**Kuali-Research 1912 Deployment**

The deployment of kuali-research for new releases is a process that involves the following actions:

1. Pull the relevant source code for kc and related modules from the kualico github repos:
   1. KC
   2. Cor-main
   3. Research-portal
2. Merge the pulled code with our own copy of the codebase for the prior release. KC takes the most time here as it involves merging upstream code into a highly customized bu version of the codebase.
3. Tag and push the merged source code to our own bu-ist github repos.
4. Run jobs in Jenkins to (one for each module) to build a docker image for each module.  
   Steps of the docker image construction include:
   1. Pull the source code
   2. Compile/build the module into artifacts
   3. Diagnose/Debug issues introduced by new changes introduced with the release.
5. Run jobs in Jenkins to push docker images to our cloud-based docker registry.
6. Run jobs in Jenkins that issue commands to each kuali-application host to pull and run new docker containers based on the image that is now newly available in the docker registry.
7. Smoke test the kc website for any runtime issues introduced by the new release.

**Environments**:

Sandbox, CI.  
Steps 1-7 above are done for both the sandbox and CI environments:

1. Sandbox: step 2 for KC is minor as we do not merge with any customization of our own.
2. CI: CI takes longer, but once completed, marks near completion for the overall deployment effort.

QA, Staging, Production.  
Only steps 6 and 7 are necessary for these environments.

**Potential Impacts:**

Experience to date shows that almost all impacts in terms of complicating or delaying release timelines occur at the following steps:

* Step 4  
  The cor-main module, for example, frequently undergoes changes that change the way the application is built and configured. Such changes are not usually documented by kualico and debugging efforts combined with zendesk ticketing may apply.
* Step 7  
  Secondarily, changes to the new release may introduce issues/bugs that show up during runtime. This require a revisit of step 4.

**1912 Release Impacts:**

Build problems where encountered for cor-main. Fixing gulp version mismatch since core upgraded to node 12.x (worked as of the november level code). This issue was resolved and the release is not endangered.