

Host your own digital repository without installing any software

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Agenda

- Digital Repositories in a Nutshell
- ICPSR's Archonnex Platform
- OpenICPSR and Self Publishing Repositories
- Feature Demo
- RaaS - Developer to Developer Integration
- Install Sample Website
- Customize Home Pages
 - Enable Workspace, Review, Search
- Cloud Based Infrastructure - AWS
- Future Plans for Archonnex

Digital Repositories in a Nutshell



- Mechanism for managing & storing digital content
- Can be subject or institutional in their focus
- Include standards that allow import, export, identify, store and retrieve

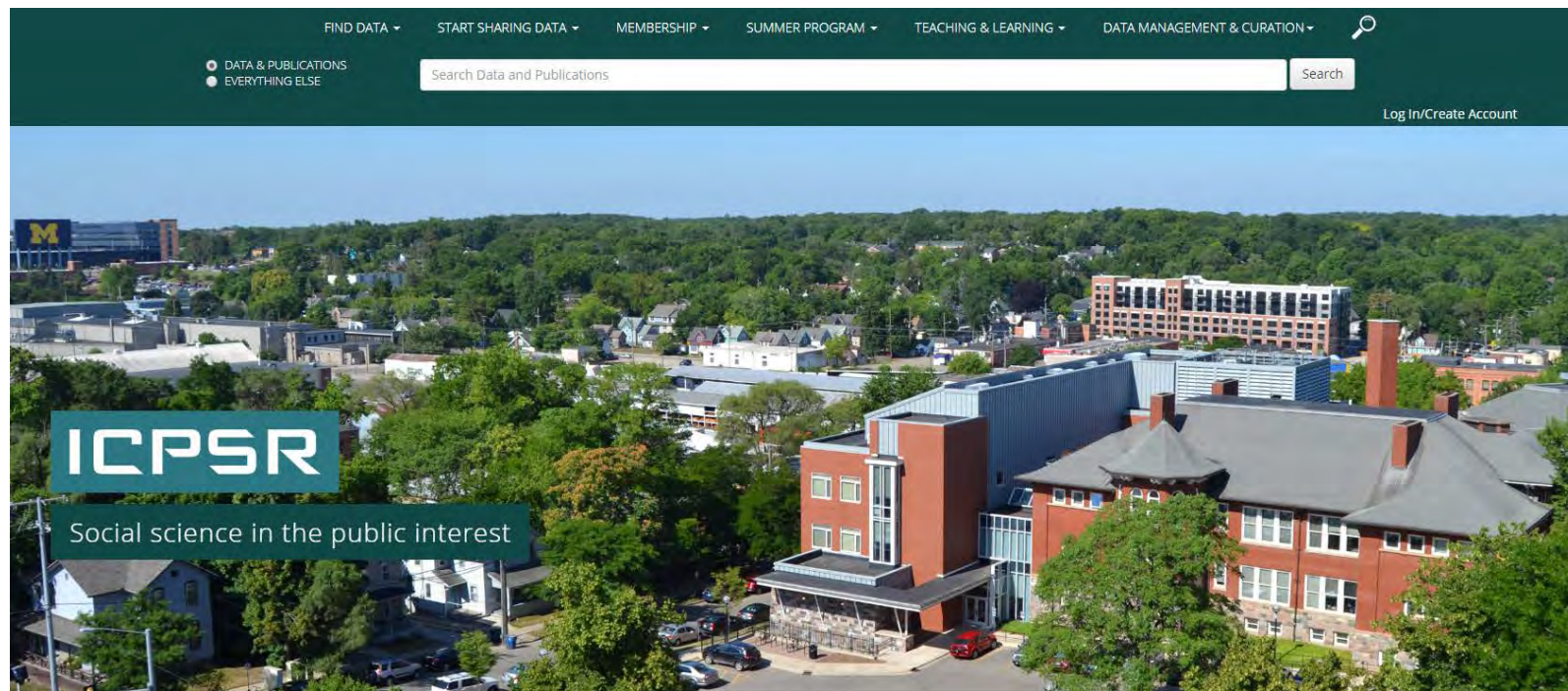
A repository can support research, learning, & administrative processes.



ICPSR as a Repository

- Founded by Warren Miller in 1962 as a consortium and now there is over 700 members institutions.
- Focus is to curate, preserve, and disseminate social science data and supporting documents.
- Leader in providing education, training, and instructional resources to help users understand and analyze research data.

ICPSR Now



News



May 21, 2018
New Releases through 2018-05-20



May 14, 2018
Featured Data: 2016 Chicago Council Survey of



May 8, 2018
Webinar alert: Making the Most out of ICPSR

More Headlines

May 18, 2018
Application Due Date to the PATH Study Data User Workshop has been Extended

May 15, 2018
Announcing Release of the Monitoring the Future Panel Data

May 12, 2018
UPDATED: Deadline Approaching for the PATH Study Data User Workshop

But We Are Not Alone

- Box
- Bitbucket
- Dataverse
- Dropbox
- DSpace (Duraspace)
- EPrints
- Github
- Google Drive





What's the Problem?

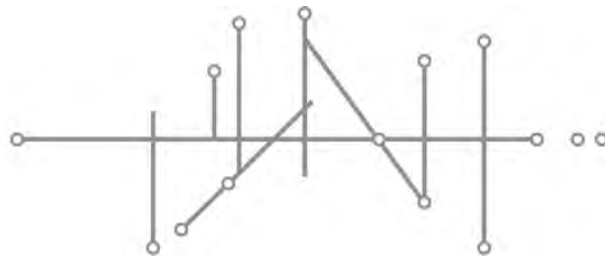
- Limited development staff
- Time, maintenance, and other costs
- Challenging to fully understand:
 - How to get started
 - Technical components and requirements
 - OAIS, metadata and search
 - Short term vs long term goals
- No one-size-fits-all solution

ICPSR's Archonnex Seeks to Improve all Aspects of the Data Experience



What's an Archonnex?

- Archonnex = connecting archives
- ICPSR ingests, curates, preserves, and shares data
 - Technology-driven data management system



Archonnex



Cool Name, but...

What's the Big Deal?

- The end-user interface for the collection does not need to be fully dependent on the repository system.
- The system is file agnostic (i.e. we can accept any file type).
- Easy to set up and built on 60+ years of experience.
- Modular systems that enable researchers to do different kinds of things with data (credentialed access; data linkages; visualization; and more)

What Does This Mean?



ICPSR's Research Data Management System

- Our system has been designed specifically to **receive research data**, care for it via rigorous **data checking and description at the file level**, **preserve it** for future generations of researchers, and **maximize data discovery** and use via thorough documentation, thoughtfully produced metadata, citation, online data-related tools, and a full suite of statistical analysis options.

Components

- Sign in and Authenticate (MyData)
- Deposit/Upload Data (Deposit Manager)
- Disseminate (Search Manager, Filter, Download)
- Online Analysis

Cool Features

- Customization (user interface; reduced cost customization; (tenant website)
- Usage statistics (dashboard of statistics)
- Improved integrated bibliography
- Search & filtering; multi-faceted searching; discoverability
- Metadata to variable level
- Collaborative publication space
- Version control management

ICPSR and Self Publishing Repositories

HMCA

nacjd

NAHDAP

ADREP

Child Care & Early Education
RESEARCH CONNECTIONS

NCAA Student-Athlete Experiences
Data Archive

NADAC
National Archive of Data on Arts & Culture

CIVIC LEADS

RCMD
RESOURCE CENTER
FOR MINORITY DATA

NACDA
Program on Aging

DSDR Data Sharing for
Demographic Research

measures of effective teaching
INDIVIDUAL DATABASE

Thematic
Collections

Healthcare Research Coordinating Center
OPEN DATA FLINT

United States
Census
Bureau

DATA
LUMIOS

OPEN ICPSR

Self
Publishing
Repositories

Thematic Collection Demo



Self Publishing Demo



A crowd-sourced repository for valuable government data


Repository as a Service (RaaS)





- Developer to Developer Integration
- Cloud Services - Amazon Web Services
- Virus Protection


Getting Started: Your local Web Application

ICPSR Repository As A Service Demo Web application

 19 commits

 2 branches

 0 releases

 2 contributors

Branch: master ▾ New pull request

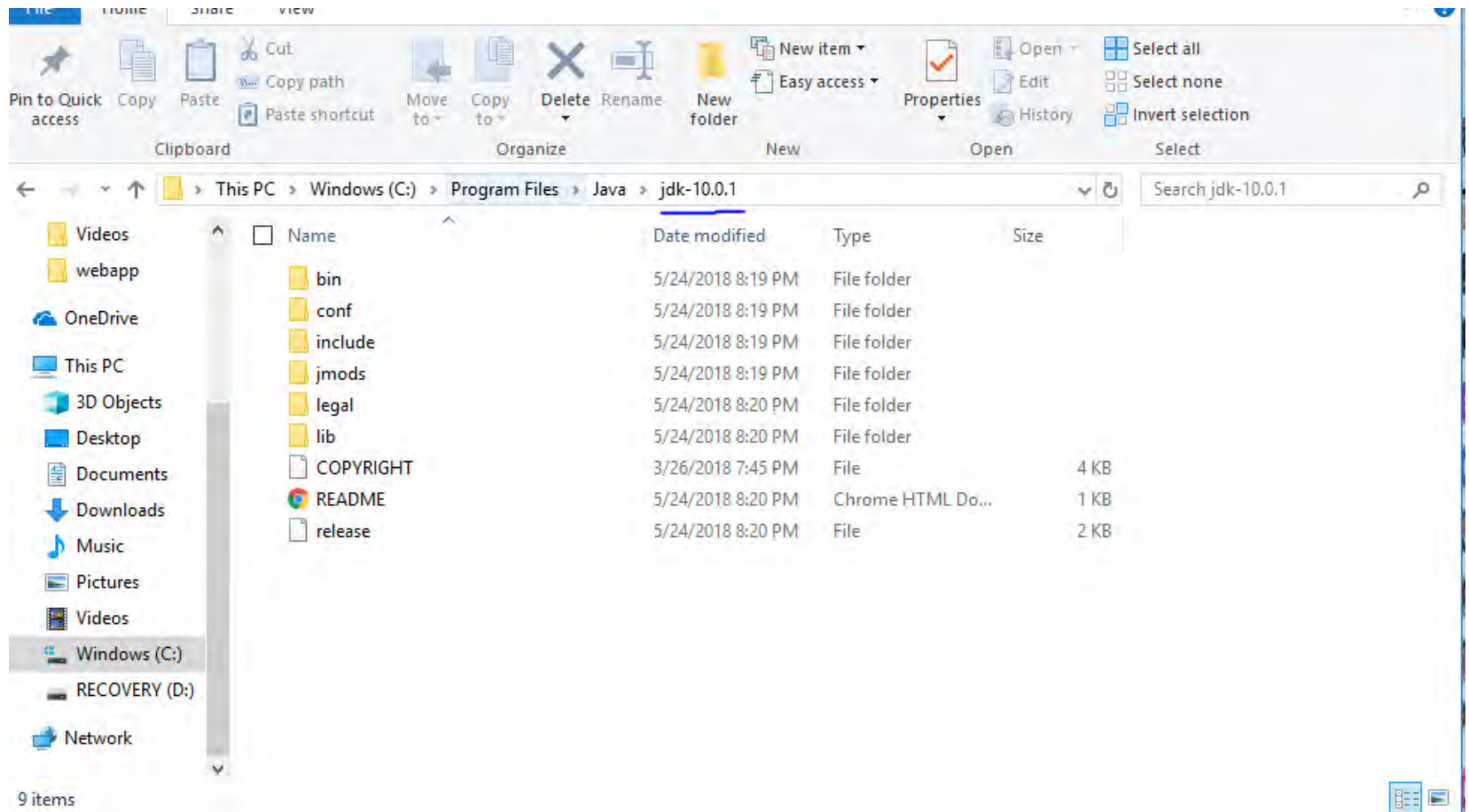
Find file Clone or download ▾

 ummerh updated instruction Latest commit 97ab1da 3 days ago

📖 README.md

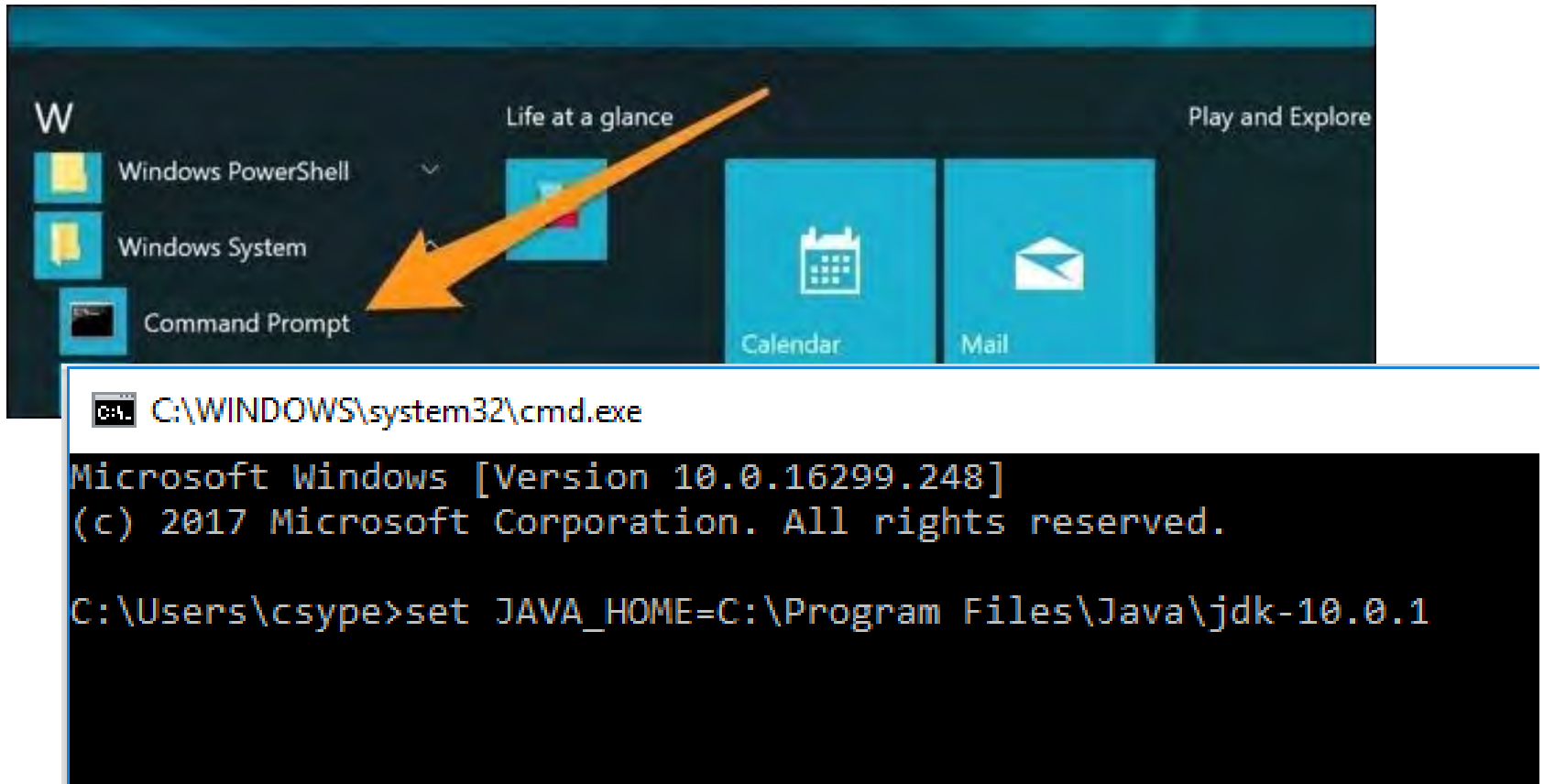
<https://github.com/ICPSR/raas-demo>

Setting up JAVA_HOME



For Windows 10 it's usually located here:
C:\Program Files\Java\jdk-10.0.1

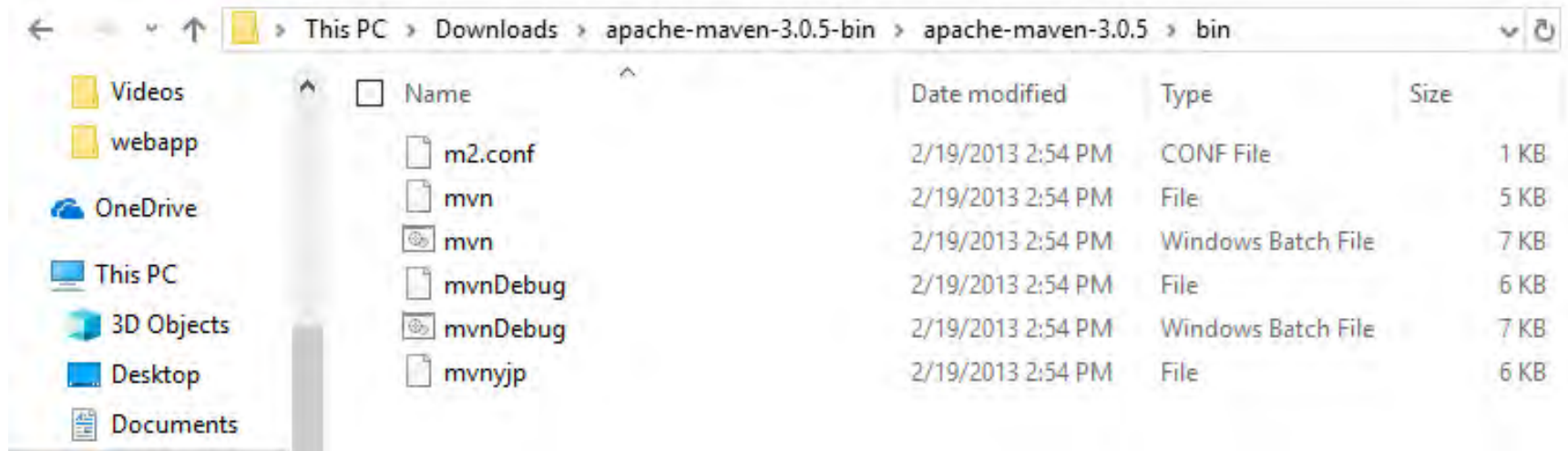
Setting up JAVA_HOME



Command Prompt

set JAVA_HOME=C:\Program Files\Java\jdk-10.0.1
(Mac) export JAVA_HOME=/Library/Java/Home

Setting up Maven



Step 1: Navigate to the folder that you downloaded and unzip it.

Step 2: Go to your "bin" folder.

Step 3: Copy this address and use this to set the path for maven. Use the command below to set the path in command:

set path=[insert address here]

(mac) export PATH=[insert address here]:\$PATH

Customization – home.jsp

- Change the title of your web page
- Change the main descriptive text on the page
- Optional: Change the navigation names

```
1 <!doctype html>
2 <html lang="en">
3 <head>
4 <!-- Required meta tags -->
5 <meta charset="utf-8">
6 <meta name="viewport"
7     content="width=device-width, initial-scale=1, shrink-to-fit=no">
8 <!-- Bootstrap CSS -->
9 <link rel="stylesheet"
10     href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.0/css/bootstrap.min.css"
11     integrity="sha384-9gVQ4dYFwwWSjIDZnLEWnxCjeSWFphJiwGPXr1jddIhOegiu1FwO5qRGvFXOdJZ4"
12     crossorigin="anonymous">
13 <link href="http://getbootstrap.com/docs/4.1/examples/cover/cover.css"
14     rel="stylesheet">
15 <title>ICPSR Repository as a Service</title>
16 </head>
17 <body class="text-center">
18     <div class="container-fluid d-flex w-100 h-100 p-3 mx-auto flex-column">
19         <header class="masthead mb-auto">
20             <div class="inner">
21                 <h3 class="masthead-brand">RaaS@ICPSR</h3>
22                 <nav class="nav nav-masthead justify-content-center">
23                     <a class="nav-link active" href="home.jsp">Home</a> <a
```

Enable Workspace: **workspace.jsp**

- Establish a credential token, by logging into [DataLumos](https://dev.datalumos.org) (dev.datalumos.org)
- Right click and view source.
- Copy the JS variable `var jwtToken = '.....';`
- You will have to use this value in the code snippets, look for word `USER_TOKEN`

Things to remember

- FIXME
- jwtToken
- Code snippets from github
- Save your files when done and refresh the page

Now let's try adding a review page:

reviewPublish.jsp


Enable Search **search.jsp**

- Add the same user token that you use for the workspace.

```
<main role="main" class="inner cover">

<div id="search"></div>
<script type="text/javascript">
    var staff = true;

    var jwtToken = 'USER_TOKEN';
    $(document).ajaxSend(function(event, jqxhr, settings) {
        jqxhr.setRequestHeader("Authorization", "Bearer " + jwtToken);
    });
    var requesterSessionId = "C51B64E6E09E66E8761B42A478BA86BF";
    var datalumosServerUrl = "/datalumos";
    var searchManagerUrl = "https://search.dev.icpsr.umich.edu/search";
    var buildSearchResultsHeader = null;
    var buildSearchResult = null;
    var saveSearchResult = false;
    var customActions = [];
    var savedResults = [];
    ReactDOM.render(React.createElement(SearchPage, {
        searchResults : {
            "response" : {
```



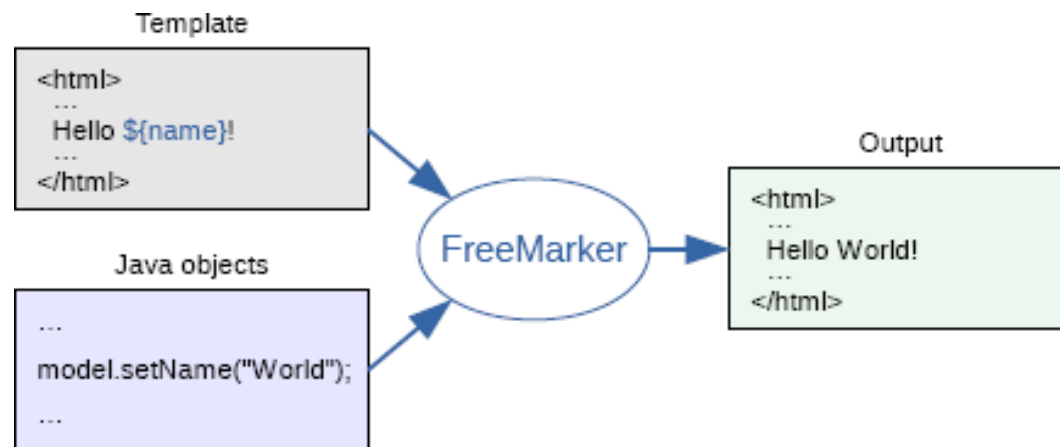
Those Seeking Hosted Repositories...

- Built specifically for data discovery, re-use, and impact tracking
- No need to hire technical staff, worry about back-ups, up-time, scalability, understand ADA compliance, data security, user support, or outreach to expose data to the data community
- The system is modular and scalable (AWS)
- **FreeMarker template** (used to customize the website to suit your needs)

FreeMarker Template

A template engine: a Java library to generate text output (HTML web pages, e-mails, configuration files, source code, etc.) based on templates and changing data.

- Powerful, lightweight, with many configurable options



Benefits of ICPSR Archonnex

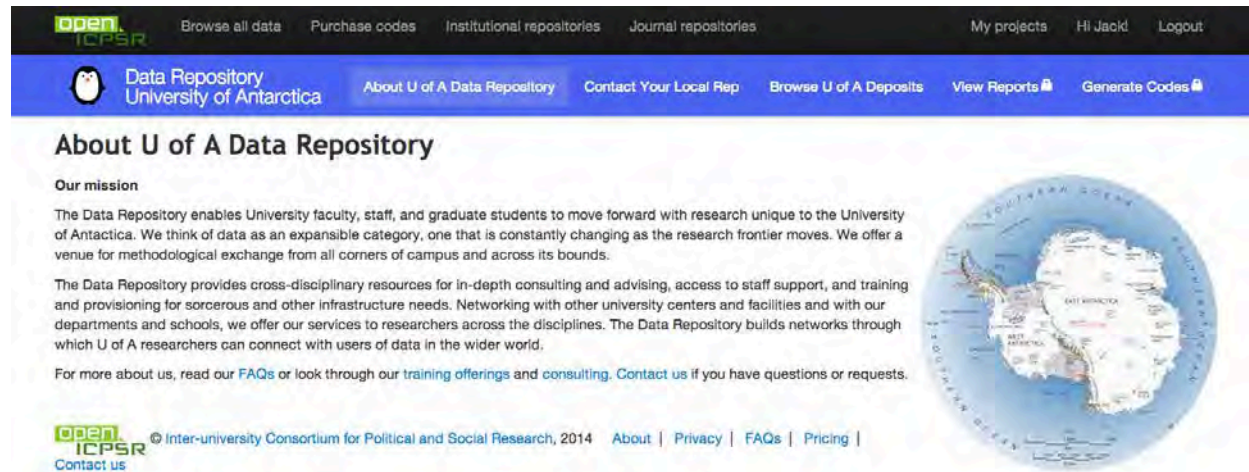
- Enables users to share more kinds of data
- Gives Users control over their deposits, searches, and downloads; ability to customize your project and download workspace and store your history
- Exposes metadata in more prominent, useful, and visual ways
- Enhances discovery of data and documentation
- Management is at the file level
- Updates and support

Just The Beginning



Learn more about Repositories

- openicpsr.org



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