



ArchivesSpace

Upgrading to v1.5.0: Migration and container conversion

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ArchivesSpace



Overview of Upgrade Process

- v1.5.0 upgrade documentation:
 - https://github.com/archivesspace/archivesspace/blob/master/UPGRADING_1.5.0.md
- Key differences with v1.5.0 upgrade:
 - Alters database schema to accommodate new container model
 - Re-sequences archival object records
 - **Converts existing container 1s to top_containers**
 - Requires complete re-index





Container conversion

- Will attempt to merge all mentions of the same container 1 in a resource or accession record into a single **top_container** record
- Detailed explanation / examples:
 - <https://gist.github.com/mark-cooper/96892ab8734cf96a5a6ab0268107ab45>





Know thy containers

- **Scenario 1: Barcodes for every container:**
 - all container 1s that share same barcode become a new top_container
- **Scenario 2: No barcodes, but unique container type / indicator combination:**
 - each unique combination of container 1 type and container 1 number becomes a new top_container (e.g. all box 1s merged to single top_container)
- **Scenario 3: No Barcodes and “parallel container sequences”**
 - Bad stuff might happen...





Parallel sequences?

- **Problem:**
 - No barcodes AND
 - Series 1, Box 1 is NOT the same physical container as Series 2, Box 1.
- **How to identify:**
 - https://github.com/archivesspace/container_checker
- **Solution(s):**
 - Barcode plugin: <https://github.com/archivesspace/barcoder>
 - SQL: <https://gist.github.com/mark-cooper/96892ab8734cf96a5a6ab0268107ab45>





Migration steps

1. Backup your database!! Recommend running test migration on a copy of your database!!
2. Download ArchivesSpace v1.5.0
 - <https://github.com/archivesspace/archivesspace/releases>
 - Download the .zip file and unzip
3. Follow standard upgrade instructions
 - <http://archivesspace.github.io/archivesspace/user/upgrading-to-a-new-release-of-archivesspace/>
4. Start with a new SOLR index
 - Delete data/solr_index/index directory
 - Remove all files from data/indexer_state directory





Migration steps (cont.)

6. Run database migration (`scripts/setup-database.sh|bat`)
 - migrates database to new schema
 - Re-sequences archival objects (may take awhile)
7. Start archivesspace (`archivesspace.sh|bat`)
 - Will kick off container conversion process
 - Application will be unavailable during container migration
 - Can follow progress in log file `logs/archivesspace.out`
 - May take a few hours
8. Rebuild the index
 - Indexer will start when container migration completes
 - May take several hours





Review container conversion errors

- Review container conversion error report (csv)
 - Background Jobs > container_conversion_job > file
- Common causes of conversion errors
 - Containers share same barcode but have different locations or types
 - Containers that share same type/indicator combo have different barcodes (or barcode and no barcode)
 - Container is missing a type or indicator
 - Container levels are skipped (container 1 and container 3, but no container 2)
 - Same container has multiple locations





Understanding error messages

- **“Locations in ArchivesSpace container don't match locations in existing top container”**
 - Two mentions of the same container are assigned to different locations.
The “quantum location” problem.
- **“Mismatch when mapping between barcode and barcode_1”**
 - Same barcode value, but different capitalization or spacing.
- **“Mismatch when mapping between indicator and indicator_1”**
 - Caused when containers share a barcode but have different indicators
 - Or, when there are variations in capitalization or spacing of indicator values (e.g. leading or trailing whitespace)





Resolve conversion errors / repeat

- Locate problem instances
 - Copy/Paste URLs in conversion_job CSV file to navigate to problem record
- Correct the errors in production database
- Re-run the migration!
- Repeat as needed

