<u>**Portico Regression Testing Policy (Operations)**</u>

1. Policy Statement

1.1. To ensure the integrity of ingested content, Portico will conduct regression testing in the Setup environment before deploying any transform or profile to ConPrep for provider content that is already in production. When necessary, regression testing will also be conducted prior to deploying system changes to ConPrep.

2. Implementation Examples

2.1. A test suite for each content provider stream where content is being ingested has been created and is used whenever regression testing is required. Test suites include content that was originally processed without problems as well as content that had validation and/or other issues that were resolved programmatically.

- Test batches are identified from Portico's bug tracking software (JIRA) and from content run in Portico's content processing (ConPrep) system.

- The files for each batch in the test suite should be copied from their storage location to the appropriate provider-named regression directory. From there they will be loaded into ConPrep.

2.2. Transform Changes:

- Regression testing is done by default whenever a transform change is deployed to the Setup environment.

- Where a transform is used for only one content provider, that provider's test suite is used for regression testing.

- Where a transform is used for multiple content providers (typically publishers whose content comes from the same publishing platform), the test suites of all content providers sharing the transform are used for regression testing.

- The correct content provider profile(s) must also be added to the Provider Mapping under the correct provider-specific regression testing entry in order to complete testing.

- Each batch must process successfully until reaching the "Inspect" activity, or, if known problems exist, must make it to the activity at which it previously failed.

- If the data team has recommended visual inspection of certain components, inspection must occur, otherwise testing is considered complete once "Inspect" is reached. The nature and degree of inspection needed will be specified by the data team in the related JIRA.

- If any batch is not tested successfully, and the failure is deemed to be due to a problem with the transform, the problems must be reported through JIRA and additional changes must be made to the transform.

- Deployment of the transform software to the Production environment will occur only when the entire test suite processes cleanly with both auto and manual QC checks completed.

2.3. Profile Changes:

- All profile changes are made in the Setup environment.

- Regression testing using the profile and appropriate transform must be successfully completed before the profile is deployed to the Ingest environment.
  - Each batch must process successfully until reaching the "Inspect" activity, or, if known problems exist, must make it to the activity at which it previously failed.

2.4. System Changes:

- The decision as to whether or not to conduct regression testing in the Setup environment prior to the deployment of system changes to the Production environment is made on a case-by-case basis by the technology team.

- The technology team will also advise as to which or how many content providers require testing.

- Regression testing is considered successful if all batches make it to the "Inspect" activity or, at a minimum, make it past the activity that is affected by the system change.

3. Document History

3.1. Approved by: Kate Wittenberg

3.2. Last Review Date: 8/7/2023

3.3. Reviewed by: Amy Kirchhoff, Karen Hanson, Kate Wittenberg, Sandra Parr

3.4. Change history:

Version	Date	Change	Author
0.1	6/1/2009	Drafted.	Stephanie Orphan
1.0*	7/29/2009	Minor mods.	Amy Kirchhoff
1.1*	8/5/2009	Added reviewed by line.	Amy Kirchhoff
1.2	4/4/2011	Updated the logo	Amy Kirchhoff
1.3*	3/27/2016	Approved	Amy Kirchhoff
1.4*	8/7/2023	Change "publishers" to "content providers"	Karen Hanson

* An approved version of this document.