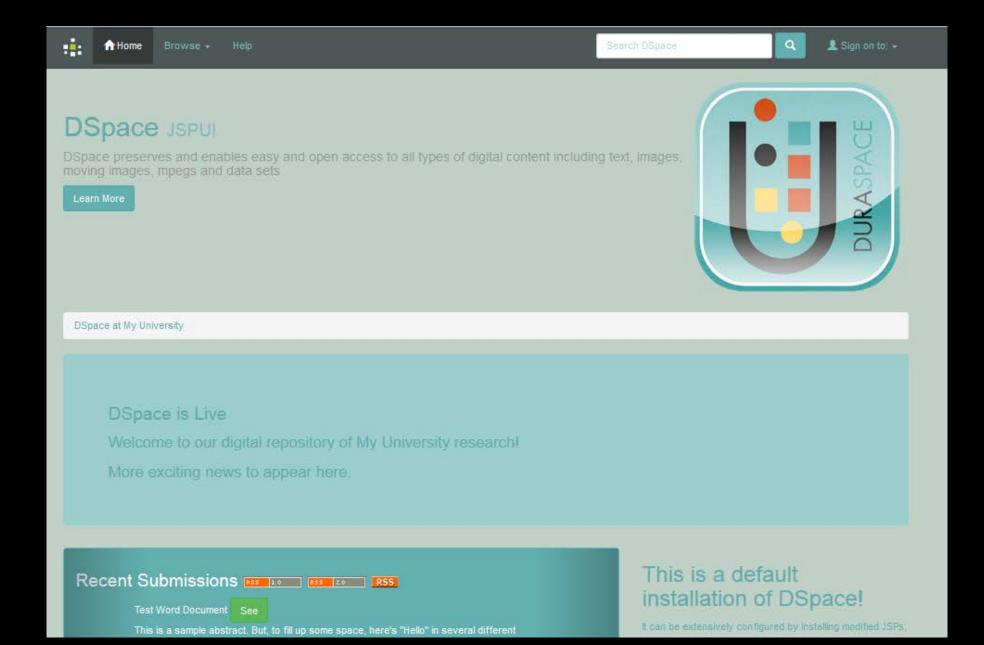




Lavish DuraSpace logo









How does it work? much like the old versions

- You can think the whole page as a big table of 12 columns...
 ...but it is tableless! (all content in HTML <div> elements)
- You have precise positioning (fix «column» size)
 ...but it is fluid (better, it is responsive, mobile friendly)
- It uses the custom tags dspace:layout and dspace:sidebar ...but the layout tag now knows about the sidebar tag early*.

^{*} You can do the math about how many columns are in your central panel and you can also put the sidebar on the left

ayout structure

<style>.jsp

ayout/<skin>/header-

NavBar – injected by the content jsp using the navbar attribute (layout/<skin>/navbar-<navbar>.jsp)

Branding content – provided by the layout/<skin>/header-<style>.jsp file

LocationBar – injected by the content jsp using the locbar attribute (layout/location-bar.jsp)

Sidebar content Injected by the specifc jsp

layout/<skin>/footer-<style>.jsp

Footer content (layout/<skin>/footer-<style>.jsp)



Four key elements

- Skin (undocumented feature ☺)
 - Configured in the dspace.cfg allow to use layout files from the subdirectory <skin> of
 - dspace-jspui/src/main/webapp/layout or
 - dspace/modules/jspui/src/main/webapp/layout
- Style
 - Used in the dspace:layout tag to define which style apply to the current content, current used styles are:
 - Default
 - Submission (not yet an appropriate name... backend could be a better name)
- NavBar
 - Used in the dspace:layout tag to define which navigation menu include
- LocationBar
 - Used in the dspace:layout tag to define or turn off the breadcrumbs



Twitter Bootstrap

- Grid system
 - Breaking point: xs (<768px); sm (≥768px); md (≥992px); lg (≥1200px)
- Responsive utilities
 - hide / visible / pull / push / reset / clearfix for specific device (xs, sm, md, lg)
- UI Components CSS + JS:
 - NavBar, Menu, Carousel, List media item, panel, badge, etc.



Bootstrap: the grid system



on small and extra small devices

.col-md-3 .col-md-5 .col-md-4



Bootstrap: responsive system

.col-md-8 .col-md-4

+ push / pull

.col-md-4 .col-md-pull-8

.col-md-8 .col-md-push-4

on small and extra small devices

.col-md-8 .col-md-push-4

.col-md-4 .col-md-pull-8

You can also play with offset, visible and hidden classes.

See http://getbootstrap.com/css



JQuery UI is actually used for...

Autocomplete widget

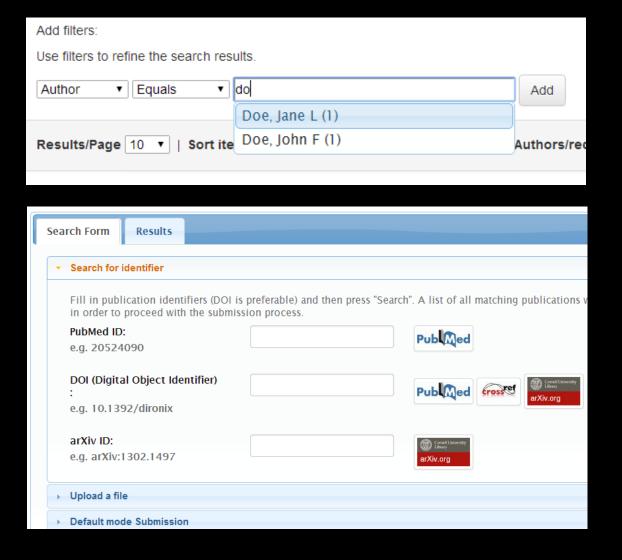
- Search filter
- Submission, authority controlled metadata

Tabs / Accordion

• Submission lookup (see later)

Progress bar

• File upload





Guidelines & design decision

- The current implementation is not perfect but it is much better than the previous one.
 - We expect wide adoption and lot of improvements and fix, specially for mobile device, in the next versions
 - At Cineca we are going to install DSpace 4 with this UI for over 60 universities and research centres in 2014/2015
- Rely only on standard bootstrap CSS classes
- Focus on middle size desktop screen col-md-* (more work to do for mobile devices)
- Uniform use of metaphors and navigation patterns



Common UI experience patterns: examples

- In a wizard
 - The next button goes on the right
 - The previous button goes on the left
- When a link makes changes it is always rendered as a button
- The state classes are used as follows:
 - Primary (blue): the expected button(s) to be used in a form
 - Success (green): add/update content, «save» buttons. Success acknowledgment
 - Danger (red): remove/delete content, «remove» buttons. Information that you MUST read before going ahead
 - Warning (yellow): change that can be reverted with some work, information to understand before going ahead
 - Info (blue): access to additional information



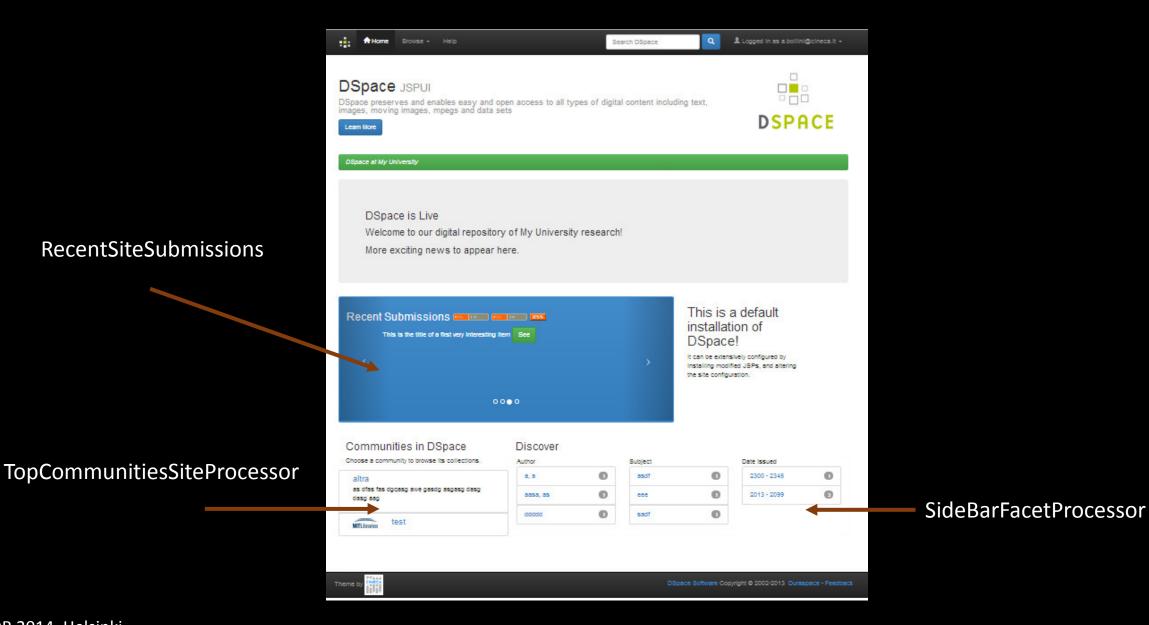
JSPUI Extensions

- The use of a CSS Framework with a solid grid system can facilitate the implementation of an extension mechanism "build by blocks"
- DSpace already has a basic support for that on the controller side.
 The main "pages": home, community, collection and item all support injection of logic via "processor"
- The view fragments actually need to be included "manually" editing the main jsp but... nobody stops us to dream about UI to configure the content order and positioning



age

dspace.cfg: plugin.sequence.org.dspace.plugin.SiteHomeProcessor



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Does Bootstrap matter for XMLUI?

Yes, recent news say that also XMLUI developers are looking to bootstrap as CSS framework to support new themes

MIRAGE2

"This theme for the DSpace "Manakin" XML User Interface was built on modern web technologies including Bootstrap, SASS/Compass and Grunt. Mirage 2 offers a fresh look and feel together with an entire range of optimizations behind the scenes. The public face of the theme is available for evaluation in a dedicated preview repository. The associated source code will be released after the release of DSpace 4."

http://duraspace.org/mirage-2-fresh-look-and-feel-dspace-4



Search User experience improvements

JSPUI & XMLUI



Search User experience improvements JSPUI & XMLUI

- ICU accent folder
 - Solve transliteration problem for UTF-8 characters so that you can for example search for Martinez, entering martinez or martinez to get the same results
 - It is enabled out-of-box, just be sure to re-index your content after the upgrade

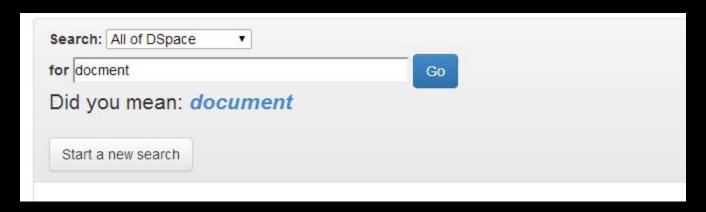
Martinez Martinez

Juan Martinez



Search User experience improvements JSPUI & XMLUI

Spellchecker SOLR component: "Did you mean?"
 Help the user when the input query has a match using a n-gram index but no match with the "standard" index



It is almost (see DS-1899) enabled out-of-box in a fresh DSpace 4 installation.

```
\equiv
```

Pay attention: you have multiple configurations!



Search: user mishaps... tips

- Hei my publication doesn't appear in the browse by title list or in search results!
 - Is your publication published in the repository? Publications under workflow are not searchable
 - Is your publication publically accessible? Discoverable and without embargoes?
 - Is your publication just approved for entry in archive? Give the system the time to index it! By default new content becomes available for search and browse within 10 seconds



Search User mishaps...

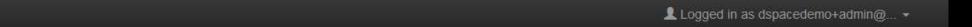
Still having issues?

Ok, you could be right, the indexing procedure in DSpace is separate from the main process that manages item editing and workflow. There is a little chance that SOLR was in trouble when you made the changes and was not able to index.

Check the dspace.log files, if this is the case, restart the SOLR webapp and reindex your content



Enhanced Submission





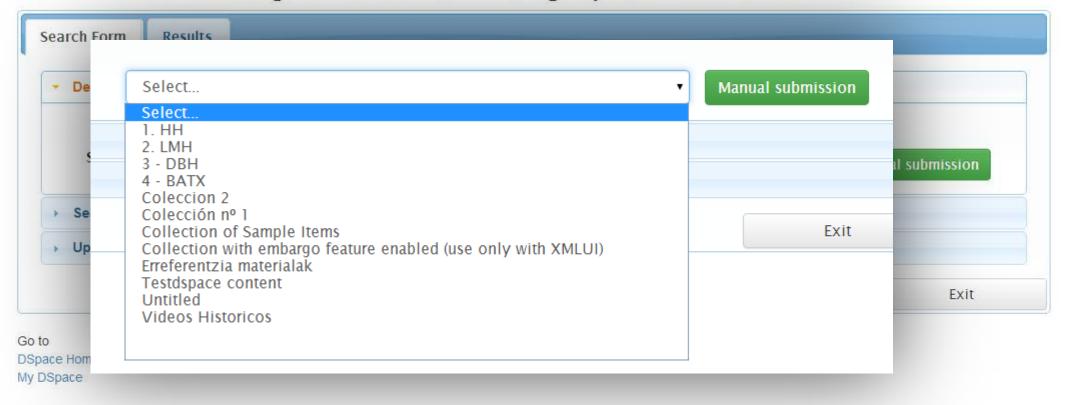
Theme by CINECA

My DSpace

#

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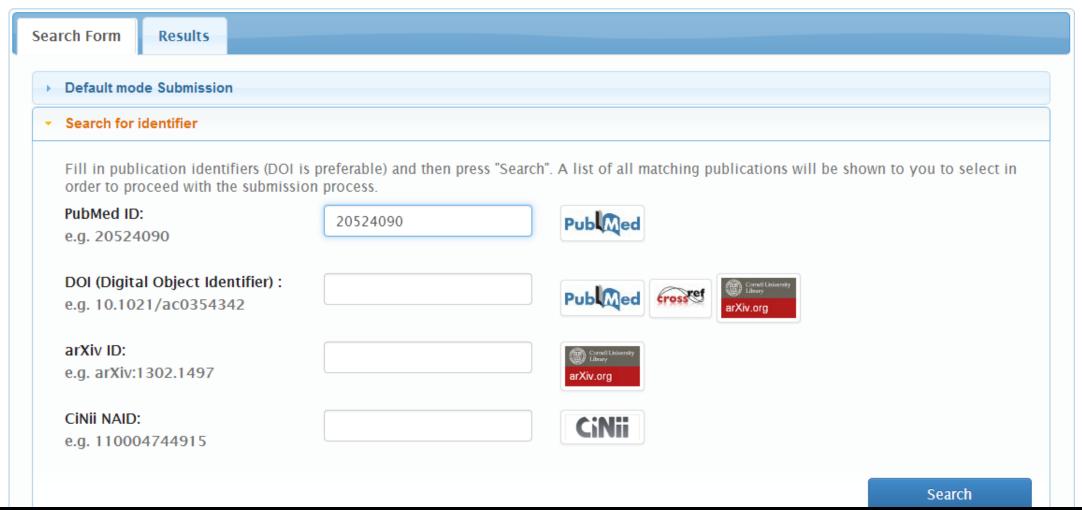


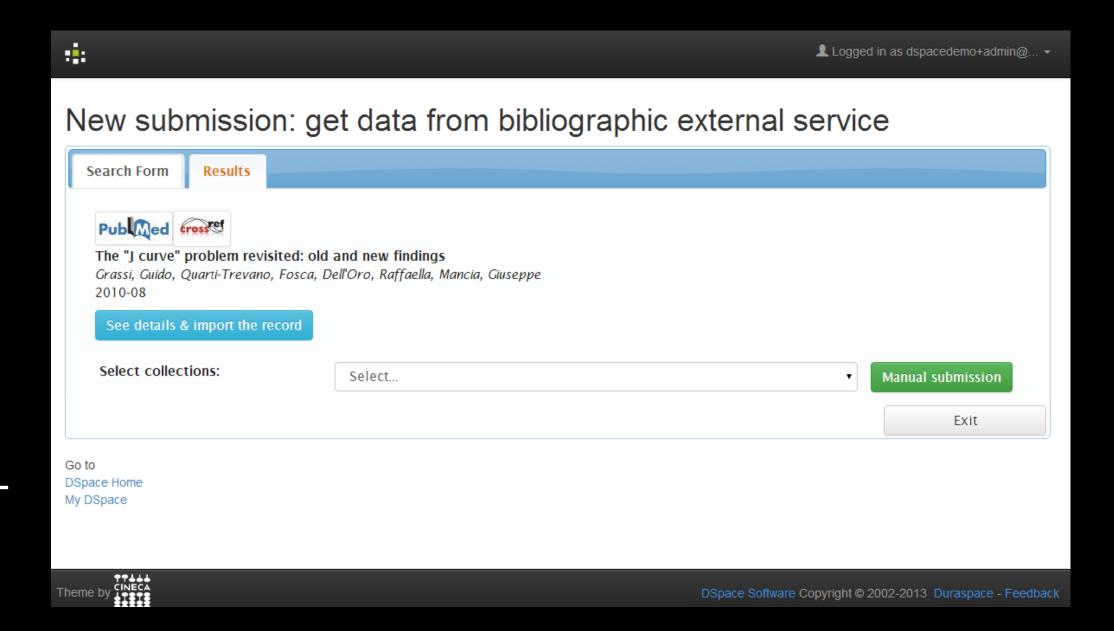


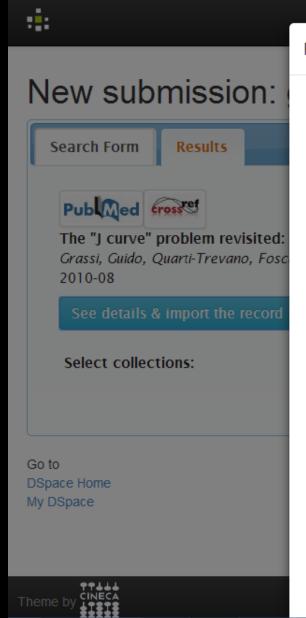


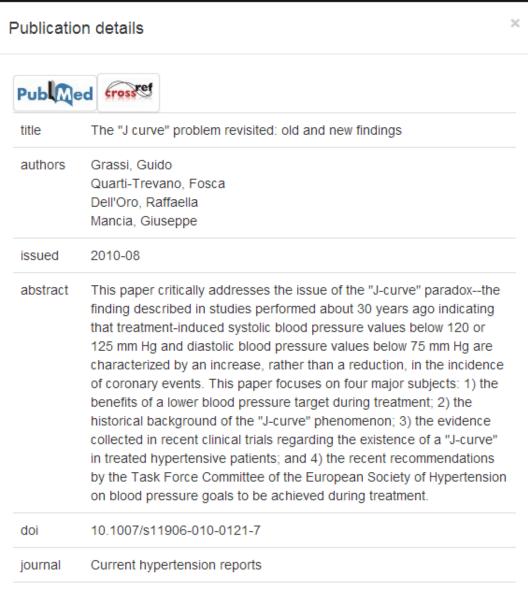
DSpace Software Copyright © 2002-2013 Duraspace - Feedback

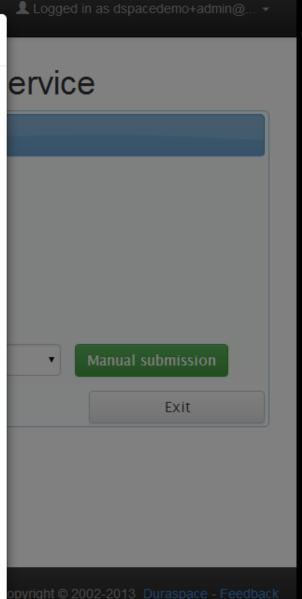


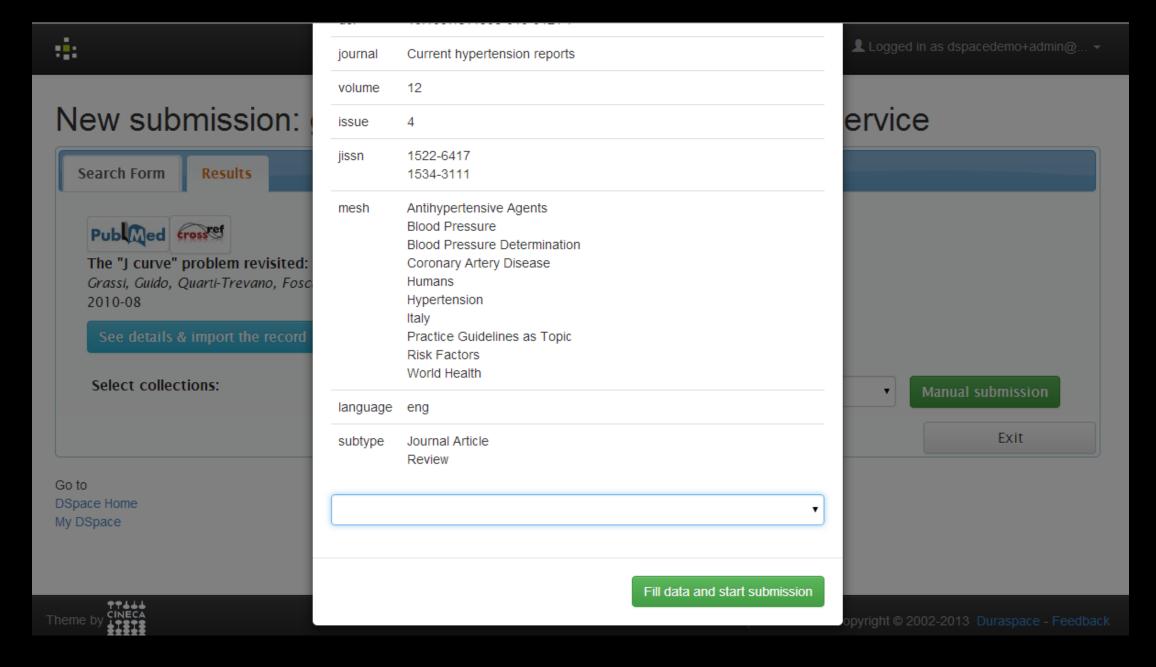


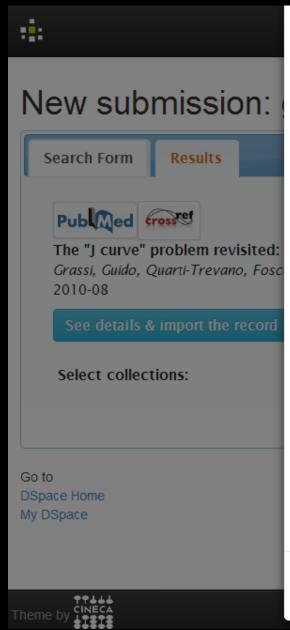










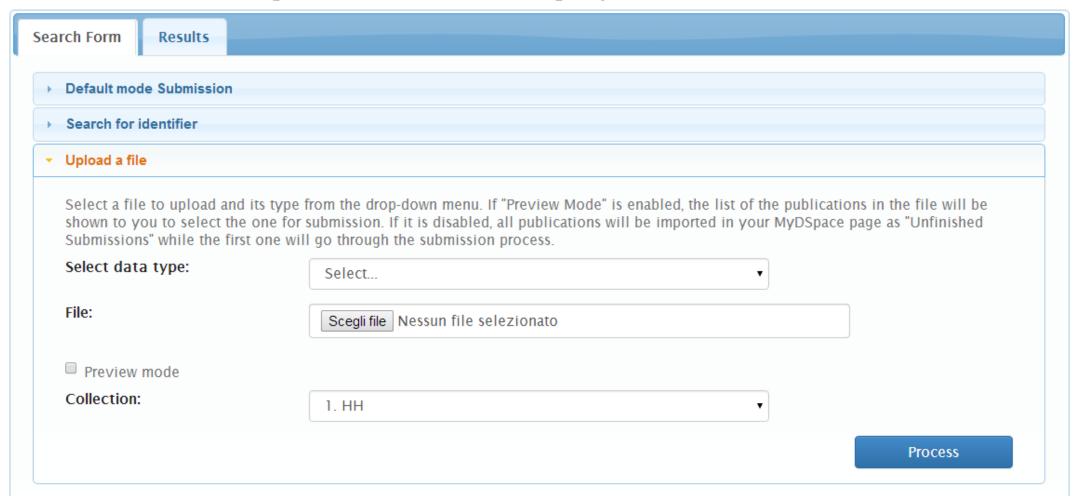


| jissn 1522-6417 1534-3111 mesh Antihypertensive Agents Blood Pressure Blood Pressure Determination Coronary Artery Disease Humans 1. HH 2. LMH 3 - DBH 4 - BATX Coleccion 2 Colección nº 1 Collection of Sample Items Collection with embargo feature enabled (use only with XMLUI) Erreferentzia materialak Testdspace content Untitled Videos Historicos | journal | Current hypertension reports 12 |
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| mesh Antihypertensive Agents Blood Pressure Blood Pressure Determination Coronary Artery Disease Humans 1. HH 2. LMH 3 - DBH 4 - BATX Coleccion 2 Colección nº 1 Collection of Sample Items Collection with embargo feature enabled (use only with XMLUI) Erreferentzia materialak Testdspace content Untitled | issue | 4 |
| Blood Pressure Blood Pressure Determination Coronary Artery Disease Humans 1. HH 2. LMH 3 - DBH 4 - BATX Coleccion 2 Colección nº 1 Collection of Sample Items Collection with embargo feature enabled (use only with XMLUI) Erreferentzia materialak Testdspace content Untitled | jissn | |
| Collection of Sample Items Collection with embargo feature enabled (use only with XMLUI) Erreferentzia materialak Testdspace content Untitled | 1. HH
2. LMH
3 - DBH
4 - BATX
Coleccio | Blood Pressure Blood Pressure Determination Coronary Artery Disease Humans |
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Untitled | n of Sample Items
n with embargo feature enabled (use only with XMLUI)
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ace content |

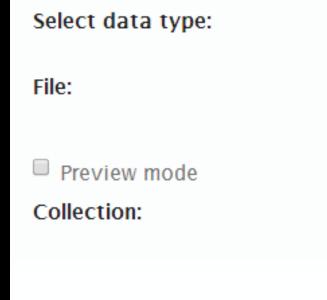
Logged in as dspacedemo+admin@... ▼ ervice Exit

Fill data and start submission



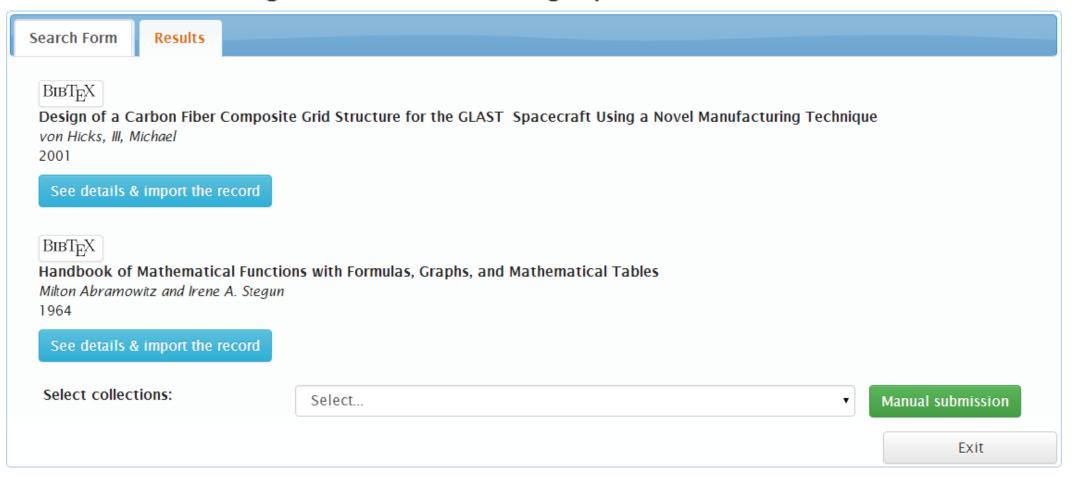


Select a file to upload and its type from the drop-down menu. If "Preview Mode" is enabled, the list of the shown to you to select the one for submission. If it is disabled, all publications will be imported in your M Submissions" while the first one will go through the submission process.











StartSubmissionLookup step

 Available only for JSPUI but doesn't break the XMLUI. Must be enabled in item-submission.xml

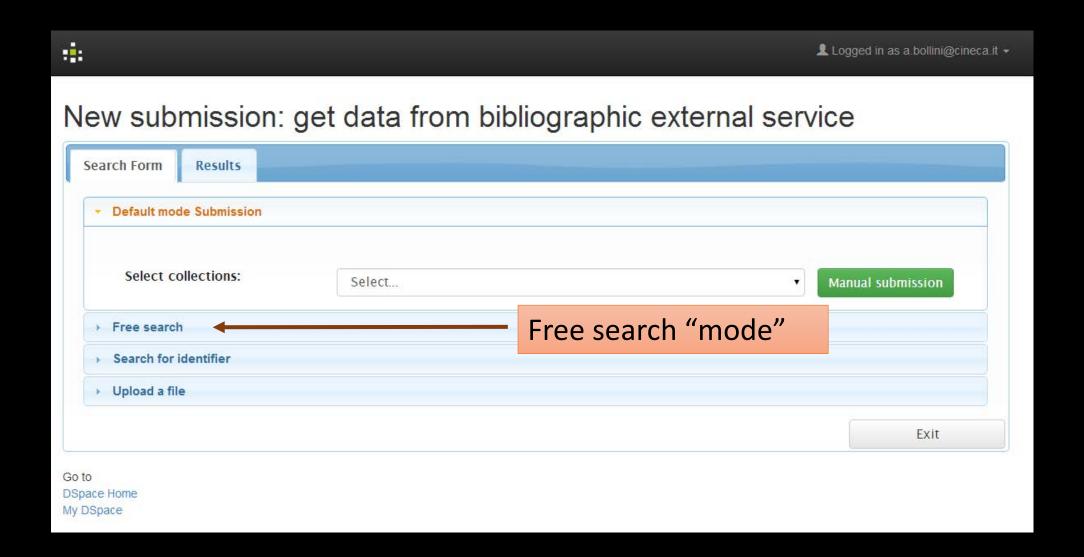
```
<step id="collection">
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```

- Built on top of BTE can be further configured and extended via the config/spring/api/bte.xml
 - New providers
 - Tuning metadata mapping
 - Enabling search functionalities

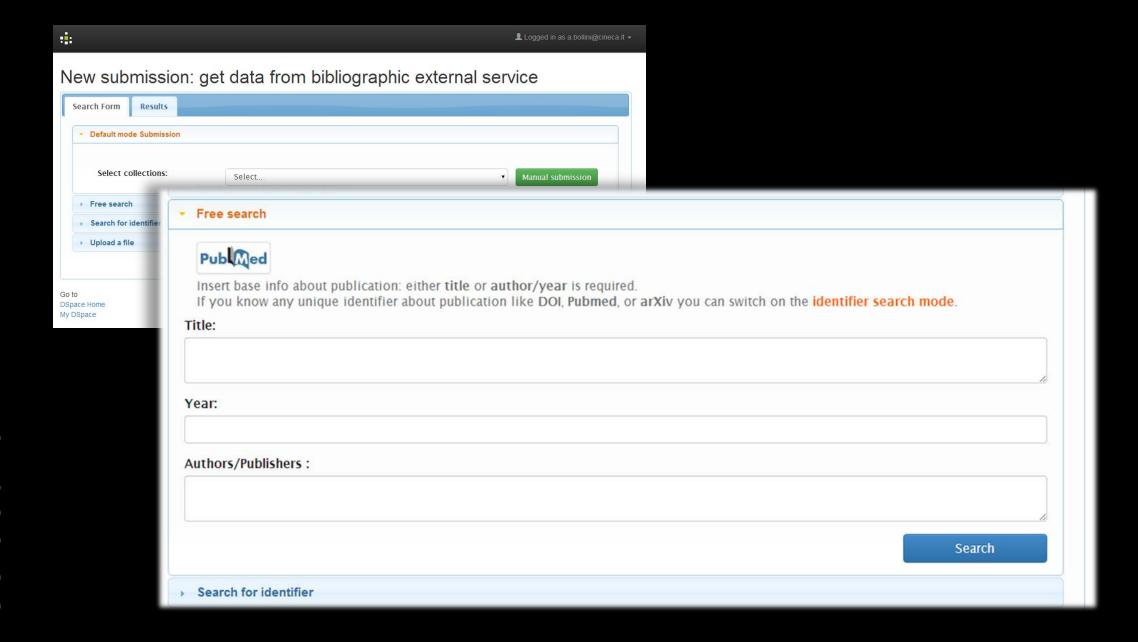


Enabling the free search

The system allows a further "submission mode": free search across Bibliographic Database. The target provider must supply API to query its internal database with free text or optionally title, authors and date indexes.









Free search mode

- It is disabled by default
 - It is supported by all the providers supplied out-of-box



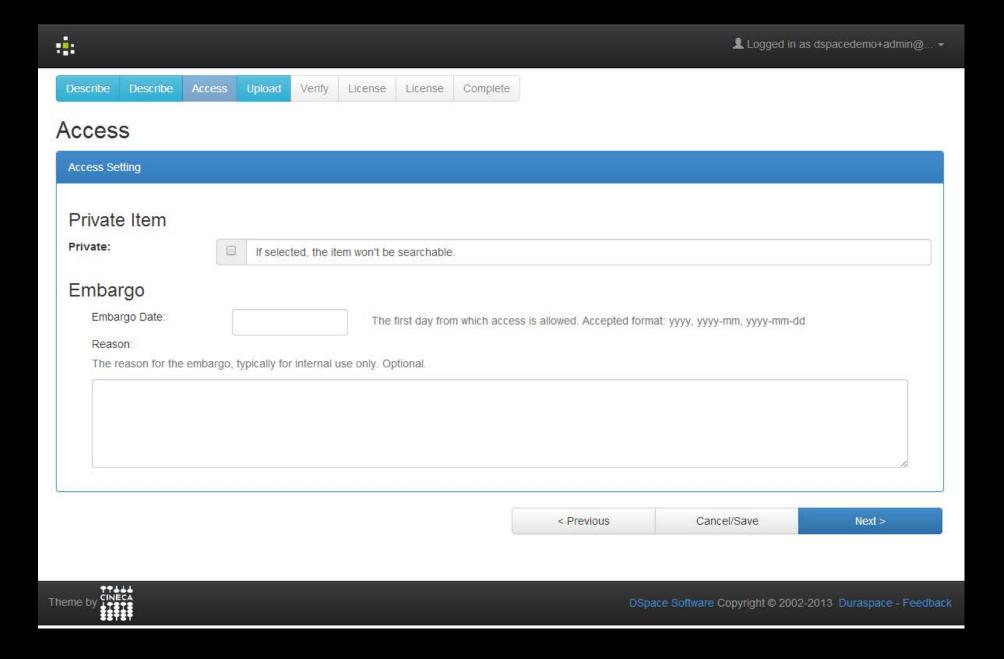
Current implementations are sub-optimal

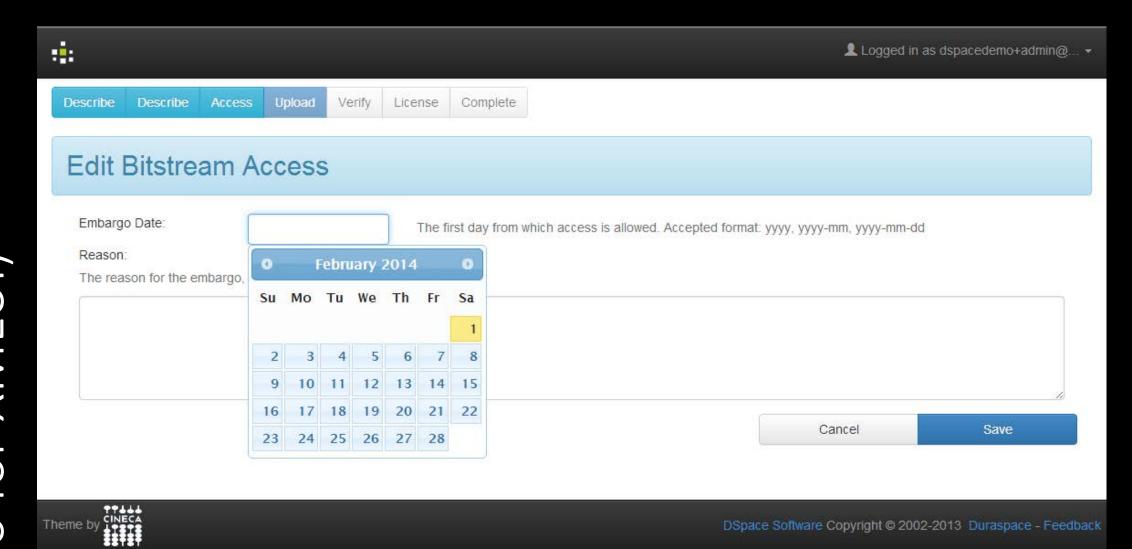


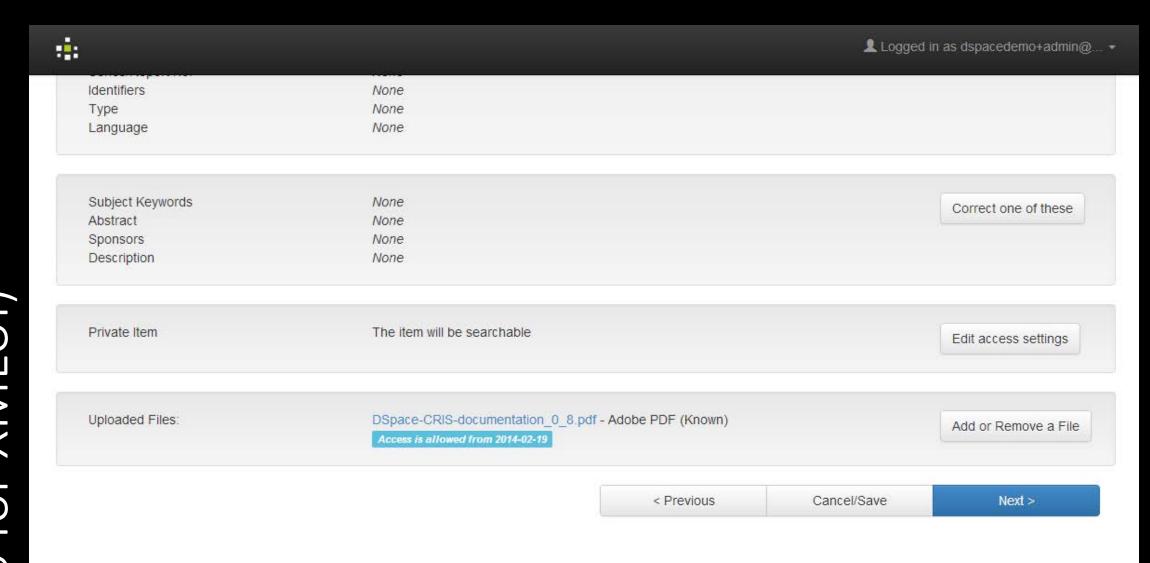
Embargo improvements



private ILUI) mbargo









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Upload step improvements





Submit: Upload a File 3

Please enter the name of the file on your local hard drive corresponding to your item. If you click "Browse...", a new window will appear in which you can locate and select the file on your local hard drive.

Please also note that the DSpace system is able to preserve the content of certain types of files better than other types. Information about file types and levels of support for each are available.

| Document F | ile: |
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|------------|------|

| <u> </u> | عامہ | rt. | a fi | |
|----------|------|-----|--------------|--|
| | | | ca 11 | |

Please give a brief description of the contents of this file, for example "Main article", or "Experiment data readings".

File Description:

| < Previous | Cancel/Save | Skip file upload > | Next > |
|------------|-------------|--------------------|--------|

SHERPA/RoMEO Publisher Policy Database



All SHERPA/RoMEO information is correct to the best of our knowledge but should not be relied upon for legal advice. SHERPA cannot be held responsible for the re-use of RoMEO data, or for alternative interpretations

which are derived from this information.

The SHERPA/RoMEO Database provide the following data for the journal that you have entered.

Journal: PLoS ONE (ISSN: 1932-6203)

Publisher: Public Library of Science

Author's Pre-prints:



Author can archive

pre-print (ie pre-refereeing)

Author's Post-prints: Author can archive



post-print (ie final draft post-refereeing)

Publisher's Version: Author can archive



publisher's version/PDF

General conditions:

- Creative Commons Attribution Licence
- Eligible UK authors may deposit in OpenDepot
- · Publisher's version/PDF may be used
- · All titles are open access journals

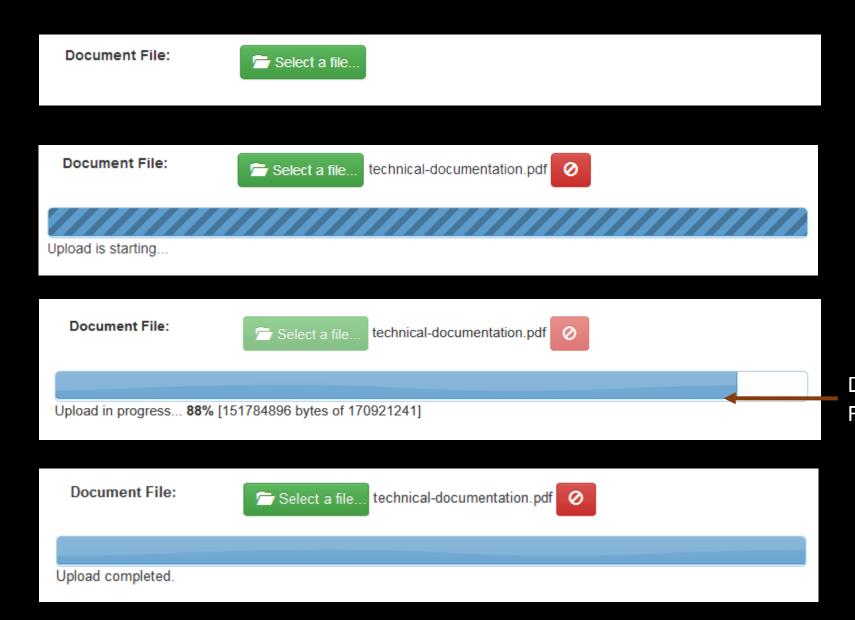
Paid open access:

Copyright:



Configure the Sherpa/RoMEO integration

- It is enabled by default but can be disabled via dspace.cfg, i.e. webui.submission.sherparomeo-policy-enabled = false
- It is configurable
 - [dspace-dir]/config/spring/sherpa.xml
 - Decide which metadata use for the Sherpa/RoMEO lookup (default dc.identifier.issn)
 - Switch to a different "ISSN Extractor" Strategy. For example you could look in the authority field of a metadata, useful in conjunction with SHERPARoMEOJournalTitle
 - [dspace-dir]/config/dspace.cfg
 - Enable the use of a specific apikey, anonymous user are limited to 500 query/day sherpa.romeo.apikey = YOUR-API-KEY

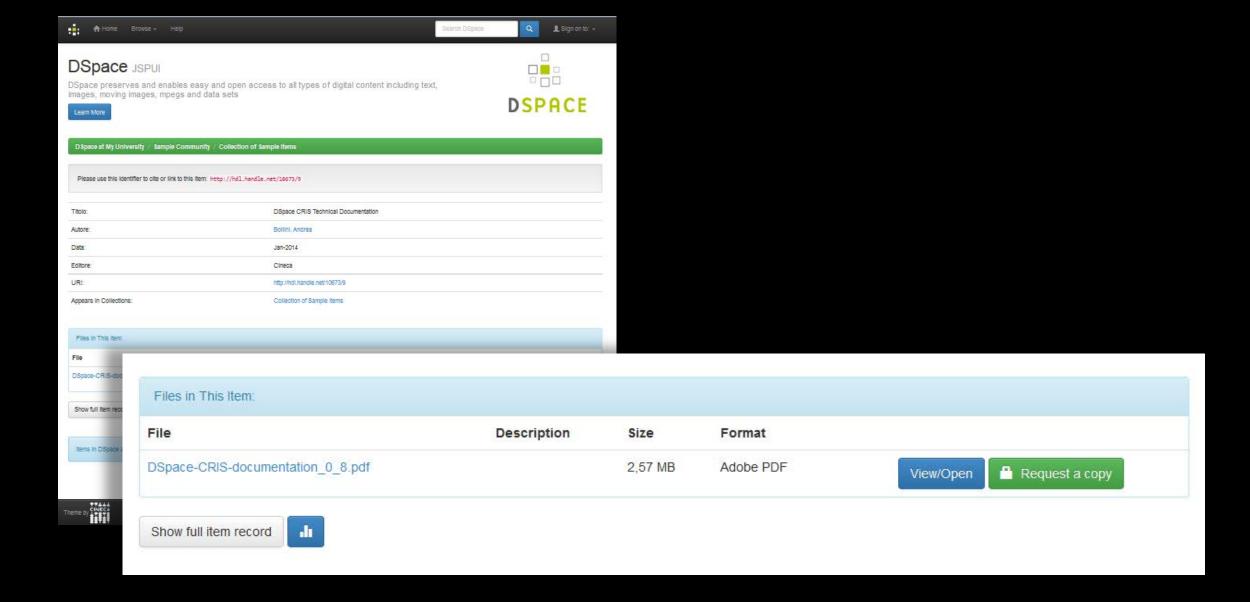


DS-1897 JavaScript bug ⁽³⁾ Fix available → 4.1



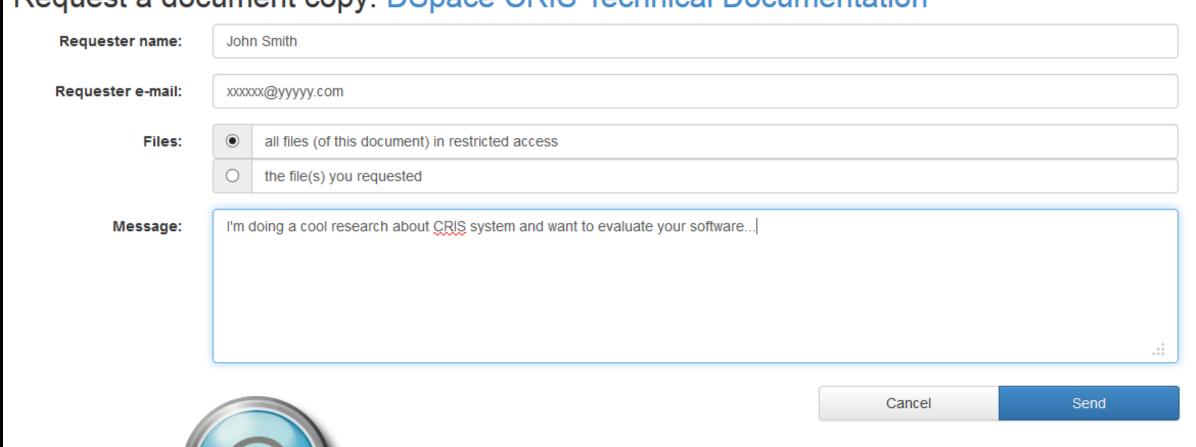
Request a copy JSPUI & XMLUI







Request a document copy: DSpace CRIS Technical Documentation





→ Submitter / Author





token=c3c604015798ff5de16ea626c3f93b71

Subject: Request a document copy

IF YOU ARE AN AUTHOR OF THE DOCUMENT, DSpace CRIS Technical Documentation, use one of the buttons below to answer the request for a copy made by the user, John Smith.

This repository will propose an appropriate model reply, which you may edit.

Don't send a copy

Send a copy



Accept the request

This is the email that will be sent to the requester along with the file(s).

Subject:

Request copy of document

Message:

Dear John Smith,

In response to your request I have the pleasure to send you in attachment a copy of the file(s) concerning the document: "DSpace CRIS Technical Documentation" (http://hdl.handle.net/10673/9), of which I am author (or co-author).

Best regards,

Demo Administrator <bollini80@gmail.com>



Back

Send



| Your answer was sent succ | essfully to the e-mail indicated by the requester. Thank you. |
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| | to reconsider the access restrictions on the document (to avoid having to respond to these requests), if there is no reason to keep it serting your name and e-mail (for authentication), click the button "Change to Open Access". |
| | |
| Name: | |
| E-mail: | |
| | Change to Open Access |
| | |

→ Repository administrators



Request a copy configuration

- Who can made the request? dspace.cfg: request.item.type
 - Anonymous users all
 - Logged-in users logged
 - Nobody (disable the feature) empty
- Who receive the request a copy emails?
 [dspace.dir]/config/spring/api/requestitem.xml
 - Submitter
 - Corresponding author as noted in metadata



A personal comparison of JSPUI vs XMLUI

The following slides reflect the opinion of the presenter, but it is not an official statement from DuraSpace nor the DSpace Committers Group.



JSP UI

XML UI

PROS:

Lightweight easy-to-learn standard-based technology

First DSpace UI, widely adopted

Skinnable

Mobile friendly

CONS:

Layout hard to customize in depth

Content creation & view logic mixed-up

PROS:

Clear separation between content and visualization XML / XSLT

Come by default since DSpace 1.6+

Possibility to use themes also for single community/collection (some themes freely available)

Mobile themes available

CONS:

Complex technology

Strongly coupled with the Apache Cocoon framework (almost stale)

Hardware consumer

Need to be cached for reasonable performance



JSP UI vs XML UI: End user functionalities

- Enhanced submission
 - Bibliographic database integration
 - Sherpa/RoMEO
 - AJAX progress bar
- DSpace-CRIS module*
 - Researcher/OrgUnit/Project profiles
 - Management of authority lists (journals, etc.)
 - Disambiguation for researchers
 - Collaboration Network analysis
 - •
- un-official module supported by Cineca http://cineca.github.io/dspace-cris

- Advanced workflow
 - Customizable through XML
- Discovery extra features
 - Highlighting
 - Related items
- Statistics extra features
 - Workflow events
 - Search usage



Choose a UI based on your local preferences and expertise

"Both the JSPUI and XMLUI are supported and in use by members of our Committers Team. Both UI platforms have their advantages and disadvantages. So, we recommend choosing a UI based on your local preferences and expertise. At this point in time, there are no plans to deprecate either UI as they are both in active use throughout our community. If UI deprecation was ever being considered, we would consult with the DSpace Community before making any decisions."

-- The DSpace Committers Group

Thank you!



Susanna Mornati

IT Solutions for Institutional Research Dept., Head

s.mornati@cineca.it

for Cineca's DSpace Team (Andrea Bollini & Co.)



Link to the Duraspace Webinar with more details and Q/A:

http://bit.ly/dspace4-roundup