Presenters

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RUNNING TESTS IN ARCHIVESPACE

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ArchivesSpace Webinar
December 14, 2017
CORE COMMITTERS GROUP

- The ArchivesSpace Core Committers Group is a committee that assists in the creation and integration of community contributions to ArchivesSpace

- Currently seven members from a number of archives and organizations
WHY ARE WE TALKING ABOUT TESTING?

- The Core Committers Group decided that tests are a requirement for all new contributions to the ArchivesSpace core codebase.

- Running/writing tests can be a barrier to working with large codebases.
WHAT IS TESTING?

• Testing is an automated method to ensure that new features/changes to an application work properly
• Tests check that new code works properly, and that old code continues working
• Tests typically check lots of tiny things (unit tests), which ensure that they continue to work as the application evolves
TESTING PROCESS

• Create a test database
• Start up an application
• Populate the database with preset test data
• Test the application’s interface
• Test that the data renders in the application properly
• Test data exports from the application
• Delete the test database
TESTING PROCESS, ASPACE-FLAVORED

• Create a temporary database
• Start up ArchivesSpace and connect it to the database
• Populate the database with data
• Test backend retrieval and calculation methods
• Test API endpoints
• Test data serializations (EAD, EAC, et al)
• Test public and staff interfaces via browser automation
• Test Solr indexer
• Shut down ArchivesSpace
• Delete the temporary database
ASPACE’S TESTING ARCHITECTURE

• ArchivesSpace uses a combination of testing tools
• Backend – rspec
• Indexer – rspec
• Staff interface – selenium
RUNNING TESTS IN FOUR EASY STEPS

1. git clone https://github.com/archivesspace/archivesspace.git
2. cd archivesspace
3. build/run bootstrap
4. build/run test
RUNNING PARTIAL TESTS

- You can run parts of the test suite by changing the build/run argument
  - build/run backend:test
  - build/run selenium:test
  - build/run indexer:test
EVEN MORE PARTIAL TESTS

- The `-Dexample="search terms"` command
  - Searches spec files for "search terms" and executes only those tests
  - Targeted search terms allow for running single tests
• Contributing to core ASpace
  • CCG is here to help!
• Writing tests
ArchivesSpace Testing Sub-Team

Miloche Kottman
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Webinar on Testing
December 14, 2017
About the Testing Sub-team

• Split from Features Prioritization and Testing team – January 2016

• Members from both the ArchivesSpace User Advisory and Technical Advisory Councils

• Current Roster:
  – Miloche Kottman (User Advisory Council)
  – Brittany Newberry (User Advisory Council)
  – Robert Lay (User Advisory Council)
  – Cory Nimer (Technical Advisory Council)
  – Dallas Pillen (Technical Advisory Council)
  – Ed Busch (Technical Advisory Council)
  – Scott Hanrath (Technical Advisory Council)
Tested bugs/features indicated as delivered or ready for testing in JIRA

- Split between testers – assigned two per issue
- Testers select “Start watching this issue” in the Watchers section
  → Email notifications sent if/when anyone edited the JIRA issue
- Indicate test results in Comment section of JIRA issue page
- Sign up for JIRA account on the Development JIRA
  http://development.archivesspace.org/
If the feature worked as expected or the bug seemed to have been fixed, we indicate that in the Comments.

If/when a feature doesn't work:
- Document the steps performed
- Describe the results you received
- Detail the results you expected

Supplement with screenshots or other documentation as needed.

---

testcsv_aspace.csv

```
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
IMPORT_ERROR
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Error: &lt;NoMethodError: undefined method `telephones' for nil:NilClass&gt;
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

testcsv_aspace.csv

---

Ed Busch added a comment - 14/Aug/17 12:50 PM

I concur with Miloce though I did not get the error in my test import. I had numbers for agent fax and telephone but neither displayed. I attached Capture, Capture1 and my csv file.

This does not seem to be working.

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Laney McGlohon added a comment - 16/Aug/17 8:20 AM

None of the telephone fields are being populated from the accession csv importer so more than what was done with pull request https://github.com/archivespace/archivespace/pull/931 needs to be done to fix this issue.
Version 2.0 testing and beyond

• Developed testing protocol in Google Sheets
  – Test the application as a whole to make sure things that were previously working still work with changes in the application
• Separate sheets for record types /web page /functional area
• Version 2.1- Call for public testing

<table>
<thead>
<tr>
<th>Accessions</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Objects</td>
<td>Background Jobs</td>
</tr>
<tr>
<td>Search</td>
<td>Reports</td>
</tr>
<tr>
<td>Public Interface</td>
<td>Containers</td>
</tr>
<tr>
<td>Agents</td>
<td>Subjects</td>
</tr>
<tr>
<td>Locations</td>
<td>Repositories</td>
</tr>
<tr>
<td>Users</td>
<td>Events</td>
</tr>
<tr>
<td>Collection Management</td>
<td>Application Management</td>
</tr>
<tr>
<td>Large Trees</td>
<td>Advanced Searching</td>
</tr>
</tbody>
</table>
Testing Process

- Assign two testers per tab
- Test functionality as System Administrator AND another permission level
  - System Administrators can "Become User"
  - Helpful for testing and troubleshooting
Testing Protocol

• Actions that a user can take on each web page are listed
• Pass if the function works as expected
• Fail if it doesn’t
– Summarize problem in Notes area
– Provide screenshots when applicable
<table>
<thead>
<tr>
<th>Resource Functions - permission level: [ ]</th>
<th>Pass</th>
<th>Fail</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Browse Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>View Resource (from Browse list)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edit Resource (from Browse list)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edit Default Values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Component</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Download CSV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Resource (from Browse list)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete Resource</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort results</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Faceting</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Filter by text</td>
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</tr>
<tr>
<td><strong>Create Resource (from Create menu)</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Enter information into all basic information fields and required sub-records</td>
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<td></td>
</tr>
<tr>
<td>Save - try to save once without required information, once with</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Lefthand navigation</strong></td>
<td></td>
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<tr>
<td>- clicking on a section leads to the expected place, if there are multiple entries in a section, number is indicate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resource Toolbar functions from top level</strong> - indicate the buttons that appear for your level of privileges in the notes area</td>
<td></td>
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</tr>
<tr>
<td>Calculate Extent</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Add Event - add 5 kinds of events, note any issues</td>
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<td></td>
<td></td>
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<tr>
<td>Publish All</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Export</td>
<td></td>
<td></td>
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<tr>
<td>- Download EAD (try the different options)</td>
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<tr>
<td>- Download MARCXML</td>
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<td></td>
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<tr>
<td>- Download Container Labels</td>
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<td></td>
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<tr>
<td>- Print to PDF</td>
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<tr>
<td>Merge</td>
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<td></td>
<td></td>
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<tr>
<td>Transfer</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Suppress</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Delete</td>
<td></td>
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</tbody>
</table>
Sandbox

• Install local version – download from github
• ArchivesSpace test site -- http://test.archivesspace.org
• Version information (sorta) indicated at bottom of page
• It doesn't have to be perfect, just make something up
• Try to break it
– Those aren't your records so no worries that you'll lose all your data
• If you discover a bug/error
– Try to replicate the steps to get the bug/error again
– If you can replicate the error “on command” the developers will have an easier time tracking down what is going wrong
– Document what you did to get the error. Provide screenshots if you think it’ll be helpful
<table>
<thead>
<tr>
<th>Search (primary navigation)</th>
<th>x</th>
<th>Added this line to spreadsheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search, Limit to collections</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Search, Limit to digital materials</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Search, Limit to Title field</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Search, Limit to Creator field</td>
<td>x?</td>
<td>Searched for creator name that contains &quot;smith&quot;. Found record for Prudence Wayland.</td>
</tr>
<tr>
<td>Search, Limit to Note fields</td>
<td>x?</td>
<td>I searched for the word &quot;Pages&quot; and limited to Notes fields. I opened the record for &quot;Potatoes in you reducing diet&quot; and looked.</td>
</tr>
<tr>
<td>Search to Dates</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Search, add row</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spreadsheet Notes**

- Completed spreadsheet added to shared folder on Google Drive
- Anything with a comment in the Notes field or has a mark in the Fail column is highlighted.
Questions
Questions?

Thank you for joining us today!