



Guide to Web Based Digital Archive Management System: ArchivesSpace

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List of Acronym

Term	Description
AS	ArchivesSpace
CSS	Cascading Style Sheet
DACS	Describing Archives: A Content Standard
DOI	Digital Object Identifier
EAD	Encoded Archival Description
GALM	Gallery, Archive, Library and Museum
HR	Human Resource
HW	Hardware
IT	Information Technology
JDK	Java Development Kit
JRE	Java Runtime Environment
MARC	Machine readable catalog
OCR	Optical Character Recognition
SW	Software
URL	Uniform Resource Locater
XML	Extensible Markup Language
METS	Metadata Encoding and Transmission Standard

Abstract

The 2020 technical manual titled Guide to Web-Based Digital Archive Management System: ArchivesSpace was collaboratively developed by researchers from Mekelle University, Ethiopia, to meet the specific needs of Tigray memory institutions in enhancing their archive and manuscript management. This manual addresses the critical need for effective digital archive management, particularly tailored to the context of Tigray, Ethiopia, and aimed at institutional memory experts. It explores the significance of archives in preserving historical materials, encompassing a wide array of media and formats, and emphasizes the cultural necessity and management responsibility associated with professional archivists. The manual also explores the current trends in archive management technology, highlighting the role of computerization and the challenges and considerations involved in automation. Furthermore, it provides insights into the ArchivesSpace open-source application, designed to facilitate the management and web access of archives, manuscripts, and digital objects. The manual offers practical guidance on utilizing ArchivesSpace, including its public and staff-side interfaces, and provides a guide to access to a sandbox for testing purposes. By addressing the customization and configuration of web-based digital archival materials, the manual aims to empower archivists, librarians, museum managers, and information center users to effectively manage archival collections, identify and access rare documents, and adhere to relevant archival standards and best practices. This manual was prepared in 2020 to address the Tigray Memory institution's demands on effective archive and manuscript management.

Regrettably, the implementation of ArchivesSpace faced obstacles due to the disturbing events of the November 2, 2020, brutal war in Ethiopia. Despite these challenges, the publication of this guide aims to foster awareness and encourage the adoption of web-based digital archive management systems by memory institutions such as libraries, museums, and heritage custodians. Looking ahead, the researchers plan to extend their work by publishing an article in a peer-reviewed journal. This forthcoming article will provide recommendations to policymakers, memory institution stakeholders, researchers, and the general public, drawing from the project's findings. In essence, this comprehensive manual stands as an invaluable resource for memory institutions in Tigray, Ethiopia, underscoring the significance of effective digital archive management in preserving cultural heritage.

Keywords: Accession, Archive, ArchivesSpace, Digital Object, Finding aid, Memory institutions, Preservation, Tigray

Chapter one

1. Introduction

Chapter 1 is an introductory section which looks at the structure of the sector and the basics of digital archive management. **Chapter 2** archival basics including importance of archive, technological trend and standards and **Chapter 3** is about web based digital archival material customization and configurations. It also includes bibliography, demonstration screenshots, configuration setting, and glossary of terms for technical words.

1.1. Objective

This tutorial is prepared to help archivists, librarian, museum managers and information centres users able to:

- Customize web based archival materials and manuscript management system using ArchivesSpace open source software (archivists and information technology experts).
- Show how to effectively retrieve and locate special collection and rare documents

1.1. Expected Outcome

After careful follow-up of this manual it is expected archival institutions:

- Effectively managing their archival collection both physical and digital
- Efficient and effective archival material identification and access
- adhere to relevant archival standards and best practices

1.2. Audience

This manual is designed to researchers, archive patrons (users), information technology experts, archivists, librarian, and museum managers and generally information centres experts found in Tigray culture and tourism bureau, Tigray Martyrs' Memorial Monument Aksumite heritage foundation library. This manual is accompanied by video tutorial and attached with CD. The video contains screen cast demonstrations and step by step visual instructions

Chapter Two

2. Web based Digital Archive Management System

The Preservation of Historical materials, in a variety of forms and formats, is both a cultural necessity and a central management responsibility for professional archivists.

2.1.1. Archive

Today, archives can include a broad range of material in a variety of media. Archives might be public and corporate records ("archives") generated by governments or businesses, or private papers and records ("manuscripts") created or kept by individuals. They can be paper documents such as letters, diaries, reports, minute books, or memos, or they may include other media items such as photographic images, maps, architectural records, films and videotapes, paintings and drawings, phonograph records and cassette tapes, pamphlets, newsletters, brochures, and even machine-readable records generated by computers.

Today, archives can be found in:

- art galleries
- churches and religious institutions
- corporations
historical societies
- hospitals
improvement districts
- libraries
municipalities
museums
native peoples' resource centers
- private societies, associations, and clubs
- schools and school districts universities and colleges

As an archives assistant, your primary roles include:

- Respecting the collection and its contents;
- Preserving the integrity of the materials;
- Ensuring the collections' availability for research use.

The archivist needs to:

- develop a comprehensive archives policy, clearly defining its purpose and goals and the type of material it will acquire
- have the archives policy approved and endorsed by the sponsoring or parent institution
- acquire appropriate material, actively gathering records from the community, organization, or institution
- gain legal control over archival holdings, documenting the archives' ownership of records
- gain intellectual control over archival holdings, knowing what material is in the archives and where it came from
- gain physical control over archival holdings, storing them properly and securing them against theft, damage, and environmental or human hazards
- make archival materials available for use by the creators, donors, and the general public

Where we preserve archive materials: GALM

GLAM is the acronym for galleries, libraries, archives and museums. The term also refers to any other organizations that care for collections of any kind, including historical societies, Indigenous keeping places and science research collections.

2.1.2. Importance of Archive

Accountability: Archives collect evidence that can back up research.

Accessibility: Archives make the rich record of our movements, meetings, and expressions accessible. We can use archives to generate discussion.

Self-determination: It is important to maintain a historical record.

Education: Today's reports, meeting minutes, web pages, videos, and images are material for tomorrow's classes and research.

Continuity: We learn from the experiences we document

Table 1: importance of archive for a community

Activity: List the importance of archive for a community

Need of digitization of archival materials

There are numerous benefits to curating a digital archive. Firstly, the collection will expand, either due to digitization, or better management of valuable born-digital documents (of digital origin, for example a document produced in Word). Secondly, keeping documents that relate to the legacy of a historical society will enrich its history for future generations. You may also need to keep born-digital documents to comply with legal retention period [].

If you’re making collection items available digitally, improving access is a great way to increase your historical society’s reputation and awareness of the collection – after all, the collection is less valuable if no one knows what you have [].

Activity: Considering your organization justify the need of digitizing archival materials, manuscripts and rare documents.

Archival Materials

What is an archival collection? An archival collection can be many things – groups of papers or documents, electronic files, photographs, business records, letters or personal materials.

Common types of archival materials include:

Table 2: Common types of archival materials

Administrative documents	Minutes
Personal or family correspondence	Original art, prints, paintings, or drawings
Diaries	Photographic material, films, or videotapes
Financial documents	Printed or published material
Legal documents	Reports
Literary manuscripts	Scrapbooks
Maps, charts, and plans	Sound recordings

Archival Material Digitization Steps

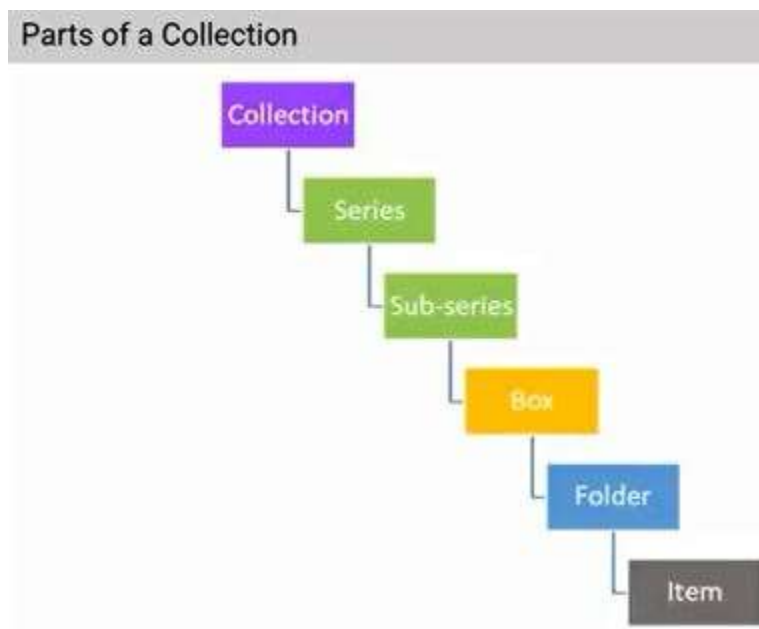
Archival Processing:

Processing is the act of assessing, arranging, describing, and housing archival collections with the goal of both efficiently and effectively preserving collections for long-term use, as well as to provide access and use to researchers.

Acquisition: As a historical society, you may have a document describing the kinds of materials you collect. You may need to update your collections policy if it is not broad enough to include born-digital materials. If you **do not have a collections policy, now is the time to write one!** Most collecting institutions make their collection policy visible to the public.

Arrangement, Description and Metadata management:

Arrangement is the process of physically and/or intellectually organizing archival material. Collections of archives, manuscripts and personal papers are distinct groupings of records defined by format, content and creating agency.



Catalogues: Historical Societies appreciate the value of cataloguing their collections, although a small number are not catalogued in any way. Most, having started with paper-based records have now migrated to some form of digital records.

Catalogues may be:

- Paper based
- In a basic spreadsheet format (e.g. Excel, File Maker Pro)

- Digital but not online
- In a format that uses accepted national and international standards (e.g. Dublin Core standards etc.).

Digitization:

Creating digital collections may include:

- A variety of collection types: photographs; manuscripts (documents, letters, diaries etc.); audio-visual materials; agricultural machinery; moveable objects; maps; books etc.
- A singular collection or a number of collections
- Objects and documents converted from analogue to digital (e.g. scanned)
- Born digital items

Collection and location management

ArchivesSpace uses the Containers tool to display and track the physical boxes, folders and other containers within which your archival materials are housed. Containers can be attached to archival components at whichever level of your collections is most useful to you, e.g. at the Collection, Series or File level through the “Instances” section of a record.

Locations is an optional tool under Containers in ArchivesSpace which allows you to manage the physical location of the containers or material in your collection.

Access and Discoverability: At times access to digital records remains in-house relying on limited access to a specific computer. Making collections discoverable via online search engines (such as Google) and aggregators (such as Trove) is the next challenge.

Digital Records may be accessed and discovered:

- In-house only
- Available only to **Society members**
- Accessible via **password**
- Accessible to the **general public** via search engines e.g. Google

Preservation:

The descriptive information in ArchivesSpace should be able to aid in appraisal and arrangement, and can replicate this data in digital preservation systems.

Current Trends in archive management technology

In the present computer age, many small archives are struggling with questions concerning automation. What can a computer do for our institution? Should we automate, given our needs and our limited financial and technical resources? What kind of computer programs (software) should we buy? What kind of computer equipment (hardware) do we need in order to use the software we have selected? How do we know we will be able to use the software and hardware effectively? What exactly is a database and how would we go about setting one up? It should be kept in mind that a computer is simply a tool. It does not replace the human activity necessary to carry out basic archival functions. In most cases, the use of computers demands that those basic archival functions be clearly articulated and systematically outlined prior to the implementation of any automated procedures or systems. ArchivesSpace Built for archives by archivists, ArchivesSpace is the open source archives information management application for managing and providing web access to archives, manuscripts and digital objects. ArchivesSpace is the next-generation web-based archives information management system, designed by archivists and supported by diverse archival repositories. ArchivesSpace is an open source, web application for managing archives information. The app is designed to support core functions in archives administration such as accessioning; description and arrangement of processed materials including analog, hybrid, and born-digital content; management of authorities (agents and subjects) and rights; and reference service. The application supports collection management through collection management records, tracking of events, and a growing number of administrative reports. The application also functions as a metadata authoring tool, enabling the generation of EAD, MARCXML, MODS, Dublin Core, and METS formatted data

Focused Group Discussion: Preform SWOT analysis on drivers and barriers of digital archive collection management in your institution.

Table 3: SWOT analysis

<u>Strength</u>	<u>Weakness</u>
<u>Opportunity</u>	<u>Treat</u>

Specification by archivists and information technology experts for their archival material:

Table 4: Specification

S.no	Requirement	Description	Remark
1	Server Computer	Small, Medium Sized	HW
2	Hard disk Size	2 TB	
3	Memory Size	8 GB expandable	
5	Scanner	Flatbed	
6	Storage Devices	DVD, Flash, External Hard disk, Internal Hard disk	
7	Digital Camera		
8	Operating System	Window Server 2012 and above, Ubuntu 18.04 and above /Platform Independent	
10	Text Editor	Notepad++, Sublime, Macromedia Dreamweaver...	
11	Multimedia Software	Adobe Photoshop, Matlab, OCR Audacity, Adobe Primer, Pinnacle, Ulead video studio, sound recorder...	
12	Assistive Technologies	Text to Speech, Speech to Text, Screen Narrator, Audiobook, Magnifier	
13	Metadata Standard	MARC, DC, EAD	METADATA
14	Price	Open source	Budget
15	Experts	Librarian/ Archivist/Record Manager, IT Expert, Network Administrator, Website Administrator, HR personnel, Finance manager, Lawyer/information policy analyst...	Human Resource
16	Archive Management Policy	Fit to constitution, best practice from international and national policies	Policy
17	Steering Committee	Combinations of experts, government officials, NGOs ...	Communication
18	Customizable and Localization Support	Yes	
19	Support	Demo, tutorial, forum, screencasts, FAQs	
20			

Chapter Three

3. ArchivesSpace Installation, Configuration and Customization

The ArchivesSpace core functions are:

- accessioning
- description and arrangement of processed materials
- management of authorities
- management of places
- management of rights
- reference service
- administrative reports (Pdf format available)
- multi repository and multi fonds
- metadata generation EAD, MARCXML, MODS, Dublin Core, and METS
- import tools (marcxml y csv)

3.1. Admin Manual

The digital archive must be installed, configured and customized properly to meet the organization and its users properly. The archivist and system administrator is responsible for installing, configuring and customizing the digital archival system for information centers.

3.1.1. Installation and Configuration

How to install ArchivesSpace on a **Windows server**, running against a **MySQL database**
ArchivesSpace Requirements

- Microsoft .NET Framework 4.5 (depending on your version of Windows this way be a component of Windows or a separate download): <https://www.microsoft.com/en-us/download/details.aspx?id=17851>
- MySQL Server (I used MySQL Web Community Server): <http://dev.mysql.com/downloads/>
- MySQL Connector for Java: <http://dev.mysql.com/downloads/connector/j/>
- Java: <https://java.com/en/download/>
- Procrun from Apache: <http://www.apache.org/dist/commons/daemon/binaries/windows/>
- ArchivesSpace: <https://github.com/archivesspace/archivesspace/releases>

Step1: Install the Microsoft .NET Framework 4.0 or install up-to-date operating system (window 10, window server 2012).

Step 2: Install MySQL Server. The “Server only” choice will be sufficient:



NB: All the defaults are fine. Enter a MySQL Root Password and make a note of it for later use.

Step 3: Install Java.

Step 4: Extract the ArchivesSpace folder from the downloaded ZIP and place it on the root of C:

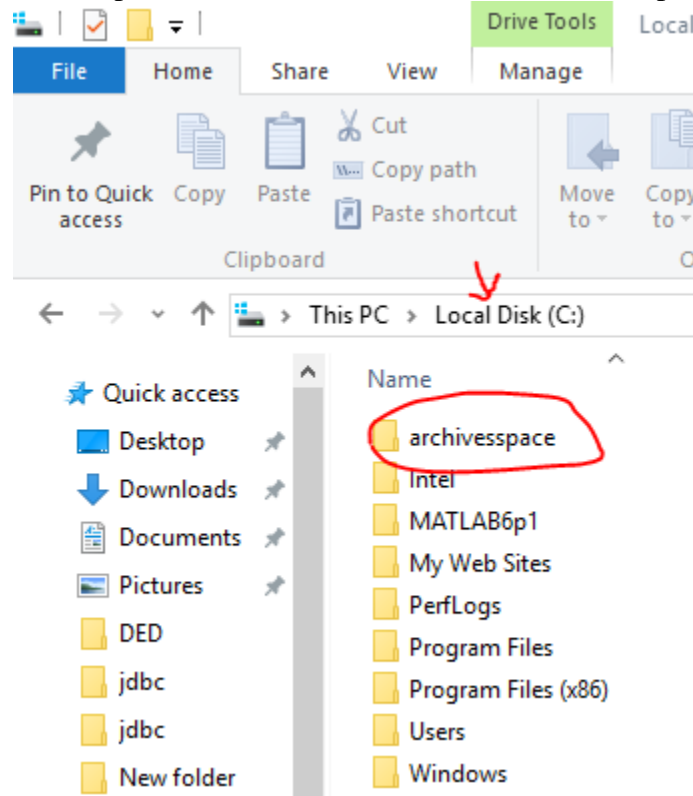


Figure 2: ArchivesSpace Root Folder

Step 5: From the downloaded Procrun ZIP, copy prunmgr.exe and prunsvr.exe and place them in the ArchivesSpace folder.

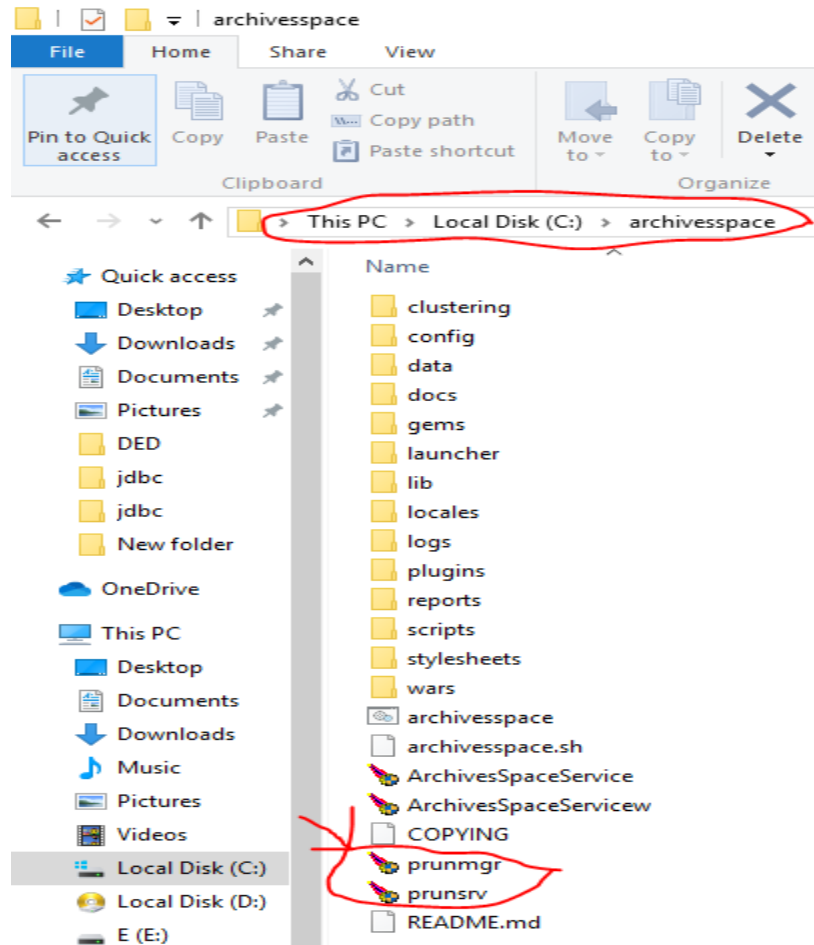
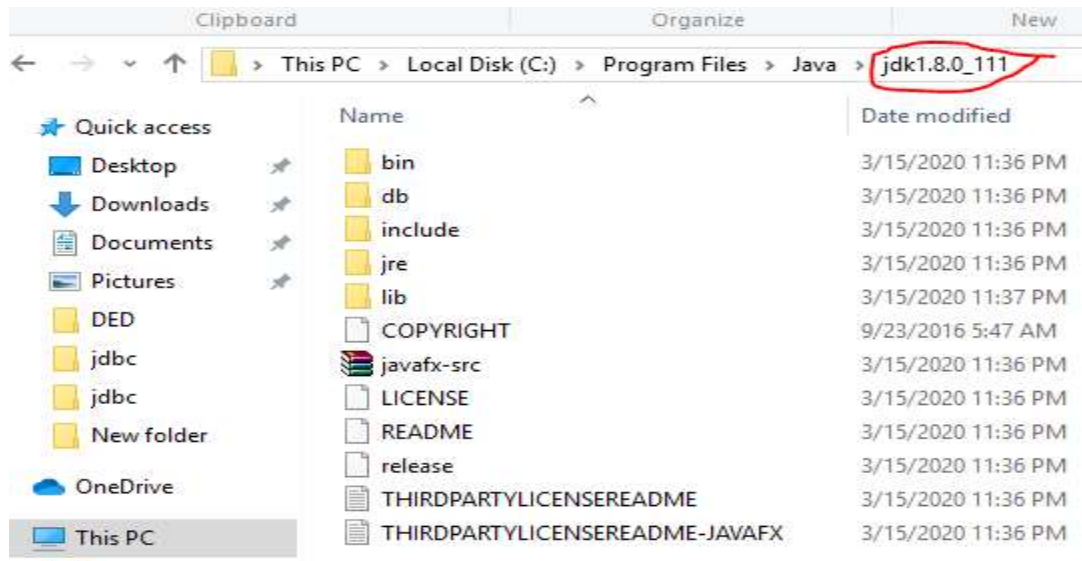


Figure 3: Apache Procrun Manager

Step 6: Make a note of Java's install path. For example, in this install the path is C:\Program Files(x86)\Java\jdk1.8.0.111:



Step 7: Go into Windows' Environment Variables by right-clicking Computer, selecting Properties, clicking Advanced Settings, then Environment Variables:



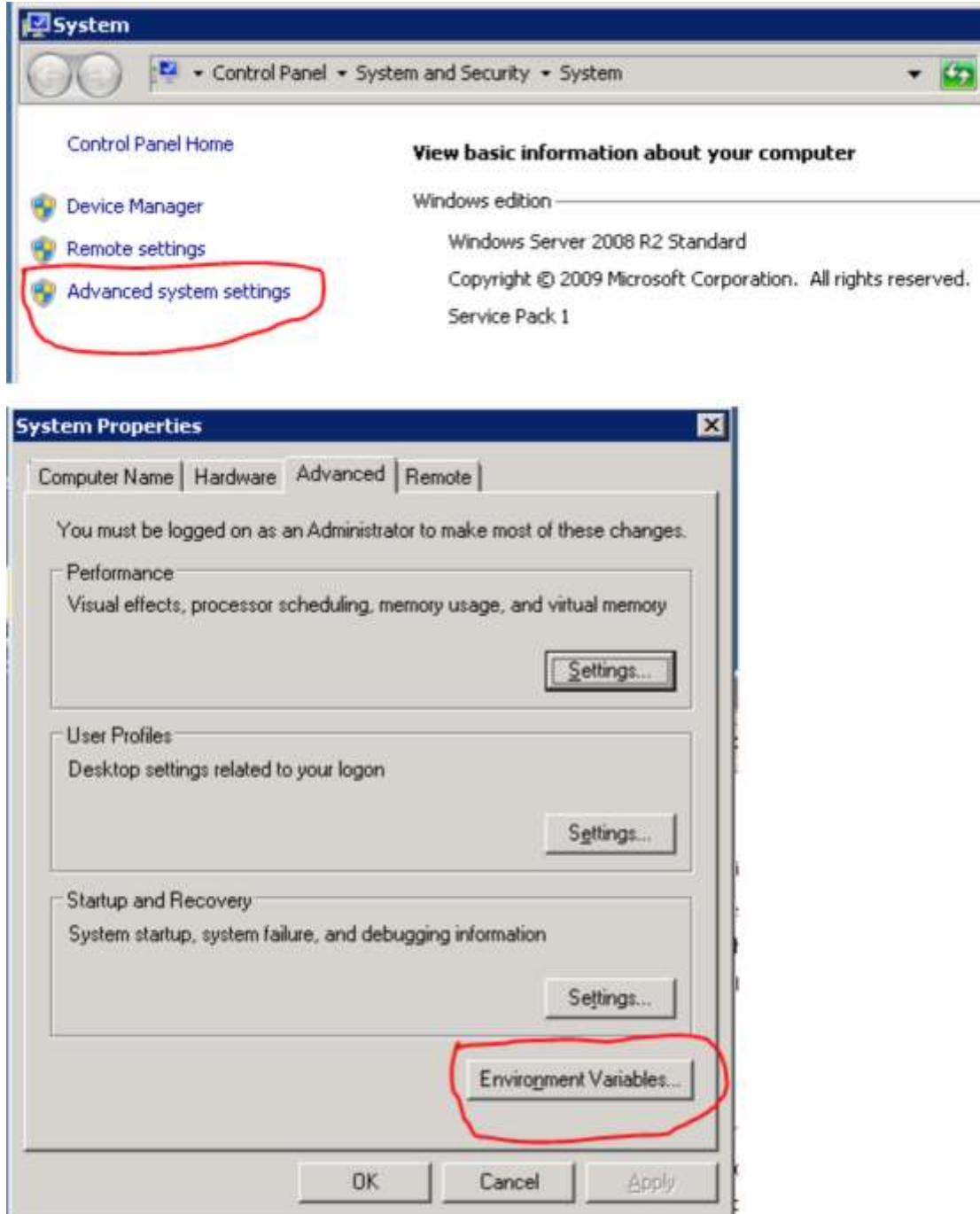
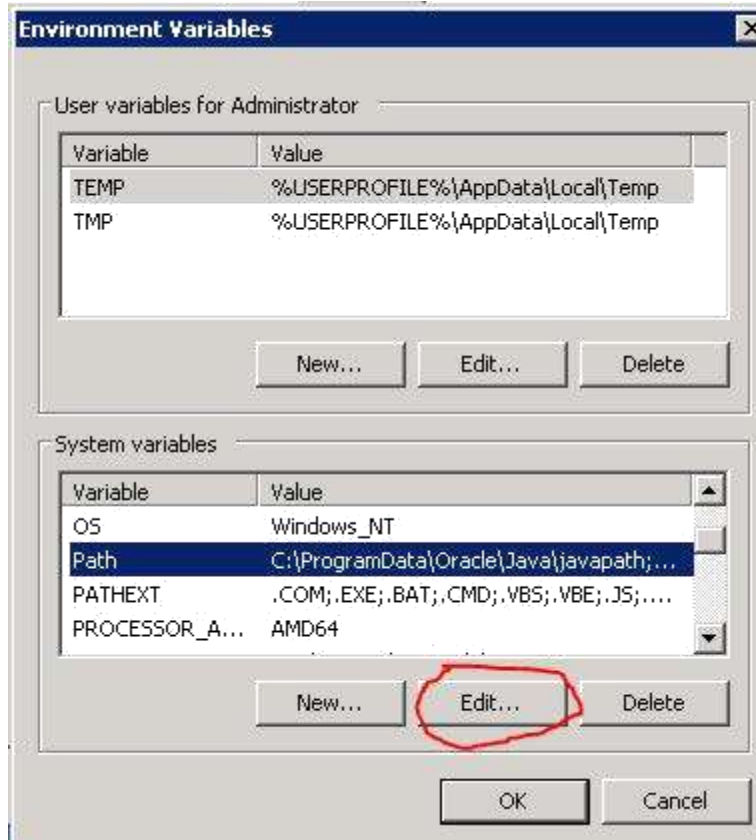
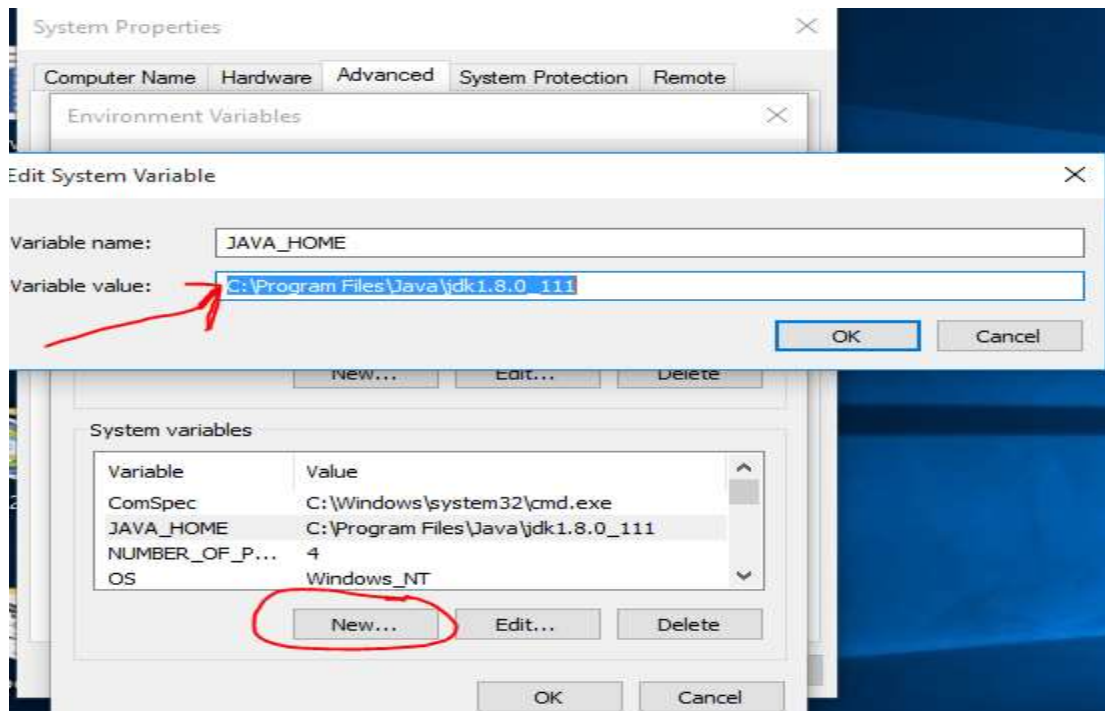


Figure 4: Environment Variable

Step 8: Change the “Path” variable to the “bin” directory below the Java path noted above. In this Example the path would be **C:\Program Files\Java\jdk1.8.0_111\bin**



Add a new System Variable named JAVA_HOME and set it to the Java directory above.



Step 10: Reboot the server/computer.

Step 11: Using the MySQL Command Line Client setup database

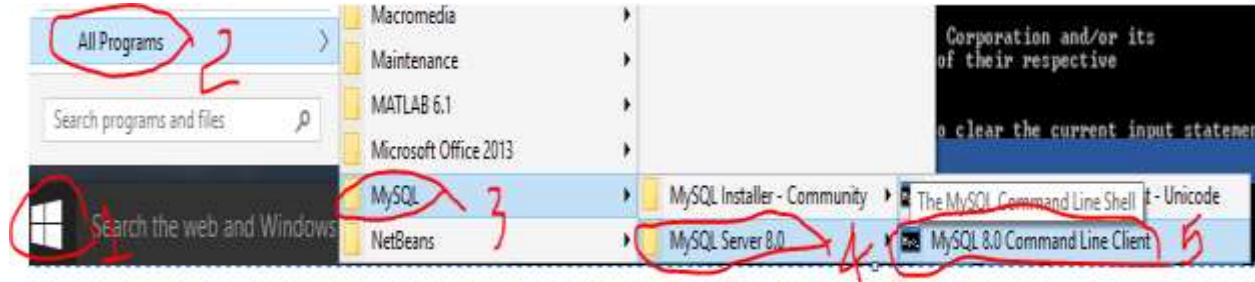


Figure 5: MYSQL

```
Enter password: *****  
  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
  
Your MySQL connection id is 12  
  
Server version: 8.0.17 MySQL Community Server - GPL  
  
Copyright (c) 2000, 2019, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark  
of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
Mysql> create user 'tekleweyni' @'localhost' identified by '*****';  
Query OK, 0 rows affected (0.16 sec)  
  
Mysql> create database tplfarchive default character set utf8;  
Query OK, 1 row affected, 1 warning (0.20 sec)  
  
Mysql> grant all privileges on *.* to 'tekleweyni' @'localhost';  
Query OK, 0 rows affected (0.11 sec)  
  
Mysql> FLUSH PRIVILEGES;  
Query OK, 0 rows affected (0.14 sec)
```

NB:

- **User Name: tekleweyni**
- **Database Name: tplfarchive**
- **Host name: localhost**

```
mysql> show databases;
+-----+
| Database      |
+-----+
| archive       |
| information_schema |
| mysql         |
| performance_schema |
| sys          |
| tp1farchive   |
+-----+
6 rows in set (0.00 sec)

mysql> show databases;
+-----+
| Database      |
+-----+
| archive       |
| information_schema |
| mysql         |
| performance_schema |
| sys          |
| tp1farchive   |
+-----+
6 rows in set (0.08 sec)

mysql> use tp1farchive;
Database changed

Mysql> show tables;
Empty set
```

Step 12: Open **C:\ArchivesSpace\config\config.rb** using a text editor such as Notepad++.

NOTE:

- Before you configure and update **C:\ArchivesSpace\config\config.rb** file you need to copy a backup file first like **C:\ArchivesSpace\config\configbackup.rb**
- It is important to remove the “#” at the beginning of each of the required lines.

Change the line starting “#AppConfig[:db_url]” to:

```
AppConfig[:db_url] =  
"jdbc:mysql://localhost:3306/tplfarchive?user=tekleweyni&password=*****&useUni  
code=true&characterEncoding=UTF-8"
```

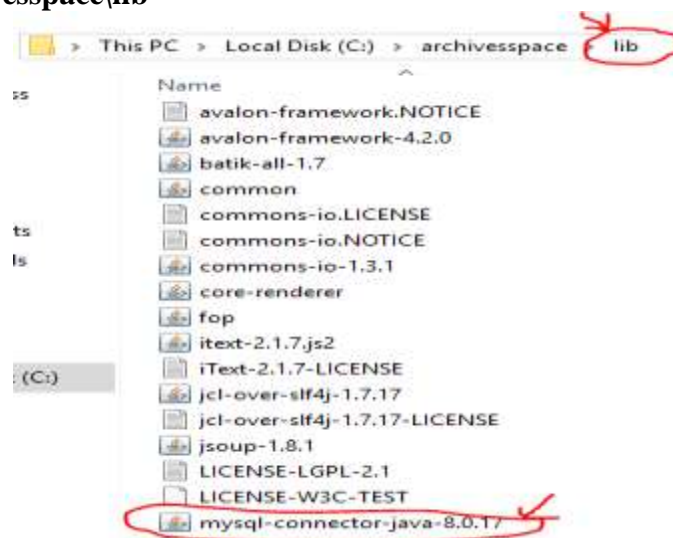
Change the line “#AppConfig[:use_jetty_shutdown_handler] = false” to

```
AppConfig[:use_jetty_shutdown_handler] = true
```

Change the line “#AppConfig[:jetty_shutdown_path] = "/xkcd"” to

```
AppConfig[:jetty_shutdown_path] = "/xkcd"
```

Step 13: From the MySQL connector ZIP, copy the “mysql-connector-java...” JAR file to **C:\archivespace\lib**



Step 14: Open a command prompt as an administrator. Type **CD**

C:\archivespace\scripts THEN TYPE **setup-database.bat** then press **Enter** keyboard key.

```
C:\Windows\system32>cd C:\archivespace\scripts
```

```
C:\archivespace\scripts>dir
```

```
C:\archivespace\scripts>setup-database.bat
```

```

Administrator: Command Prompt
Volume in drive C has no label.
Volume Serial Number is 965F-EB81

Directory of C:\archivesspace\scripts

04/04/2016  11:26 AM    <DIR>          -
04/04/2016  11:26 AM    <DIR>          ..
04/04/2016  11:26 AM                323 backup.bat
04/04/2016  11:26 AM                371 backup.sh
04/04/2016  11:26 AM                277 checkindex.bat
04/04/2016  11:26 AM                366 checkindex.sh
04/04/2016  11:26 AM                296 ead_export.bat
04/04/2016  11:26 AM                356 ead_export.sh
04/04/2016  11:26 AM                217 find-base.sh
04/04/2016  11:26 AM                377 initialize-plugin.bat
04/04/2016  11:26 AM                780 initialize-plugin.sh
04/04/2016  11:26 AM                301 password-reset.bat
04/04/2016  11:26 AM                359 password-reset.sh
04/04/2016  11:26 AM    <DIR>          rb
04/04/2016  11:26 AM                274 setup-database.bat
04/04/2016  11:26 AM                328 setup-database.sh
                13 File(s)                4,625 bytes
                3 Dir(s)      28,647,473,152 bytes free

C:\archivesspace\scripts>setup-database.bat
    
```

Step 15: Navigate to C:\archivesspace\launcher and run service.bat

```

C:\archivesspace\scripts>cd C:\archivesspace\launcher
C:\archivesspace\launcher>service.bat

Administrator: Command Prompt

C:\archivesspace\launcher>dir
Volume in drive C has no label.
Volume Serial Number is 965F-EB81

Directory of C:\archivesspace\launcher

04/04/2016  11:26 AM    <DIR>          -
04/04/2016  11:26 AM    <DIR>          ..
04/04/2016  11:26 AM                776 archivesspace.bat
04/04/2016  11:26 AM                4,470 archivesspace.sh
03/29/2016  07:07 PM    <DIR>          backup
04/04/2016  11:26 AM    <DIR>          ead_export
04/04/2016  11:26 AM                8,339 launcher.rb
04/04/2016  11:26 AM                658 launcher_init.rb
04/04/2016  11:26 AM    <DIR>          lib
04/04/2016  11:26 AM    <DIR>          password_reset
04/04/2016  11:26 AM    <DIR>          plugin_gems
04/04/2016  11:26 AM                1,083 request_handler.rb
04/04/2016  11:26 AM    <DIR>          scripts
04/04/2016  11:26 AM                3,980 service.bat
                6 File(s)                19,306 bytes
                8 Dir(s)      28,553,060,352 bytes free

C:\archivesspace\launcher>service.bat
    
```

Figure 6: ArchivesSpace Service

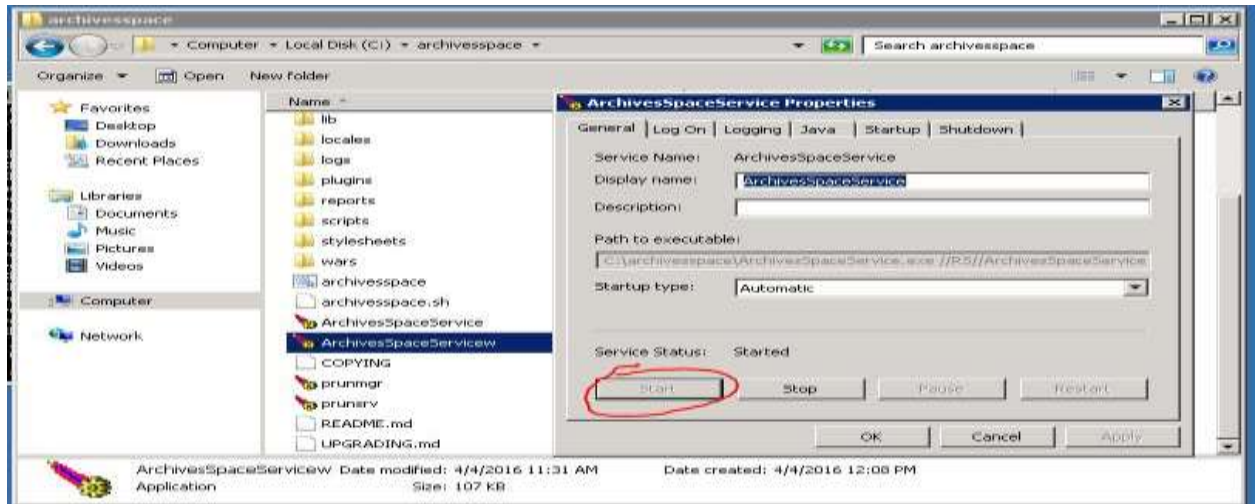
Step 16: Start ArchivesSpaceService

```

C:\archivesspace\launcher>cd C:\archivesspace
c:\archivesspace>ArchivesSpaceService //RS//
c:\archivesspace>ArchivesSpaceService //ES//
    
```

Please wait until it restarts the ArchivesSpace service daemon.

Or Browse to **C:\archivesspace** and double-click **ArchivesSpaceService.w**. Start the service. It will take ArchivesSpace about a minute to start in the background.



Step 17: Go into Windows firewall and allow inbound connections for ArchivesSpace TCP ports 8080, 8081, 8089, and 8090.



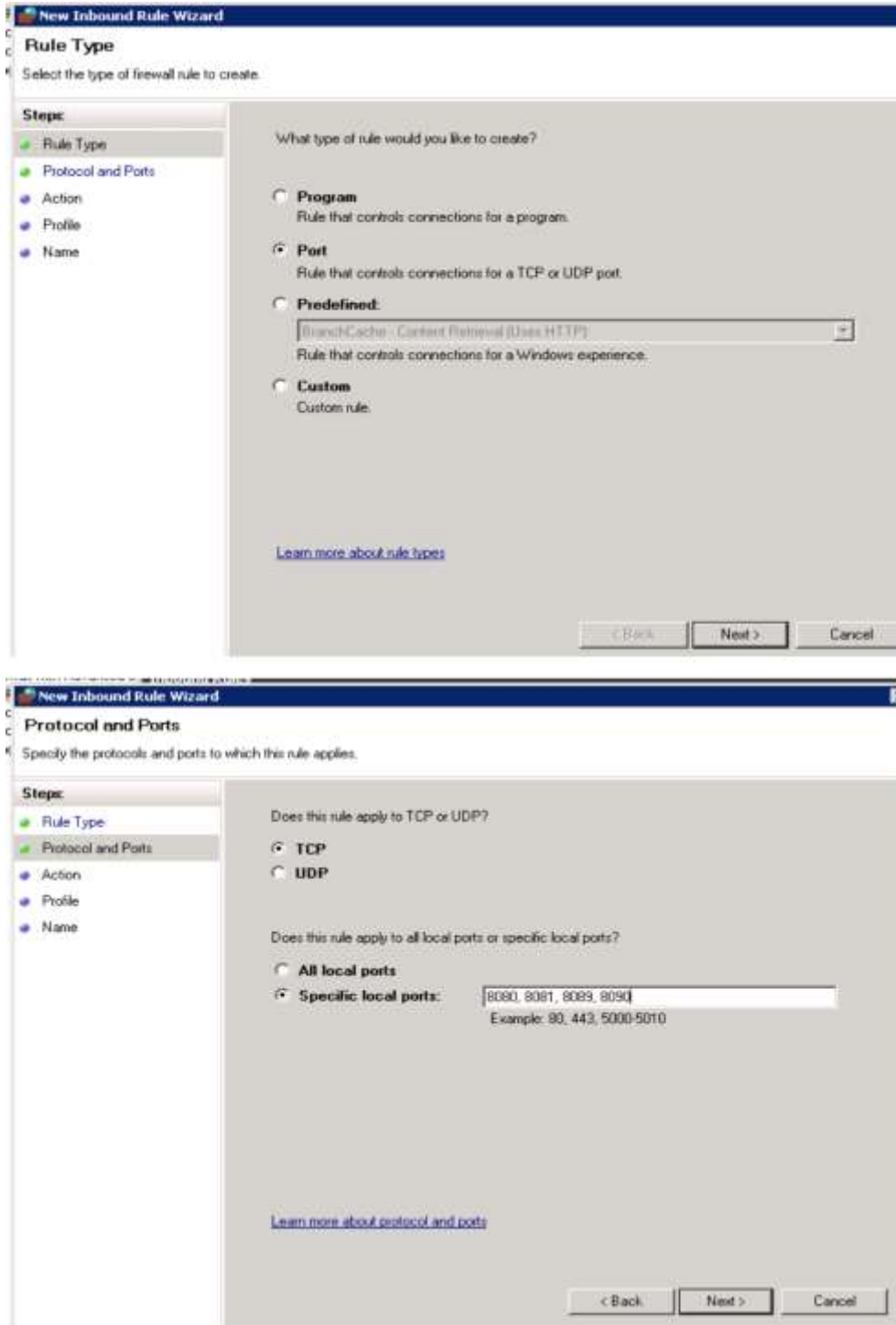
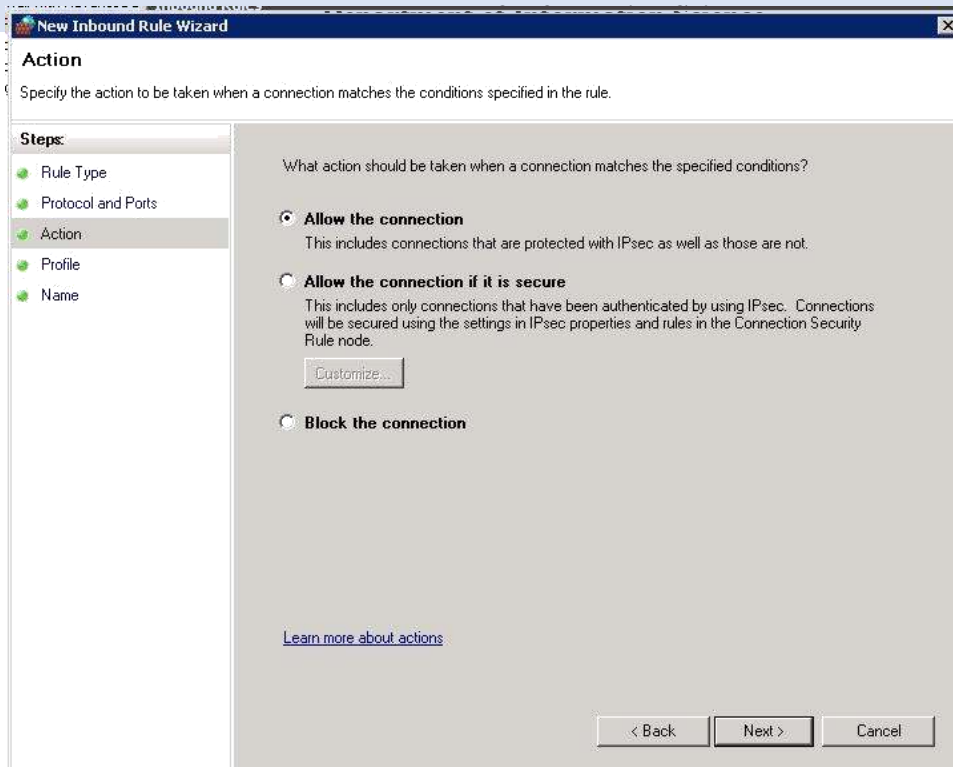


Figure 7: Allow Ports on Firewall Rules



Step 18: Browse ArchivesSpace type <http://localhost:8080> for staff interface and <http://localhost:8081> for public interface on your browser.

Getting Started

- Open ArchivesSpace. The application will launch in a web browser. Google Chrome or Mozilla Firefox are preferred browser options for this application. If you are having trouble getting the link to launch in either of those browsers, consult the archivist in charge of ArchivesSpace..
- The current URL for ArchivesSpace is <http://serveripaddress:8080> or <http://serverhostname:8080> Choose “**Sign In**” at the top right portion of the screen. Log in using your username and password. The database will open to this screen:

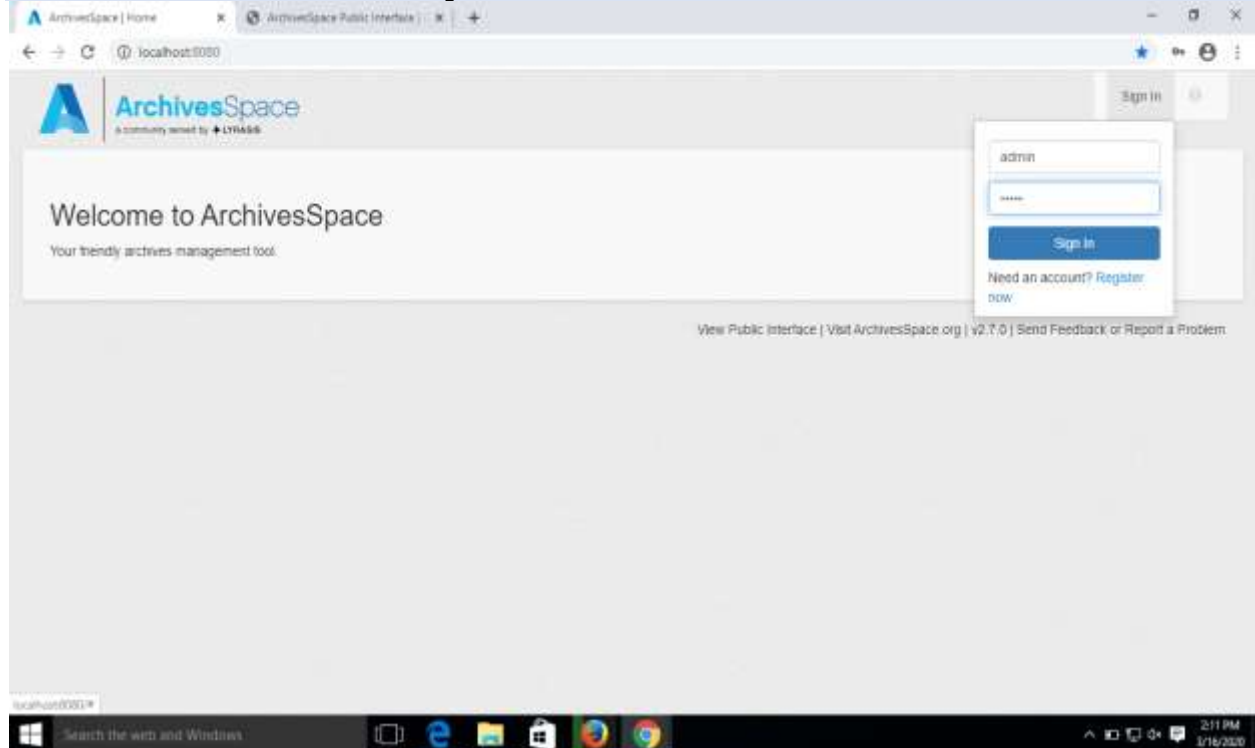


Figure 8: ArchivesSpace Admin Page

First admin login: The default admin user is **admin and admin password is **admin****

1. User: **admin**
2. Password :**admin**



Figure 9: AS Login

3.1.2 ArchivesSpace installation on Ubuntu

Prerequisites

Prerequisites to AS Install java, MySQL Server, wget, curl, leafpad, unzip.

```
sudo apt-get install openjdk-8-jre mysql-server unzip  
sudo apt-get install leafpad wget curl
```

Download the latest stable release and move it to desired directory

wget

<https://github.com/archivesspace/archivesspace/releases/download/v2.7.1/archivesspace-v2.7.1.zip>

```
unzip archivesspace-v2.7.1.zip  
sudo mv archivesspace /opt
```

Download the mysql connector

```
cd /opt/archivesspace/lib  
curl -Oq http://central.maven.org/maven2/mysql/mysql-connector-java/5.1.34/mysql-connector-java-5.1.34.jar
```

Set up a Database

```
mysql -u root -p  
mysql> create database archivesspace default character set utf8;  
mysql> grant all on archivesspace.* to 'as'@'localhost' identified by 'YOURPASSWORD';  
mysql> exit;
```

Note: archivesspace is the name of your database and as is database user.

After copying config.rb for backup purpose update **config.rb** to tell it about your database preferences

```
sudo leafpad /opt/archivesspace/config/config.rb
```

Insert the following line:

```
AppConfig[:db_url] =  
"jdbc:mysql://localhost:3306/archivesspace?user=as&password=PASSWORD&useUnicode=true&characterEncoding=UTF-8"
```

Note: to update config.rb please check archivesspace configuration on window server 2012

Run the database setup script:

```
/opt/archivesspace/scripts/setup-database.sh
```

Set up a daemon and start archivesspace

```
sudo ln -s /opt/archivesspace/archivespace.sh /etc/init.d/archivesspace  
sudo service archivesspace start
```

Change admin users name and password

1. Open staff interface
2. Login
3. Click system ...manage users. Then edit
4. Fill the required information properly including strong password.
5. Click update account

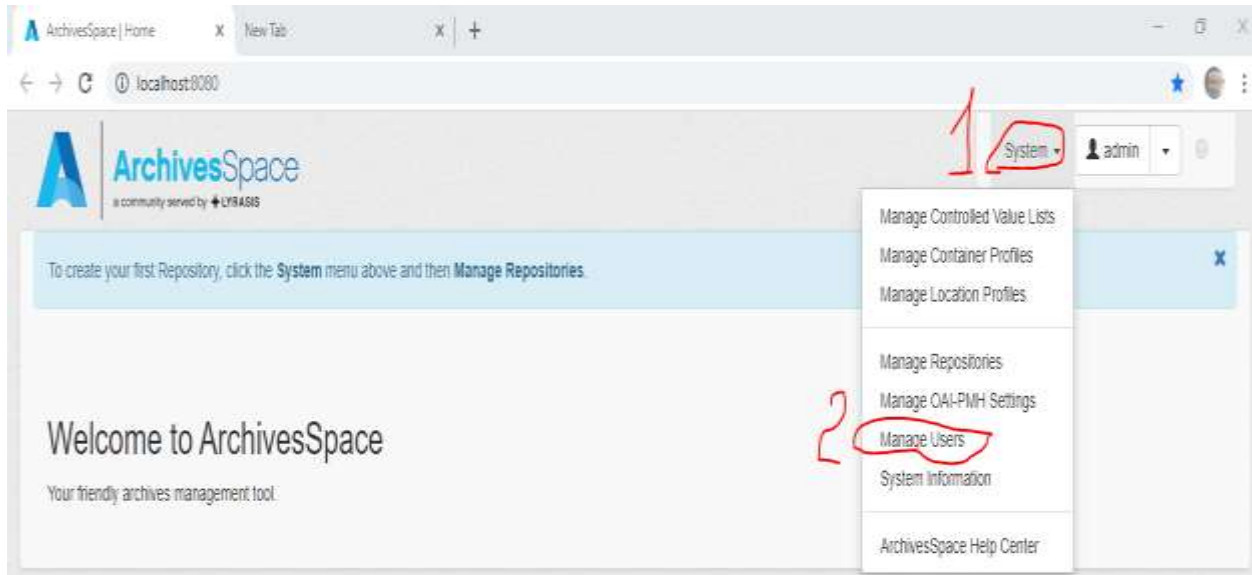
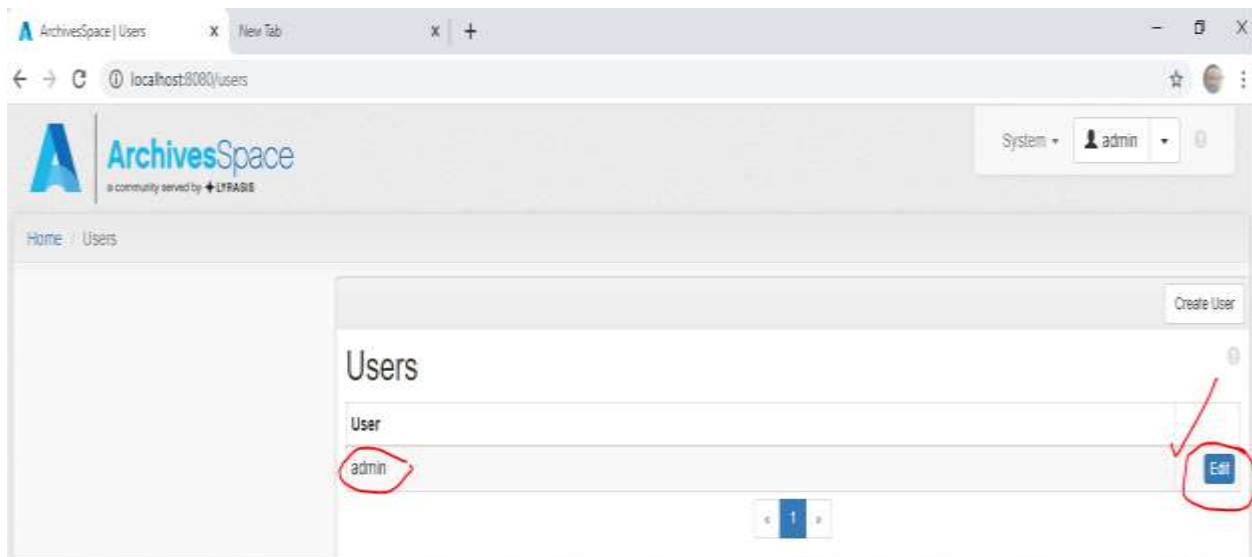
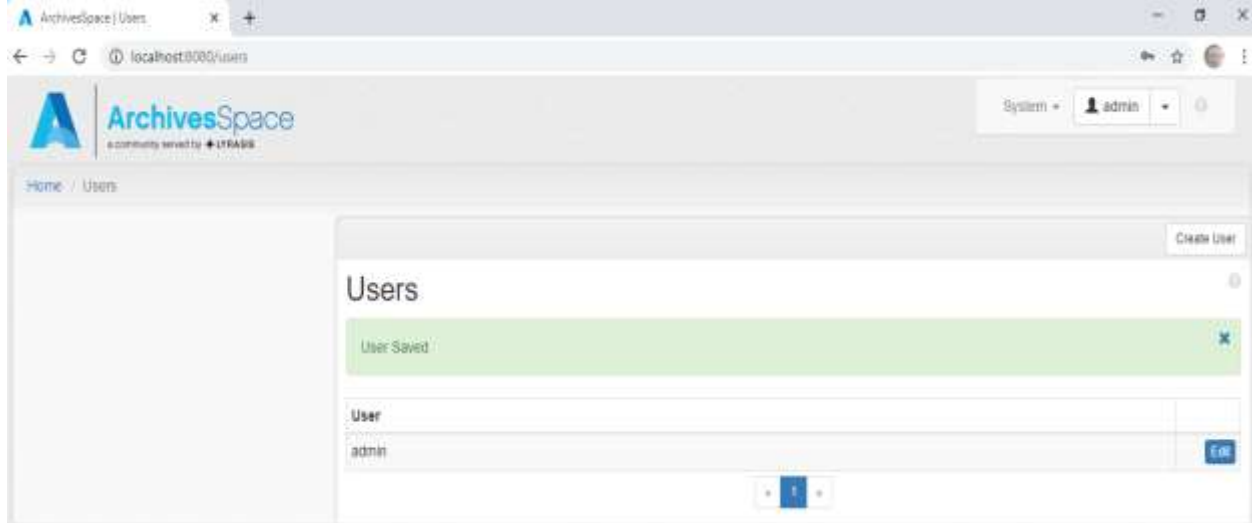


Figure 10: Mange Users

Then



Then



ArchivesSpace Default Public User Interface

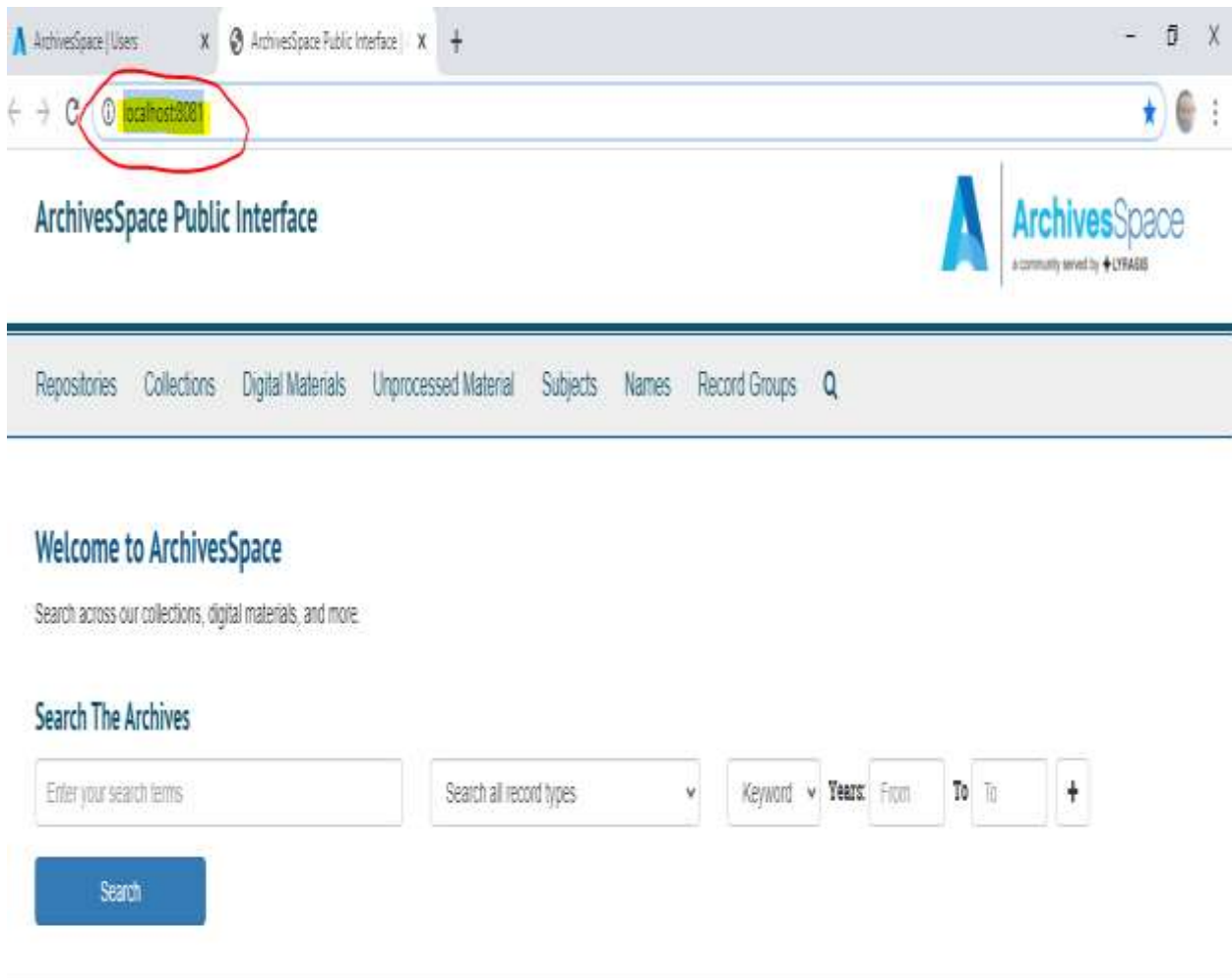


Figure 11: Default Public User Interface

Add user

1. Click system
2. Click manage user
3. Click add user
4. Fill the required information
5. Click Create Account

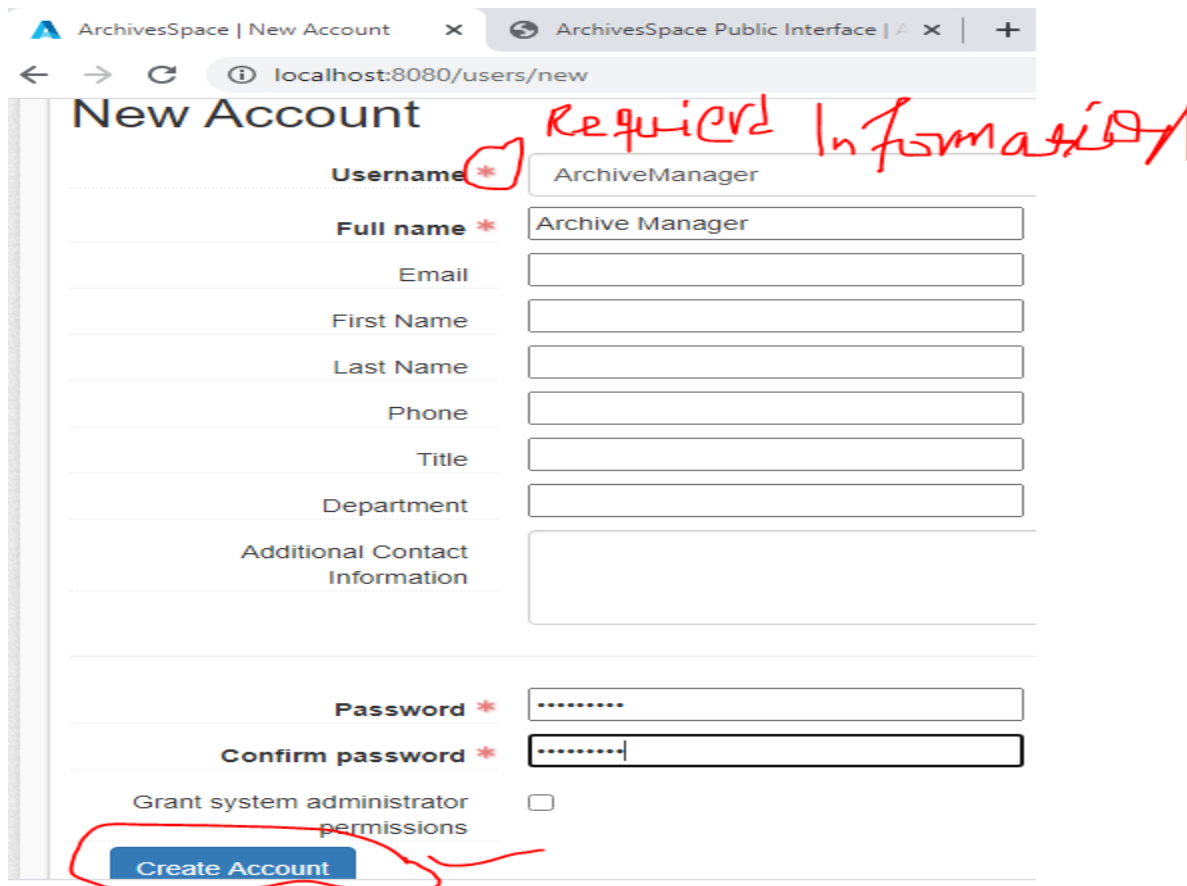


Figure 12: Create New Account

Logout

1. Login with specified user
2. Click admin dropdown menu
3. Click logout

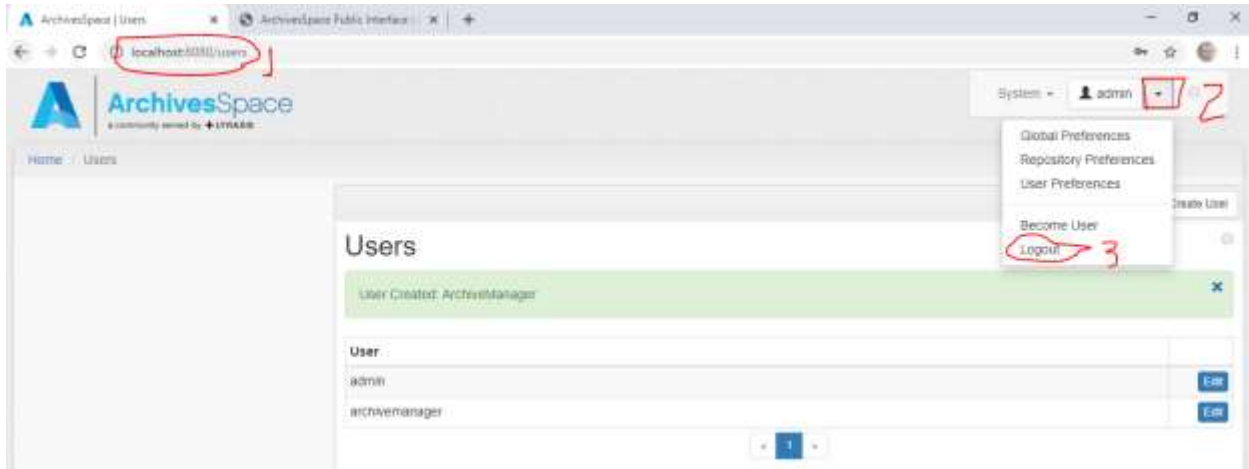


Figure 13: AS Logout

Manage Repositories

1. Open with ArchivesSpace admin page
2. Click system
3. Click manage repositories
4. Click on Create repositories
5. File repository details
6. Click save

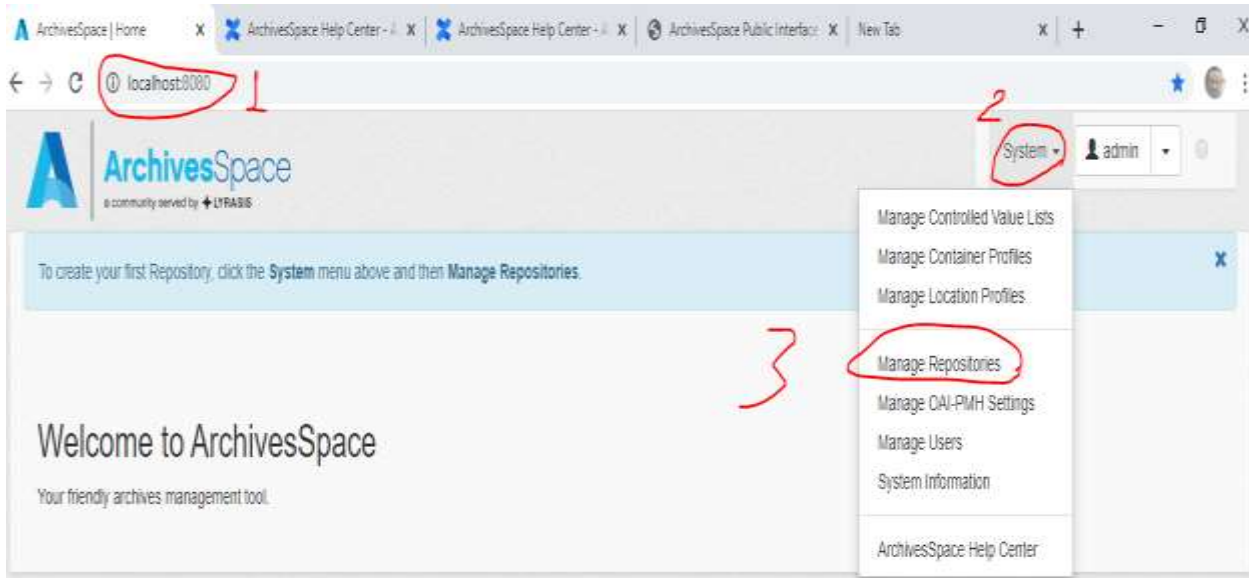
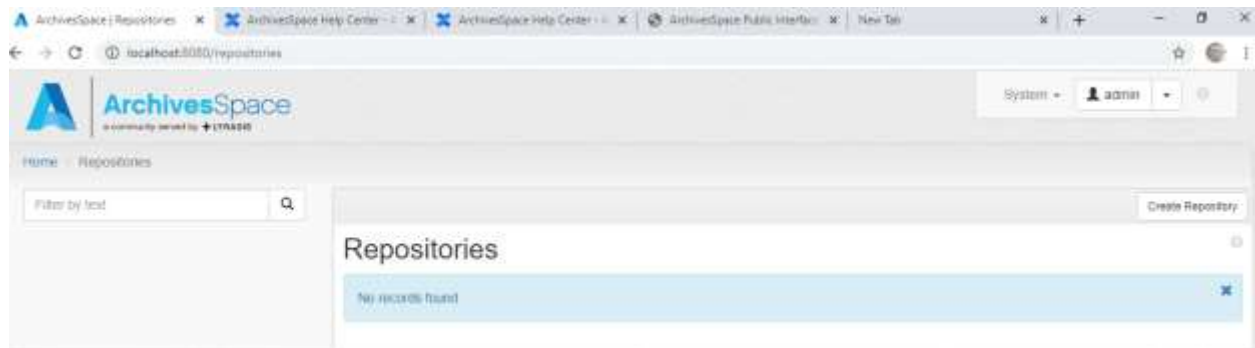
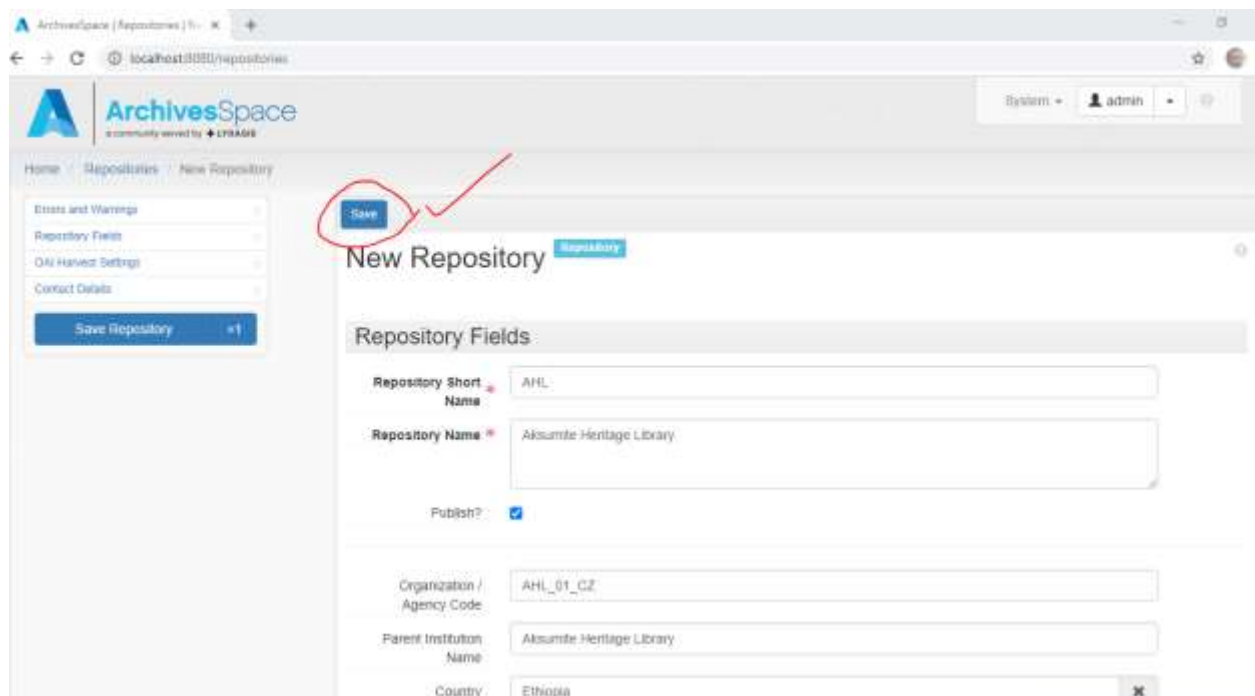


Figure 14: Manage Repositories

Then



Then



Then

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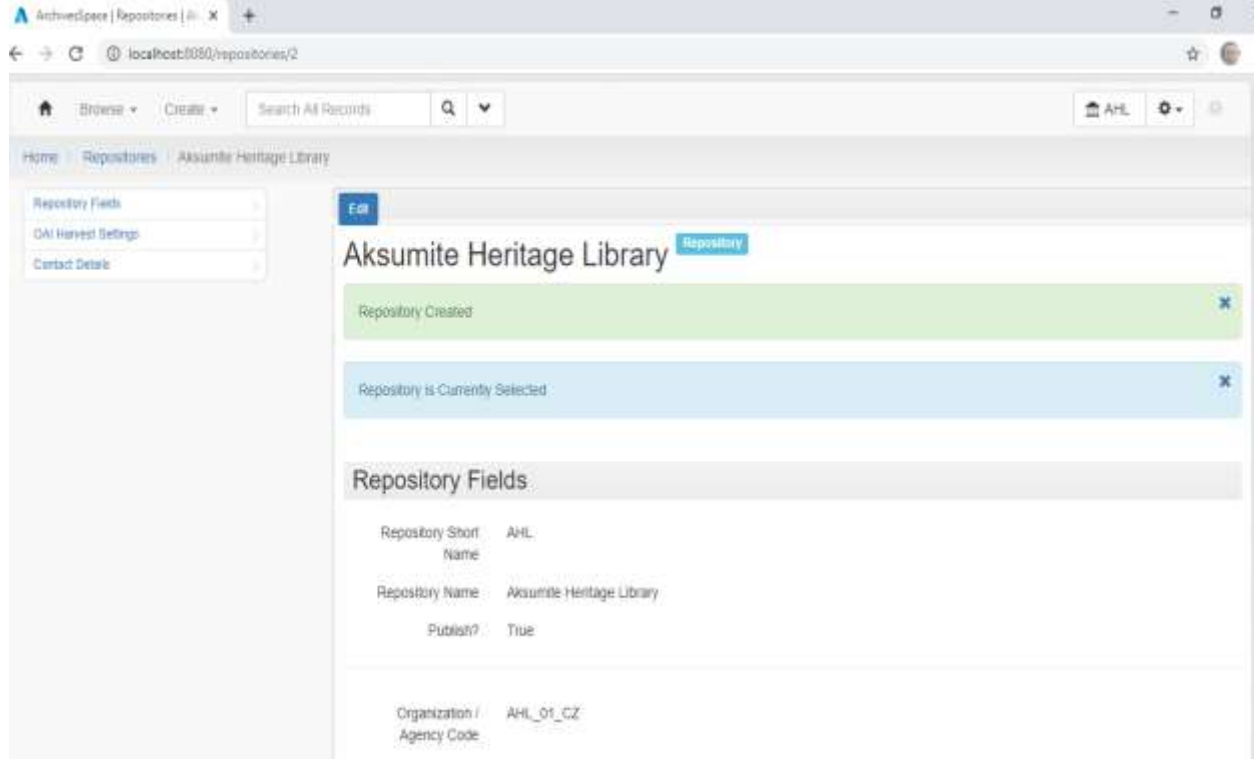
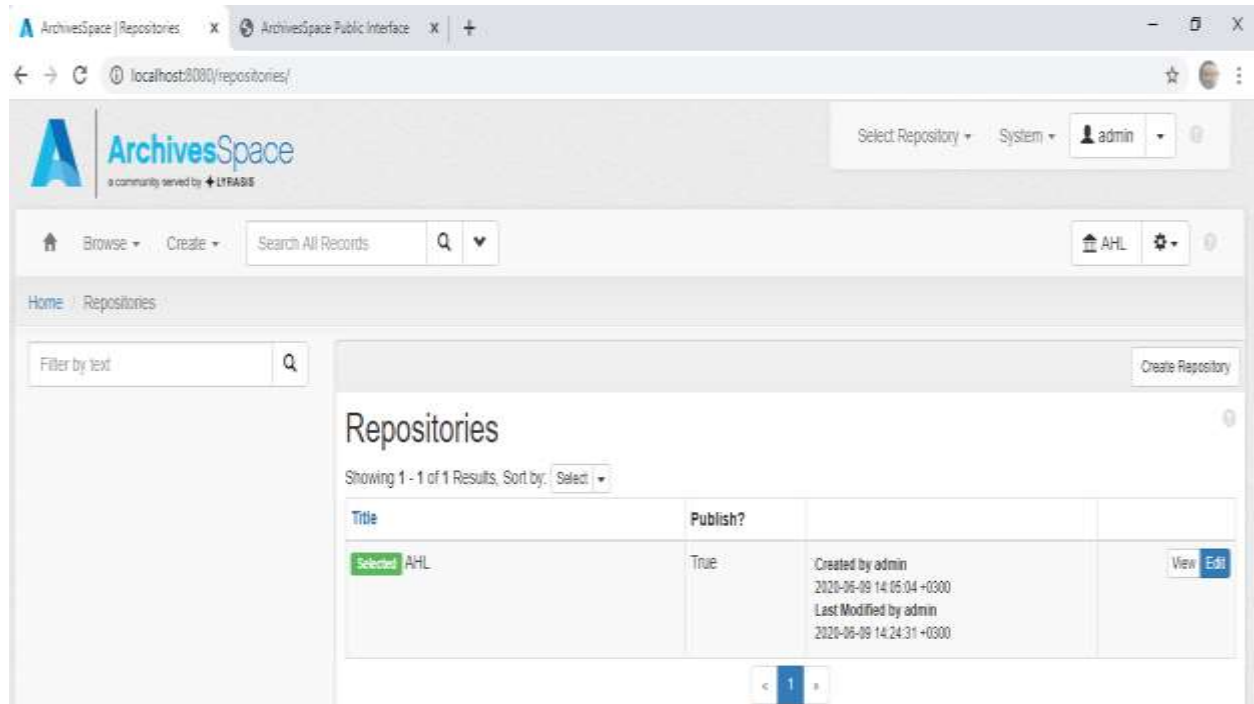
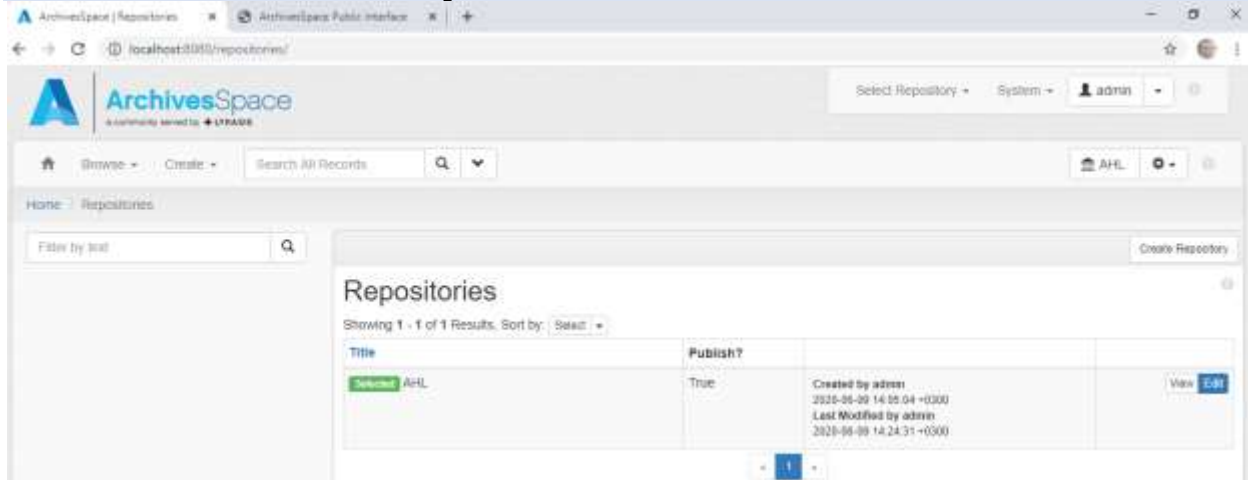


Figure 15: Aksumite Heritage Foundation Library as Repository

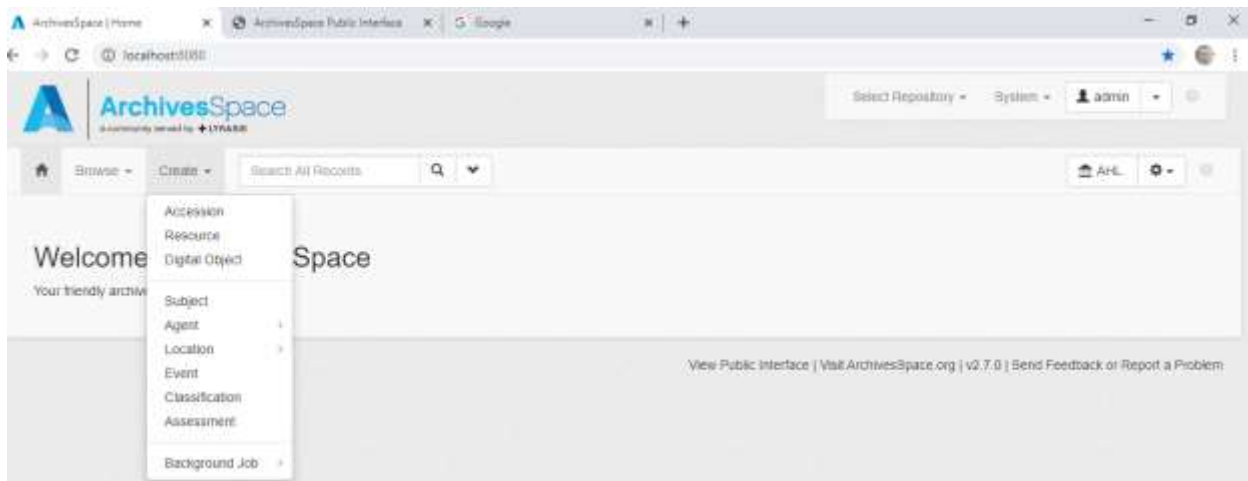
Then



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THEN



3.1.2. Customization

Configuration Setting

- In all ArchivesSpace releases, there is a configuration file in the config directory called **config.rb**
- Some of the configuration settings in this file can be used to customize the Public User Interface
- When you change the values in the **config.rb** file, don't forget to remove the pound signs (#) at the beginning of the modified lines to enable the configuration changes
- In most of the following examples, the default values are provided
- After saving the changes, don't forget to restart ArchivesSpace!

Change Header Color

This example will change colors across all pages. The stylesheets for the Public User Interface are in the `public/app/assets/stylesheets/archivespace` directory in the core code base.

- First, add an empty `layout_head.html.erb` file to the `plugins/local/public/views` directory
- Next, create a `css` file with the customization you want in it and place the `css` file in the `plugins/local/public/assets` directory
- Finally, add the reference to the `css` file into the `layout_head.html.erb` file from the first step. For example, if the `css` filename is `custom_colors.css` it should be like this:

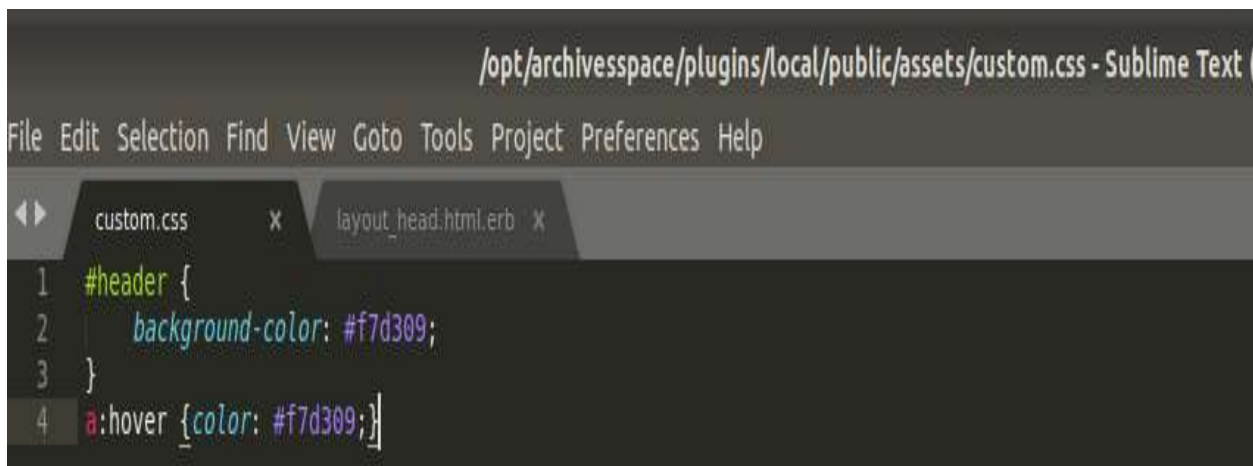
```
<%= stylesheet_link_tag "#{@base_url}/assets/custom_colors.css" %>
```



The screenshot shows the Sublime Text editor interface. The title bar indicates the file path: `/opt/archivespace/plugins/local/public/views/layout_head.html.erb - Sublime Text (UNREGISTERED)`. The menu bar includes File, Edit, Selection, Find, View, Goto, Tools, Project, Preferences, and Help. The tab bar shows two open files: `custom.css` and `layout_head.html.erb`. The main editor area displays the following code on line 1:

```
<%= stylesheet_link_tag "#{@base_url}/assets/custom.css" %>
```

Custom.css



The screenshot shows the Sublime Text editor interface for the `custom.css` file. The title bar indicates the file path: `/opt/archivespace/plugins/local/public/assets/custom.css - Sublime Text (UNREGISTERED)`. The menu bar includes File, Edit, Selection, Find, View, Goto, Tools, Project, Preferences, and Help. The tab bar shows two open files: `custom.css` and `layout_head.html.erb`. The main editor area displays the following CSS code:

```
1 #header {  
2     background-color: #f7d309;  
3 }  
4 a:hover {color: #f7d309;}
```

Figure 16: Edit Header CSS Color

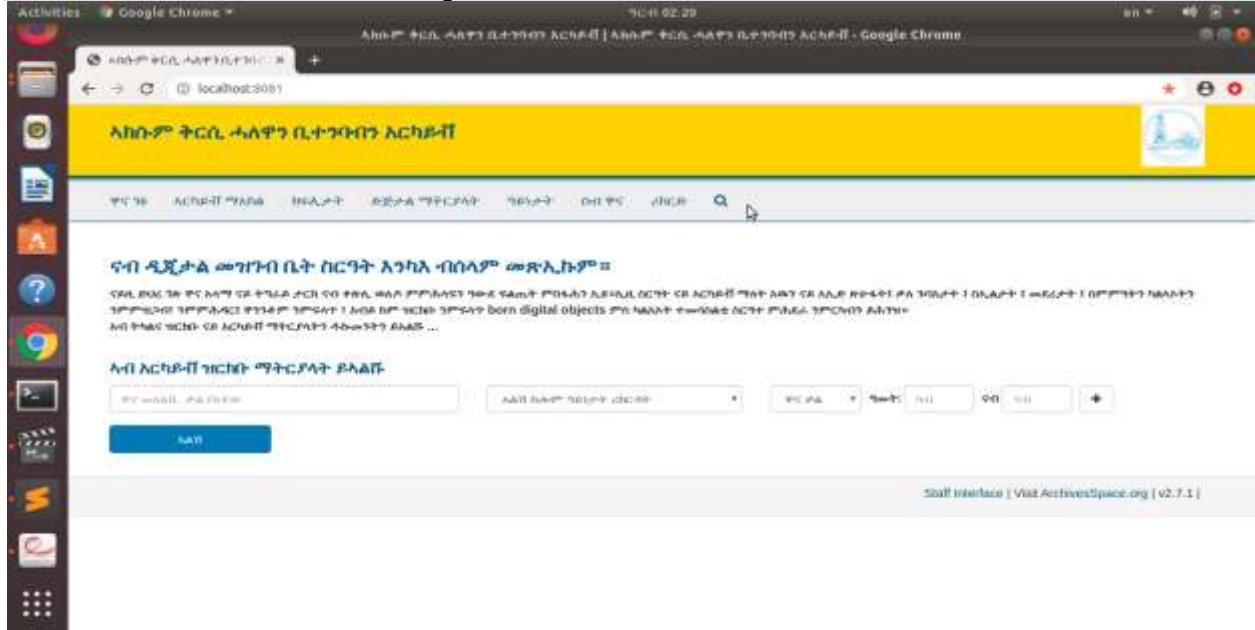


Figure 17: Customized Header Color

Customizing branding image

To change the branding image,

- In the `plugins/local/public` directory, add a new directory called `assets` and put the branding image in there
- Modify the `config.rb` file by setting `AppConfig[:pui_branding_img]` equal to the name of the branding image in the `assets` directory – eg.
`AppConfig[:pui_branding_img] = 'my_branding_image.png'`
- Restart ArchivesSpace

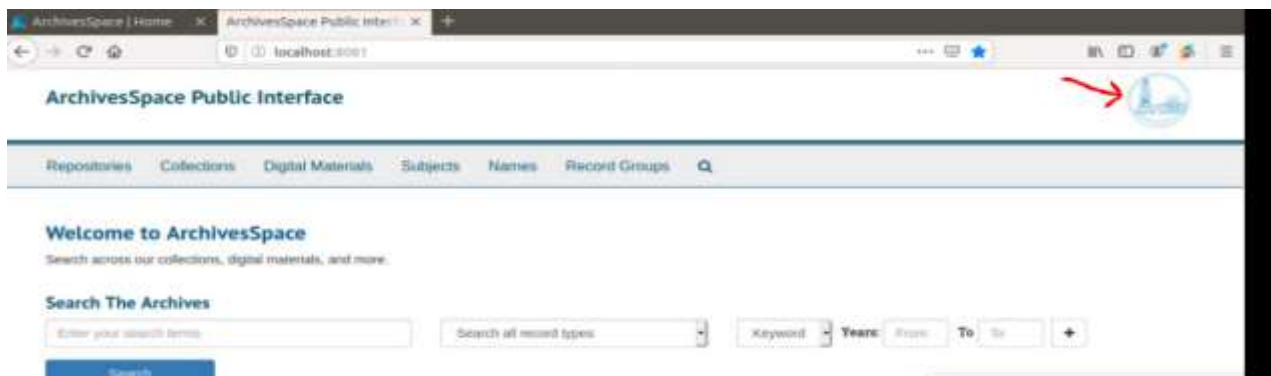


Figure 18: PUI Logo

Add Home Link

- In the `plugins/local/public` directory, add a new file called `plugin_init.rb` and put this line of code in it:

```
Plugins::add_menu_item('/', 'Home', 0)
```
- If the file already exists, just add the line above to the beginning of the file.

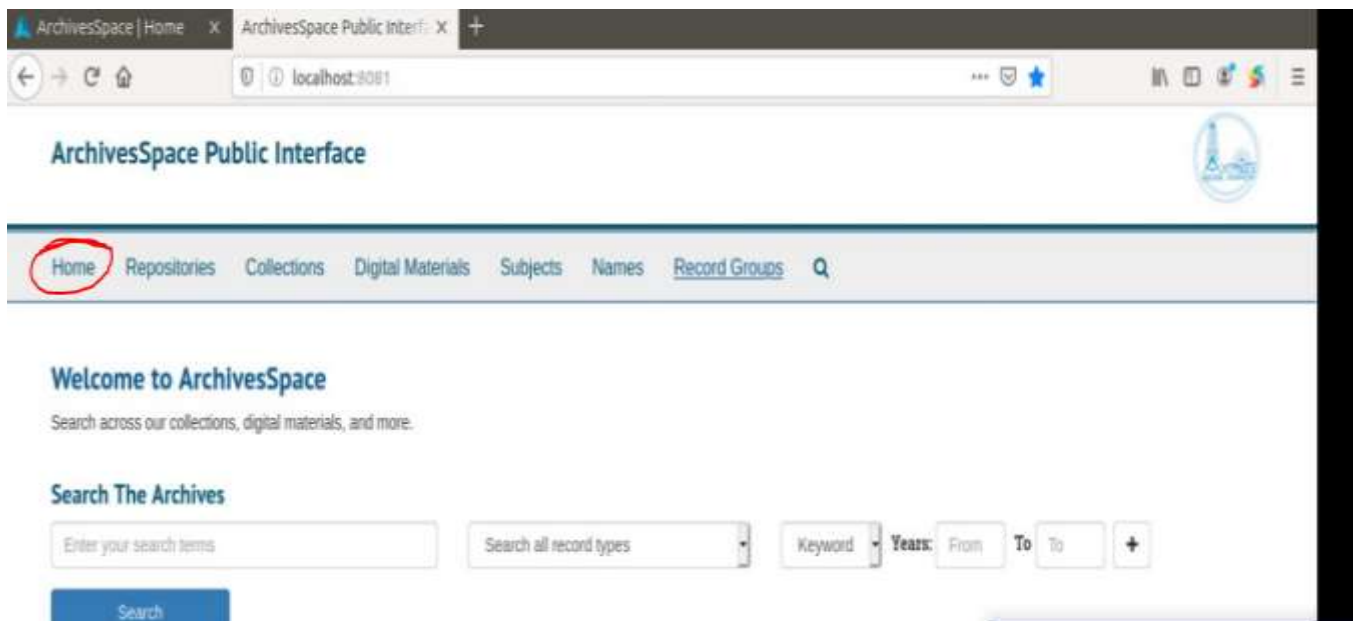


Figure 19: Home Link

Change Links on navigation toolbar

You can remove links on the navigation toolbar by setting any of the following to true:

```
AppConfig[:pui_hide][:repositories] = false    AppConfig[:pui_hide][:subjects] = false
AppConfig[:pui_hide][:resources] = false      AppConfig[:pui_hide][:agents] = false
AppConfig[:pui_hide][:digital_objects] = false AppConfig[:pui_hide][:classifications] = false
AppConfig[:pui_hide][:accessions] = false     AppConfig[:pui_hide][:search_tab] = false
```

Default

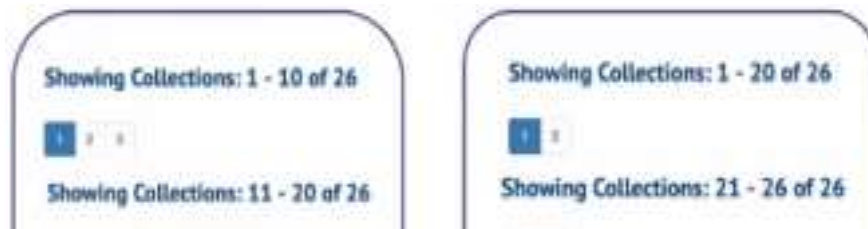


New



Change the Number of Search Result per Page

The configuration variable for the number of search results per page is `AppConfig[:pui_search_results_page_size]`. The default is 10.



3.2. User Manual

The ArchivesSpace web based digital archival collection management is a Web portal for browsing and searching guides and data about archival, manuscript, and record collections at the library and archival Collections. ArchivesSpace has both a public user interface and a staff-side interface to ArchivesSpace and collections management data.

SANDBOX

For those who would like to try out ArchivesSpace without installing the application on their own servers, an ArchivesSpace sandbox is available. The links below provide access to the interface for archival staff and the interface for the general public.

Archives Staff: <http://sandbox.archivesspace.org/>

Public: <http://sandbox.archivesspace.org/public/>

sandbox.archivesspace.org

Login: **admin** | Password: **admin**

Figure 22: Demo Site

In the Archives Staff interface, use the login and password **admin/admin** to access all of the features of the application. If you create a separate user account, be sure to associate the user account with an existing repository and permission group or create a new repository and associate the user account with it. Please note that the sandbox is for testing purposes only. Records created in the sandbox are cleared out frequently as updates are made to the application.

Browse: it is opposite of searching it is the process of finding information graphically without using keyword unlike search.



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<http://archivesspace.org/community/whos-using-archivesspace>.

Appendix

A. Glossary of Terms

Terms	Description
Accession	A transaction by which a repository legally and physically acquires custody of materials deemed to have archival value. The accession may result from a transfer of records from another office in the repository's institution, from a purchase, or from a gift. The recording of the formal acceptance into custody of an acquisition
Accession record	A form or log that summarizes standard information about the process of transferring materials to a repository. An accession record may be for a single item or an aggregation of materials.
Agent	Persons, families, or corporate bodies that have a specified relationship (such as source, creator, topic, rights owner) to archival material or to an event
browsing	opposite of searching
Classification	Grouping terms that define a repository's overall arrangement scheme
Collection	Documents or material of any kind that have accumulated as part of the normal activity of an organization, business or individual and been kept as a unit in an archival
containers	package or housing for holding archival materials
Digital Material	A broad term encompassing digital surrogates created as a result of converting analogue materials to digital form (digitization), and "born digital" for which there has never been and is never intended to be an analogue equivalent, and digital records.
Digital Object	Archival materials in digital format; can be born-digital or digitized materials
Event	Specific actions that one or more agents undertook in relation to one or more archival objects at a specific date and time
External document	files related to archival materials that are external to ArchivesSpace, such as inventories provided by donors
Finding Aid	Containing detailed, indexed, and processed information about a specific collection of records within an <i>archive</i> .
Keyword	An ordered list that sorts each entry under all nontrivial words in the title.

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Metadata	Metadata is commonly defined as “data about data.” Metadata is frequently used to locate or manage information resources by abstracting or classifying those resources or by capturing information not inherent in the resource.
Record Group	Describes a unit of materials, from an item to a manuscript collection or record group, which is managed according to archival principles. The record group can contain links to Digital Object records and material instances (e.g., text, microform, tape).
Report	Provide summary information about different characteristics of a repository’s holdings
Repository	a physical or intellectual entity with archival holdings
Resource	collections; can range from a single item to aggregations of any size and complexity
Subject	the principal theme or topical contents of an item or group of materials as well as format characteristics
URI	Enter detailed additional information about your repository, including Organization/Agency Code, Parent Institution Name, Country, Home Page URL, Branding Image uniform resource locator URL (for a repository logo that should appear on your finding aids), and information concerning Contact Details (address, phone, etc.)
Acquisition	The process of adding to the holdings of a records center/ archives (2) by transfer, deposit, purchase, gift or bequest.
Inclusive dates	The dates of the oldest and most recent items in a collection, series or folder.
Provenance	The origin or custody of the materials in a collection . Provenance is important for judging the integrity of a collection. A collection with a shared provenance can provide insights into the creator's life and work.
Series	Item or documents arranged in accordance with a filing plan/ system or maintained as a unit because they relate to a particular function or subject, result from the same activity, have a particular form, or because of some other relationship arising out of their circumstances of their creation or use.
Access	The right, opportunity, means of finding, using or retrieving information.
Archives	Records of organizations and individuals that have been selected for indefinite retention on the basis of their continuing value for legal, administrative, financial or historical research purposes;
De-accession	The process by which an archives, museum or library permanently removed accessioned materials for its holdings.

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Holdings	All material held in an Archive or records repository.
container	The means by which material enclosures are physically controlled in a repository. Container types include box, disc, file, etc.
extent	A description of the physical quantity of the material described. E.g. 4 folders
Home	The first screen a user see after logging in to ArchivesSpace. Users can return to this screen from any location by clicking on the home icon.
Location records	Location records identify and describe the shelving locations (shelves, drawers, file cases, bins, walls, etc.) where archival materials are permanently stored. They also enable the tracking of archival materials to a temporary location where they may be in use, e.g., reading room.
public interface	The ArchivesSpace public interface allows users to browse, search, and display descriptive records within an institution's ArchivesSpace installation. Users with appropriate permissions may connect to the staff interface from the public interface through "edit" links to view non-public information that is not displayed in the public interface.
staff interface	Accessible only to authenticated staff, the ArchivesSpace staff interface is where staff create, edit, and manage records and other administrative data within an institution's ArchivesSpace installation. Staff can connect from the staff interface to the public staff interface through links in order to view the public version of ArchivesSpace descriptive records.

B. Main Configuration Setting (config.rb)

```
1 AppConfig[:db_url] = "jdbc:mysql://localhost:3306/archive?user=tekleweyni&password=Gedish$2c2o4useUnicode=true&characterEncoding=UTF-8"
2 AppConfig[:backend_url] = "http://localhost:8083"
3 AppConfig[:frontend_url] = "http://localhost:8090"
4 AppConfig[:public_url] = "http://localhost:8081"
5 AppConfig[:oai_url] = "http://localhost:8082"
6 AppConfig[:solr_url] = "http://localhost:8090"
7 AppConfig[:indexer_url] = "http://localhost:8091"
8 AppConfig[:docs_url] = "http://localhost:8888"
9 AppConfig[:locale] = :en
10 AppConfig[:plugins] = ['local', 'lcmsf']
11 AppConfig[:frontend_proxy_url] = proc { AppConfig[:frontend_url] }
12 AppConfig[:public_proxy_url] = proc { AppConfig[:public_url] }
13 AppConfig[:enable_backend] = true
14 AppConfig[:enable_frontend] = true
15 AppConfig[:enable_public] = true
16 AppConfig[:enable_solr] = true
17 AppConfig[:enable_indexer] = true
18 AppConfig[:enable_docs] = true
19 AppConfig[:enable_oai] = true
20 AppConfig[:use_jetty_shutdown_handler] = true
21 AppConfig[:jetty_shutdown_path] = "/skod"
22 AppConfig[:frontend_theme] = "default"
23 AppConfig[:public_theme] = "default"
24 AppConfig[:feedback_url] = " "
25 AppConfig[:allow_user_registration] = true
26 AppConfig[:help_enabled] = true
27 AppConfig[:help_url] = "https://archivesspace.atlassian.net/wiki/spaces/ArchivesSpaceUserManual/overview"
28 AppConfig[:help_topic_base_url] = "https://archivesspace.atlassian.net/wiki/spaces/ArchivesSpaceUserManual/pages/"
29 AppConfig[:shared_storage] = proc { File.join(AppConfig[:data_directory], "shared") }
30 AppConfig[:pui_search_results_page_size] = 10
31 AppConfig[:pui_branding_img] = '/assets/images/archivesspace_small.png'
32 AppConfig[:pui_hide][:accessions] = true
33 AppConfig[:pui_enable_staff_link] = true
34
```

Figure 24: Config.rb

C. Evaluation of the Web Based Digital Archival Management System

Purpose: this evaluation helps us understand the positive side and negative side of the web based digital archive management system. The identification of area of weakness and strength is mandatory in the implementation of web based digital archive management system.

Field of specialization: _____

No	Criteria	Poor	Fair	good	Very good	Excellent
1	How do you evaluate the usability of the web based digital archive management system?					
2	Is the web based digital archive management system localized or multilingual (audience centered)?					
3	Does the web based digital archive management system provide error messages ?					
4	How do you evaluate the ArchivesSpace web based digital archive management system integration level and Interoperability with Digital Repository Systems ?					
5	How do evaluate the availability of help/support (Demo/Sandbox), forums, and training of the web based digital archive management system?					
6	Does the system support for Importing/Exporting metadata					
7	How do you evaluate the level of customization ?					
8	How do you evaluate the ability to discover archival collections?					
9	How do you evaluate speed in browsing and searching archival records?					
10	How do you evaluate the security and user management of the web based digital archive management system?					

Positive sides of the websites?

Negative side of the websites?

Put General Comments

D. Who is using ArchivesSpace?

<http://archivesspace.org/community/whos-using-archivesspace>

