LINDAT / CLARIN
DSpace Repository
How to set up a CLARIN B-centre using a modified DSpace
Jozef Mišutka
Amir Kamran

https://github.com/ufal/lindat-dspace
In this tutorial

• An introduction to DSpace

• Our modifications to DSpace to make it a better CLARIN repository.

• Demo from scratch with installation and configuration.

• How to setup a CLARIN B center using LINDAT platform
Why DSpace?

- DSpace is a platform that allows you to capture items in any format – in text, video, audio, and data. It distributes it over the web. It indexes your work, so users can search and retrieve your items. It preserves your digital work over the long term.

- Supports Metadata capturing that makes it harvestable and easy to find and cite.

- Provides customizable workflows for submission and curation tasks.

- Open Source, Active Community 👍
Why DSpace?

In short

DSpace has got the ingredients to support the basic architecture for the repository system required by a CLARIN B-Center.
A submitter is the owner of a resource, who wants to distribute his/her work over the internet.

DSpace provides easy-to-use web based interface that makes deposition of files and metadata simple for submitters.

Handles any format from simple text documents to datasets and digital video.
Submission forms are customizable and driven by metadata registries.

Data files, also called bitstreams, are organized together with the related metadata into packaged bundles called items.

An Item is the basic archival entity. The exposed metadata of an item is indexed for browsing and searching.
DSpace Architecture

Logically related items can be further organized into Collections and Communities.

The higher level of organization hierarchy makes management easy. Separate editor/curator workflows can be configured.

Specialized editors can be assigned to different collections to ensure high quality of submissions.
The end user interface supports browsing and searching the archives.

Once an item is located, the metadata and associated files are displayed.

The user can download the files by agreeing to the terms and conditions associated with the resource license (if any selected by the submitter).
How we adopted DSpace to meet our requirements

- Enhanced Submission User Interface
- Powerful Control Panel
- Sleek User Interface Citation Mechanism
- Advance Curation
- Authentication & Authorization Infrastructure
- Better Statistics
- Advance Licensing Framework
Easy to Use

• Dspace has a modular architecture and **clear separation of view** from the business logic (MVC).

• We have created our **own theme** based on the state-of-the-art **bootstrap** css/javascript library.

Attractive  
Practical  
Responsive and Mobile Friendly
Easy to Access
Authentication and Authorization Infrastructure (AAI)

• Users from around the world can login through federations.

• and inter-federations such as SPF, eduGAIN, CLARIN “homeless” IdP

• Local authentication mechanism is also available.
Easy to Access
Authentication and Authorization Infrastructure (AAI)

- We rely on the Shibboleth system for AAI that is formed by Identity Providers (IdPs) and Service Providers (SPs), which then form national federations and optionally creating inter-federations.

- In order to get external users using Shibboleth, you have to get appropriate server, install shibboleth SP and create metadata of your SP in conformance with your national federation guidelines.

- We have solved a number of issues related to shibboleth configurations and attributes mapping.

The AAI user interface is built using DiscoJuice (a very flexible User Interface library for implementing an IdP Discovery Service.)
Data Protection
Authentication and Authorization Infrastructure (AAI)

- We have implemented **GÉANT Data Protection Code of Conduct** (DP-CoC) that requires proclamation from the SP to not misuse released attributes. The Data protection Code of Conduct describes an approach to meet the requirements of the EU Data Protection Directive in federated identity management.

- At **first sign in**, we present to the End User a **Privacy Statement** about released information from the IdP.
To detect problems, we have implemented an **advanced log parsing** so that we could easily **inspect** the sessions and **identify** e.g., when a user selected an IdP but never returned back to SP or the difference between attributes sent to the shibboleth SP application and the attributes propagated to our service.

There can be users who will never return back after selecting an IdP because the IdP will not recognize your SP mostly because it does not consume appropriate feed. Your SP should be able to hide them from selection. Because of this, we have developed a **QA tool for SPs**, which processes IdPs from a given list, tries to get to the login screen and return the problematic IdPs.

The above two screen shots are part of the advance control panel features that we developed.
Easy to Control Quality
Submission Workflow

- The submission workflow is basically the quality control and editing actions that happened after the user submits an item.

- The submission process steps, metadata and file upload, are not part of the submission workflow.

- When a user starts submitting an item it selects a collection and based on that a workflow is selected on completion of submission.
Easy to Control Quality
Submission Workflow

- Submission workflow consists of configurable **steps**, **actions** and **roles**.

- On collection edit screen you can **assign** different **user groups** (roles) to different steps.

- A reviewer can take different actions like **accept** or **reject** an item.

- The workflow is defined using **xml documents** (workflow.xml, workflow-actions.xml, workflow-actions-xmliui.xml)

The Collection edit screen where roles can be assigned to steps.
Easy to Control Quality
Submission Workflow

Workflow tasks
These tasks are items that are awaiting approval before they are added to the repository. There are two task queues, one for tasks which you have chosen to accept and another for tasks which have not been taken by anyone yet.

Tasks you own

<table>
<thead>
<tr>
<th>Task</th>
<th>Item</th>
<th>Collection</th>
<th>Submitter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No tasks are assigned to you</td>
</tr>
</tbody>
</table>

Tasks in the pool

<table>
<thead>
<tr>
<th>Task</th>
<th>Item</th>
<th>Collection</th>
<th>Submitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledging editor’s attention</td>
<td>Ignore this item (this is a test)</td>
<td>LINDAT/CLARIN Data &amp; Tools</td>
<td>email: Amir Kanran</td>
</tr>
</tbody>
</table>

- After the item is submitted it is available to the users of assigned group as a task.
- A user can take an item from the pool to continue the workflow.

- We have added **more actions** that a reviewer/editor can perform, like curation, or move an item to a different collection etc.
Monitor Progress
Submission Workflow

• We have added a section in control panel to **monitor the progress of unfinished** and workflow items.

• We can track, which workflow step currently an item is in, or which user is currently the item is assigned to.

<table>
<thead>
<tr>
<th>WORKFLOW ID</th>
<th>ITEM ID</th>
<th>COLLECTION</th>
<th>CURRENT STATE</th>
<th>ASSIGNED TO</th>
<th>LAST MODIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5081</td>
<td>154</td>
<td>3</td>
<td></td>
<td></td>
<td>2015-05-27 14:12:41.261</td>
</tr>
<tr>
<td>217</td>
<td>183</td>
<td>5</td>
<td></td>
<td></td>
<td>2015-05-27 09:01:32.112</td>
</tr>
<tr>
<td>2091</td>
<td>2019</td>
<td>1</td>
<td></td>
<td></td>
<td>2016-05-10 22:54:03.465</td>
</tr>
</tbody>
</table>

| WORKSPACE ITEMS |

Following items are currently in workspace mode i.e. in the process of submission. You can view the details of the item by clicking the itemID.

<table>
<thead>
<tr>
<th>WORKSPACE ID</th>
<th>ITEM ID</th>
<th>STAGE</th>
<th>SUBMITTER EMAIL</th>
<th>REJECTED</th>
<th>LAST MODIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5081</td>
<td>154</td>
<td>3</td>
<td><a href="mailto:amirkarim@msn.com">amirkarim@msn.com</a>,<a href="mailto:jamran@ufal.mff.cuni.cz">jamran@ufal.mff.cuni.cz</a></td>
<td>Not Submitted</td>
<td>2015-05-27 14:12:41.261</td>
</tr>
<tr>
<td>217</td>
<td>183</td>
<td>5</td>
<td><a href="mailto:ko_ok@centrum.cz">ko_ok@centrum.cz</a></td>
<td>Not Submitted</td>
<td>2015-05-27 09:01:32.112</td>
</tr>
<tr>
<td>2003</td>
<td>2001</td>
<td>1</td>
<td><a href="mailto:jmsuktis@gmail.com">jmsuktis@gmail.com</a></td>
<td>Not Submitted</td>
<td>2016-05-26 22:06:10.742</td>
</tr>
<tr>
<td>2091</td>
<td>2019</td>
<td>1</td>
<td><a href="mailto:jorg.siedell@gmail.com">jorg.siedell@gmail.com</a></td>
<td>Not Submitted</td>
<td>2016-05-10 22:54:03.465</td>
</tr>
<tr>
<td>2078</td>
<td>2007</td>
<td>5</td>
<td><a href="mailto:ko_ok@centrum.cz">ko_ok@centrum.cz</a></td>
<td>Rejected</td>
<td>2015-05-15 14:04:56.845</td>
</tr>
<tr>
<td>2070</td>
<td>2099</td>
<td>5</td>
<td><a href="mailto:gdespoerte@lasunio.org">gdespoerte@lasunio.org</a></td>
<td>Rejected</td>
<td>2015-05-12 15:02:24.642</td>
</tr>
</tbody>
</table>
The DSpace submission process consists of a series of "steps", where each "step" corresponds to one or more UI pages.

We have carefully designed the steps to make sure that a submitter provides as much metadata as possible.
OpenAIRE Integration
Submission Process

- OpenAIRE is a platform for accessing open repositories with research outputs and evaluation.
Validation and Help
Submission Process

Item submission
- Basic Info
- Who's involved
- Describe
- Upload
- License
- Note
- Review
- Complete

Resource details

Description
* Please give us a description

Enter a description of the submitted data.

Language
* Please choose a language for the resource.

Select the language of the main content of the item. Multiple languages are possible. Start typing to autocomplete form that will appear if applicable.
File Upload
Submission Process

Drag and Drop Functionality

Support for large files

Upload File(s)

File
Choose File

Please enter the full path of the file on your computer corresponding to your item. If the window will allow you to select the file from your computer.

When uploading language resources, please try to use one of the recommended formats:

Standards

Uploading files larger than requires special handling. Please contact Help Desk about the understanding.

File Upload

Please fill in the description(s) and hit the "Start Upload" button. Then wait till the file(s) are uploaded.

Filename: Form_A_Passport_Form.pdf
Type: application/pdf
Describe the file:

Progress: 0 bytes / 0.24 MB

Start Upload

Drop file(s) here.

Please note, that you can select licences in the License step of this submission after you upload at least one file.
Licensing
Submission Process

• The **License Step** is one of the most critical one.

• Clear and visible **Distribution License Agreement**, we want to make sure that the use is fully aware of how the deposited resources will be distributed by the repository.

• The user must also select the **Resource License** under which the resources will be distributed. We support major licenses and with our **advance licensing framework**, it is easy to add new licenses with labels and extra metadata.
To make sure that the submitter choose the correct license, we develop a License Selector tool.

A simple question/answer screen will guide the user to decide which license is most appropriate for his/her requirements.

https://github.com/ufal/public-license-selector
Easy to Distribute
Licensing Framework

With our Licensing Framework it is easy to add new licenses.

Licenses have labels PUB (public), RES (restricted), ACA (academic). The labels decides the access mechanism of the licenses resources e.g. for PUB label licenses the user is not required to login.

It is also possible to force the user to sign the license, with options like sign only once or always.

Licenses can be configured to ask users extra information on signing.
Easy to Distribute
Licensing Framework

License Signing Process

Clear visibility of what information we will store

In Control Panel the administrators can view details of signed licenses.
Easy to Find
Searching and Browsing

Easy to Search

Search Listing with clearly visible Licensing, Files and Size information

Search Facets to quickly filter out the search results
Easy to Find

- Harvestable due to simple yet powerful metadata representation
- VLO - CLARIN virtual language observatory
- OLAC - Open Language Archives Community
- Thomson Reuters Data Citation Index
- and others
Easy to Cite

Please use the following text to cite this item or export to a predefined format:

Bejček, Eduard; Hajic'ová, Eva; Hajic', Jan; Jínová, Pavlína; Kettnerová, Václava; Kolárová, Veronika; Mikulová, Marie; Mírovský, Jiří; Nedoluzhko, Anna; Panevová, Jarmla; Poláková, Lucie; Ševčíková, Magda; Štěpánek, Jan and Zikánová, Šárka, 2013, Prague Dependency Treebank 3.0, LINDAT/CLARIN digital library at Institute of Formal and Applied Linguistics, Charles University in Prague, http://hdl.handle.net/11858/00-097C-0000-0023-1AAF-3.

REFBox

https://github.com/ufal/lindat-common
Easy to Integrate

Integrate other services

HamleDT 3.0

Please use the following text to cite this item or export to a predefined format:

Zeman, Daniel; Mareček, David; Mašek, Jan; Popel, Martin; Ramasamy, Loganathan; Rosa, Rudolf; Štěpánek, Jan and Žabokrtský, Zdeněk, 2015, *HamleDT 3.0*, LINDAT/CLARIN digital library at Institute of Formal and Applied Linguistics, Charles University in Prague, [http://hdl.handle.net/11234/1-1508](http://hdl.handle.net/11234/1-1508).

This resource is also integrated in the following services:

- PML-TQ
- KonText

Authors

Zeman, Daniel; Mareček, David; Mašek, Jan; Popel, Martin; Ramasamy, Loganathan; Rosa, Rudolf; Štěpánek, Jan; Žabokrtský, Zdeněk

Project URL

Easy to Retrieve
Item View and Bitstream Access

Czech-English Parallel Corpus 1.0 (CzEng 1.0)

Authors: Bojar, Ondřej; Žabokrtský, Zdeněk; Dušek, Ondřej; Galuščáková, Petra; Majlík, Martin; Mareček, David; Maršík, Jiří; Novák, Michal; Popel, Martin; Tamchyna, Aleš

Project URL: http://ufal.mff.cuni.cz/czeng

Date issued: 2011-12

Size: 206442315 tokens

Language(s): Czech, English

Files in this item

Download all files in item (86.13 MB)

Download All

Visible Citing Information
Clear Licensing Information
Acknowledgement

Ministerstvo školství, mládeže a tělovýchovy České republiky
Project code: MSM 0021620825
Project name: Jazyk jako lidská činnost, její produkt a faktor

Univerzita Karlova v Praze
Project code: P10 – Lingvistika
Project name: Program rozvoje vědních oblastí na Univerzitě Karlově P10 – Lingvistika, modul Osvojování a vývoj jazykové a komunikační kompetence u populace ČR, řešeno od r. 2012

Subject(s)

- youth language
- classroom
- language acquisition corpus
- AKCES

This item is replaced by a newer submission:
http://hdl.handle.net/11858/00-097C-0000-0023-3FBB-3

Please refer to the submission above for the latest available data. If you nevertheless need the original data, please click here.
Statistics

- Google Analytics
- PIWIK Integration
Monthly PIWIK Reports

Monthly Item Statistics
Mar, 2015

Testing branding metadata value 2
http://hdl.handle.net/11858/1458

Views Over Time
- Views
- Downloads

Visitors By Country
- Netherlands: 44
- Czech Republic: 2
- Slovakia: 2

Summary
- 675 pageviews, 101 unique pageviews
- 48 visits, 21 unique visitors
- 0 downloads, 0 unique downloads
## Control Panel

<table>
<thead>
<tr>
<th>Java Information</th>
<th>Extra Java Info</th>
<th>Configuration</th>
<th>Extra Configuration</th>
<th>SystemWide Alerts</th>
<th>Programs</th>
<th>PID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shibboleth</td>
<td>Backup</td>
<td>IRODS Replication</td>
<td>Cron Jobs</td>
<td>OAIPMH Validators</td>
<td>Harvesting</td>
<td>Release Notes</td>
</tr>
<tr>
<td>Statistics</td>
<td>Licenses</td>
<td>Signed Licenses</td>
<td>Current Activity</td>
<td>Checks</td>
<td>Verify Logging</td>
<td>Dspace Log(s)</td>
</tr>
<tr>
<td>User Logins</td>
<td>Shib Raw Logins</td>
<td>Unpublished Items</td>
<td>Bitstream items</td>
<td>Specific Metadata</td>
<td>Metadata Quality</td>
<td></td>
</tr>
<tr>
<td>Embargoed items</td>
<td>Oldest users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Java and Operating System

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java Runtime Environment Version</td>
<td>1.8.0_45</td>
</tr>
<tr>
<td>Java Runtime Environment Vendor</td>
<td>Java HotSpot(TM) 64-Bit Server VM</td>
</tr>
<tr>
<td>Operating System Name</td>
<td>Linux</td>
</tr>
<tr>
<td>Operating System Architecture</td>
<td>amd64</td>
</tr>
<tr>
<td>Operating System Version</td>
<td>2.6.32-19-pve</td>
</tr>
</tbody>
</table>
Control Panel

Verify Logging

- Logging to /opt/lindat-dspace/installation/log/dspace.log.2016-05-10 OK.
- Logging to /opt/lindat-dspace/installation/log/curator.log.2016-05-10 OK.
- Logging to /opt/lindat-dspace/installation/log/checker.log.2016-05-10 OK.
- Logging to /opt/lindat-dspace/installation/log/curator.log.2016-05-10 OK.
- Logging to /opt/lindat-dspace/installation/log/cocoon.log.2016-05-10 OK.
- Logging to /opt/lindat-dspace/installation/log/authentic.log.2016-05-10 OK.

Monitor errors in real time


<table>
<thead>
<tr>
<th>Exception at line:</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821</td>
<td>2016-05-10 02:25:05,608 ERROR org.dspace.app.xmlui.aspect.discovery.AbstractSearch @ can not sort on multivalued field: dc.date.issued org.dspace.discovery.SearchServiceException: can not sort on multivalued field: dc.date.issued at org.dspace.discovery.SolrServiceImpl.search(SolrServiceImpl.java:1643)</td>
</tr>
<tr>
<td>3187</td>
<td>2016-05-10 03:50:10,868 ERROR org.hibernate.engine.jdbc.SqlExceptionHelper @ ERROR: canceling statement due to statement timeout</td>
</tr>
</tbody>
</table>

File: [dspace-ufal.metsahare-schema-errs.log.2016-05-10] Warnings/Errors: [0]

File: [curator.log.2016-05-10] Warnings/Errors: [0]

Control Panel

Verify Logins

Choose different file =

Absolute file: [/opt/lindat-dspace/installation/log/authentication.log,2016-05-10]

amirkamran@msn.com; kamran@ufal.mff.cuni.cz @ 2016-05-10 03:14:18,61 => logged in successfully

Monitor Item progress

View all bitstreams in the repository

WORKFLOW ITEMS

Following items are currently in workflow mode i.e. waiting for an approval. You can view the details of the item by clicking the item ID.

<table>
<thead>
<tr>
<th>WORKFLOW ID</th>
<th>ITEM ID</th>
<th>COLLECTION</th>
<th>CURRENT STATE</th>
<th>ASSIGNED TO</th>
<th>LAST MODIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>168</td>
<td>154</td>
<td></td>
<td>Rejected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>217</td>
<td>163</td>
<td></td>
<td>Not Submitted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2963</td>
<td>2121</td>
<td></td>
<td>Not Submitted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2901</td>
<td>2190</td>
<td></td>
<td>Not Submitted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WORKSPACE ITEMS

Following items are currently in workspace mode i.e. in the process of submission. You can view the details of the item by clicking the item ID.

<table>
<thead>
<tr>
<th>WORKSPACE ID</th>
<th>ITEM ID</th>
<th>STAGE REACHED</th>
<th>SUBMITTER EMAIL</th>
<th>REJECTED</th>
<th>LAST MODIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>2097</td>
<td>6</td>
<td>ko.oikobruechtr</td>
<td>Rejected</td>
<td>2016-05-15</td>
</tr>
<tr>
<td>151</td>
<td>2090</td>
<td>6</td>
<td>ko.oikobruechtr</td>
<td>Rejected</td>
<td>2016-05-12</td>
</tr>
<tr>
<td>152</td>
<td>license.bt</td>
<td></td>
<td>false</td>
<td></td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>English-Hindi-without-Emilie.tgz</td>
<td>12.16 MB</td>
<td>false</td>
<td></td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>license.bt</td>
<td></td>
<td>false</td>
<td></td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>CoNLL2003-ST-Czech.zip</td>
<td>14.84 MB</td>
<td>false</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Work collaboratively - Start a submission and pass it on to another user to complete the rest

Share link

To pass your submission to another user give them the following link: https://lindat.mff.cuni.cz/repository/xmlui/submit?workspaceID=3037&share_token=b8847556e4df6e9d464a1aead59e47b3. You will also receive an email with this link.
Bitstream Preview

Without downloading preview what's inside a zip archive or a text file
Localization

Czech-English Parallel Corpus 1.0 (CzEng 1.0)

Byjar, Ondřej; Žabokrtský, Zdeněk; Dušek, Ondřej; Galuščáková, Petra; Majlík, Martin; Marešek, Ondřej; Marklík, Jiří; Novák, Michal; Popek, Martin and Tarnycha, Aleš. 2011. Czech-English Parallel Corpus 1.0 (CzEng 1.0). Linden/CLARIN digital library at Institute of Formal and Applied Linguistics, Charles University in Prague, http://hdl.handle.net/11234/1-1458.

Autoři
Bojar, Ondřej; Žabokrtský, Zdeněk; Dušek, Ondřej; Galuščáková, Petra; Majlík, Martin; Marešek, Ondřej; Marklík, Jiří; Novák, Michal; Popek, Martin; Tarnycha, Aleš

URL projektu
http://ufal.mff.cuni.cz/czeng

URL dema
http://lindat.mff.cuni.cz/services/kontext/run.cgi?corprname=czeng_10_cs_a

Datum vydání
2011-12

Typ
corpus

Velikost
206442315 tokens
Repository in Action

LINDAT/CLARIN - Czech Republic

https://lindat.mff.cuni.cz/repository
Repository in Action

CLARIN Bergen - Norway

The CLARINO Bergen Centre offers:
- A repository to search and deposit language data
- Online services for treebanks and other corpora
- Online editing of CMDI metadata

Welcome to CLARINO Bergen Centre

CLARINO is a Norwegian infrastructure project jointly funded by the Research Council of Norway and a consortium of Norwegian universities and research institutions. Its goal is to implement the Norwegian part of CLARIN. The ultimate aim is to make existing and future language resources easily accessible for researchers and to bring eScience to humanities disciplines.

Advanced Search

<table>
<thead>
<tr>
<th>Author</th>
<th>Subject</th>
<th>Language (ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerstenberger, Cipri ...(21)</td>
<td>Bilingual Lexicon (9)</td>
<td>Northern Sami (7)</td>
</tr>
<tr>
<td>Parra Escartin, Carla (3)</td>
<td>South Saami (8)</td>
<td>Norwegian Bokmål (7)</td>
</tr>
<tr>
<td>Dione, Cheikh M. Bamba (1)</td>
<td>Machine-readable Dic ...(7)</td>
<td>Southern Sami (7)</td>
</tr>
<tr>
<td>Giellatekno and Divv ...(1)</td>
<td>Norwegian (7)</td>
<td>Kven Finnish (5)</td>
</tr>
</tbody>
</table>

https://repo.clarino.uib.no/xmlui/
Repository in Action

CLARIN - Poland

https://clarin-pl.eu/dspace/
Repository in Action

CLARIN - Slovenia

https://www.clarin.si/repository/xmlui/
Repository in Action

ILC-CNR - CLARIN - Italy

https://dspace-clarin-it.ilc.cnr.it/repository/xmlui/
Questions ?
Demo / Installation
• ant (>= 1.8.0 required)
• postgresql (>=9.4 required)
• jdk (>=1.7 required)
• tomcat (>=7.0.30 required)
• maven (>=3.0)
• make
• apache/nginx
This project uses vagrant to create a temporary Virtual Machine (VM) (suitable for developers) provisioned by puppet (responsible for installation of additional software) with an installation of the repository developed at LINDAT/CLARIN based on DSpace including a number of useful tools.

The VM can be created for different providers e.g., VirtualBox.

https://github.com/ufal/lindat-repository-vagrant
Support

- We are an active project on Github
  https://github.com/ufal/lindat-dspace

- Documentation
  https://github.com/ufal/lindat-dspace/wiki

- Issue tracking
  https://github.com/ufal/lindat-dspace/issues

- Mailing list
  lindat-technical@ufal.mff.cuni.cz
Related Projects

- LINDAT Common Branding
  https://redmine.ms.mff.cuni.cz/projects/lindat-common
  Provides the common header and footer for all services.

- AAI
  https://redmine.ms.mff.cuni.cz/projects/lindat-aai/repository
Weekly Meetings

- We meet every Monday @ 12:30
  https://connect.cesnet.cz/lindat-tech

- The upcoming meeting schedule is also available on our events page.
  https://lindat.mff.cuni.cz/en/events