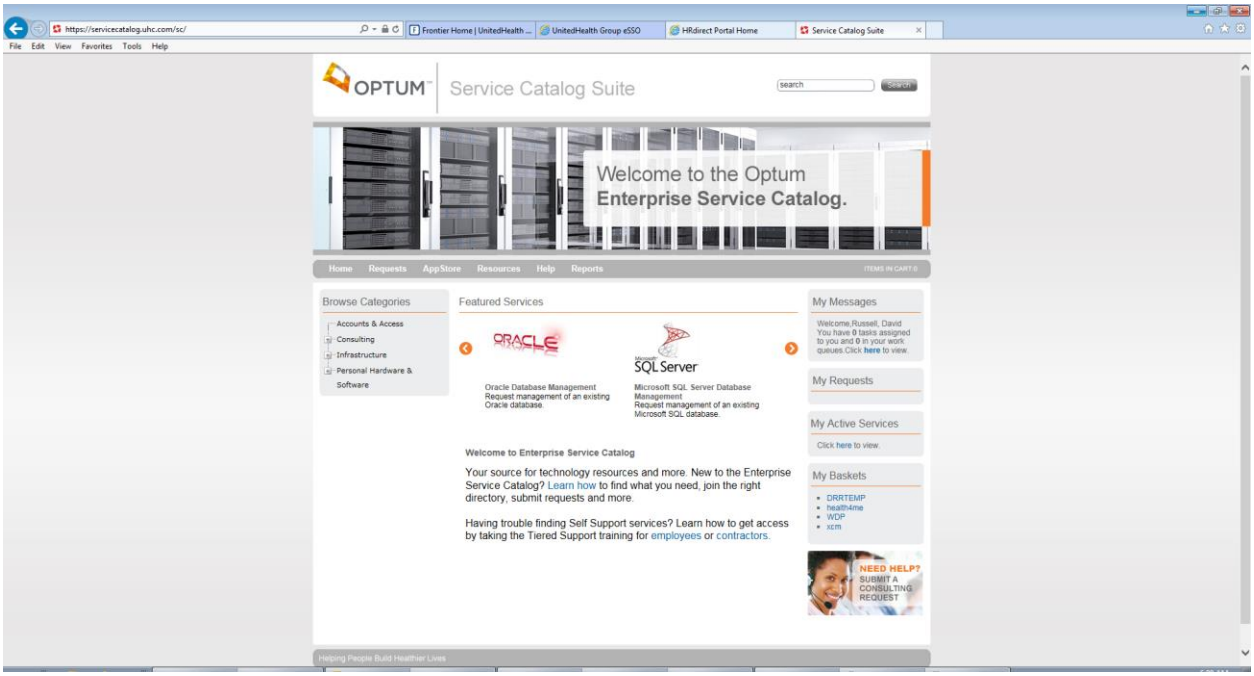
XL deploy & Release Installation Process/Configuration:

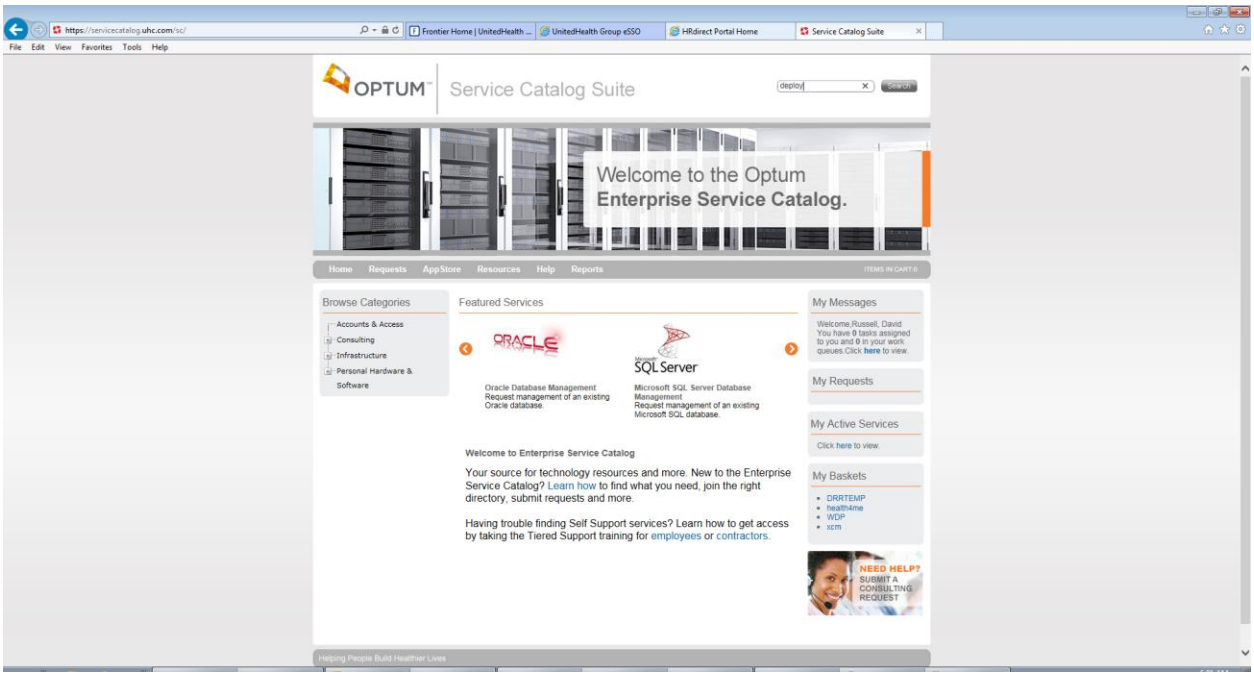
XL deploy & Release Installation Process:

You use the service catalog to request XL Deploy/Release be setup for your application(s).

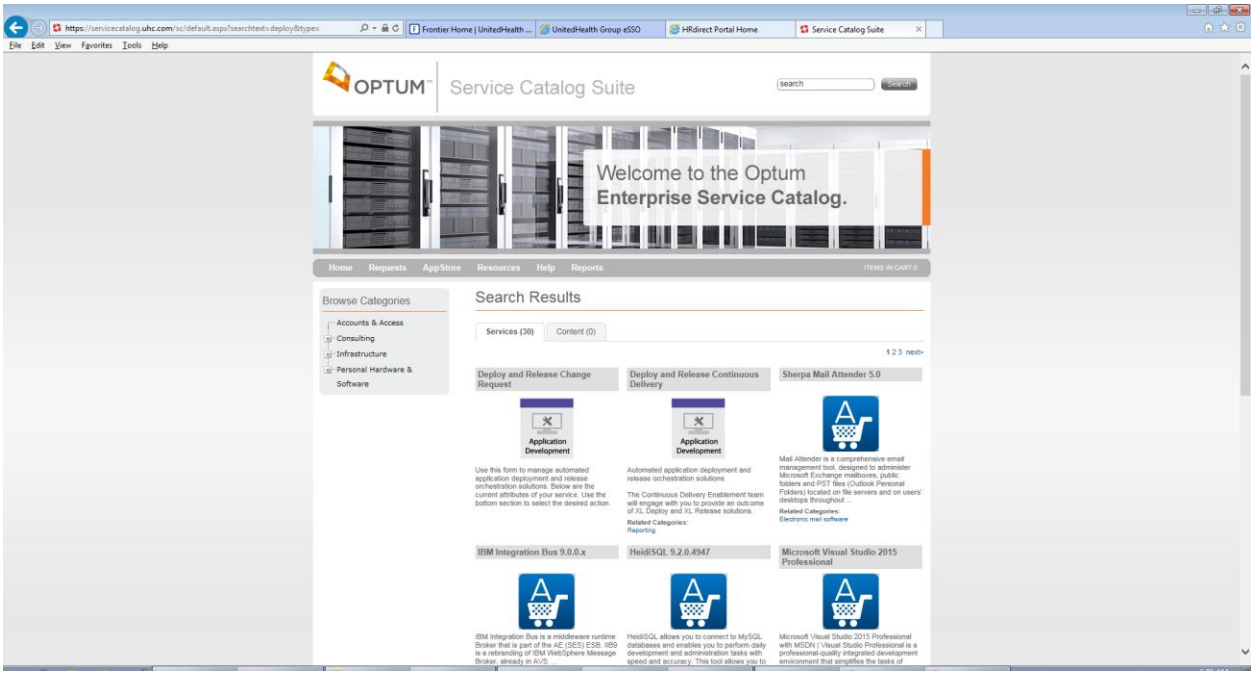
The URL for the service catalog: https://servicecatalog.uhc.com/sc



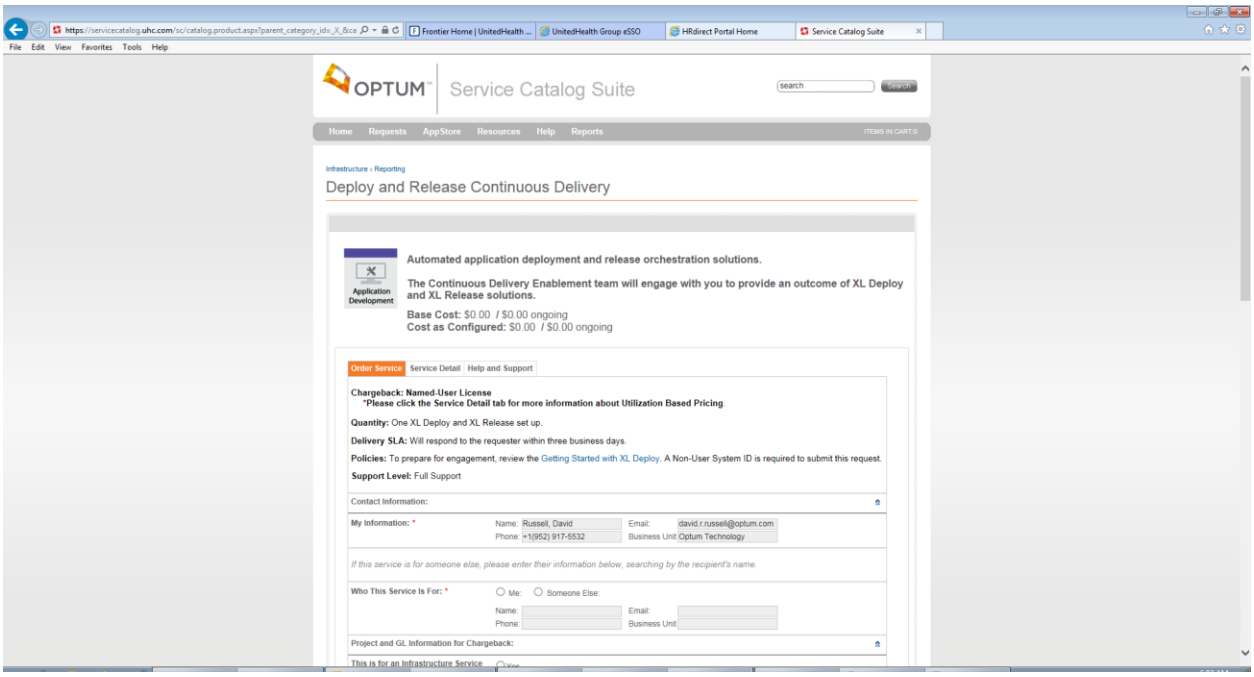
In the search field in the upper right corner use the word deploy to find the XL Deploy request:

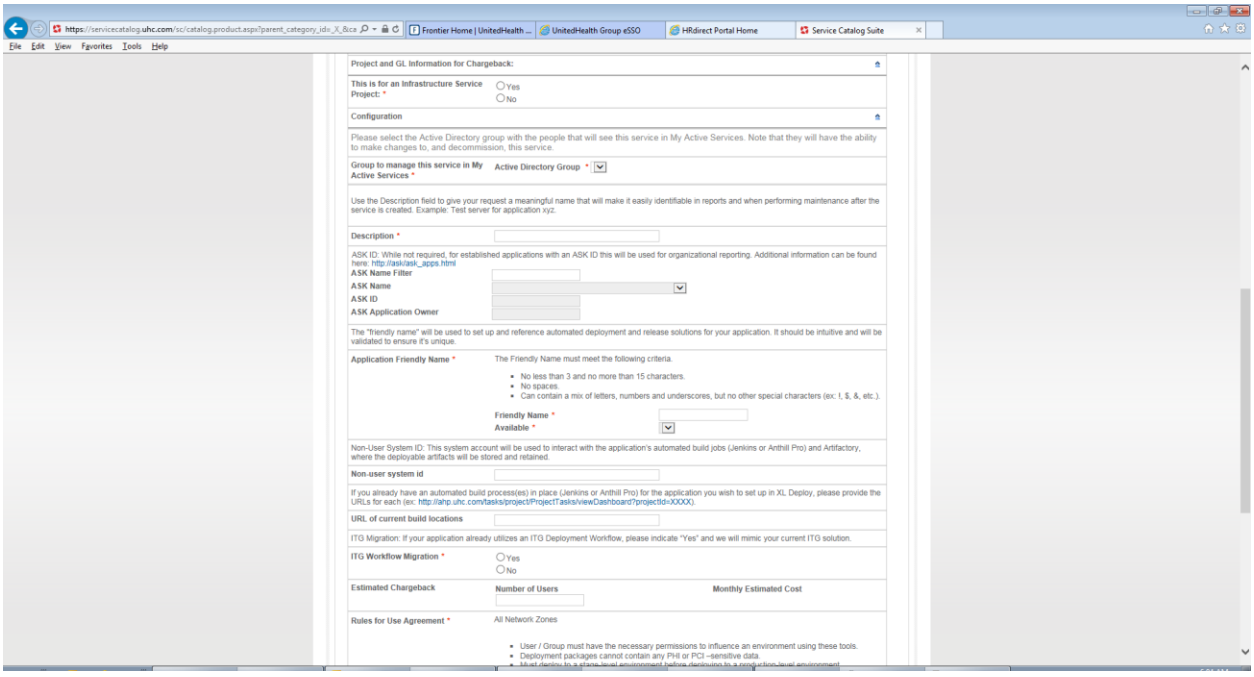


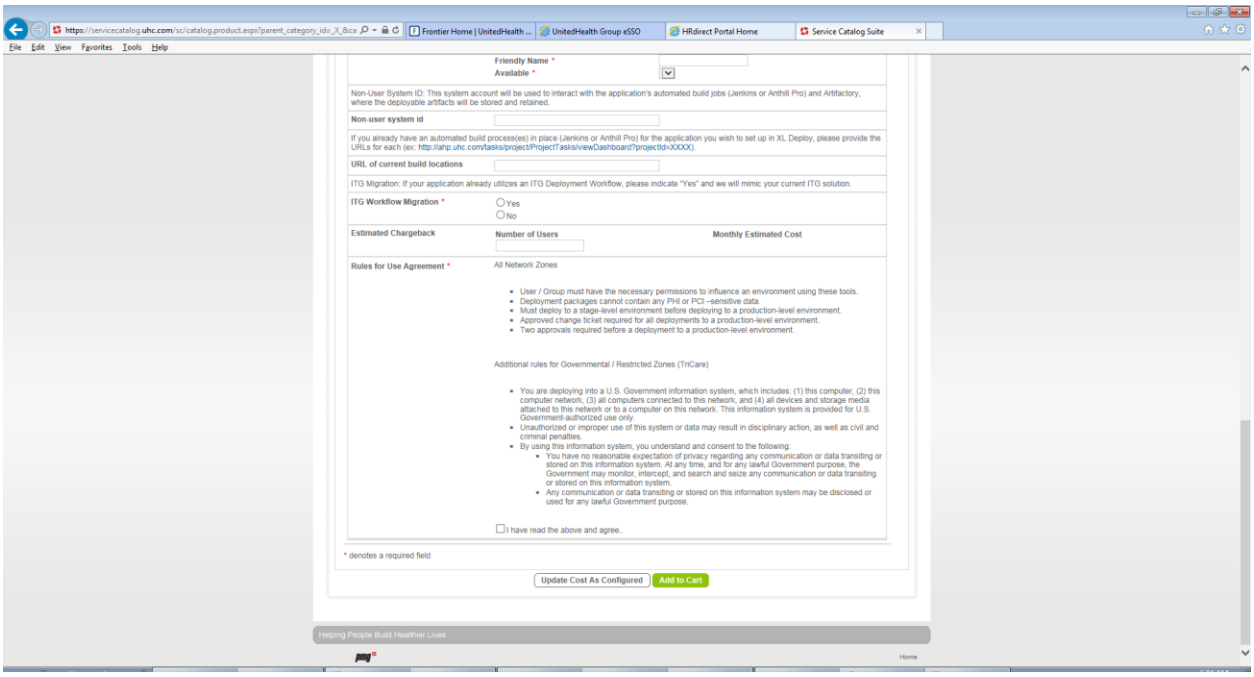
Click the search button



Select the Deploy and Release Continuous Delivery item (middle top on this screen shot)


https://servicecatalog.uhc.com/sc/catalog.product.aspx?parent_category_id=_X_&ca
Frontier Home | UnitedHealth ...
UnitedHealth Group eSSO
HRdirect Portal Home
Service Catalog Suite
File Edit View Favorites Tools Help
OPTUM
Service Catalog Suite
search
Search
Home Requests AppStore Resources Help Reports
ITEMS IN CART:0
Infrastructure › Reporting
Deploy and Release Continuous Delivery
Application Development
Automated application deployment and release orchestration solutions.
The Continuous Delivery Enablement team will engage with you to provide an outcome of XL Deploy and XL Release solutions.
Base Cost: $0.00 / $0.00 ongoing
Cost as Configured: $0.00 / $0.00 ongoing
Order Service
Service Detail
Help and Support
Chargeback: Named-User License
*Please click the Service Detail tab for more information about Utilization Based Pricing.
Quantity: One XL Deploy and XL Release set up.
Delivery SLA: Will respond to the requester within three business days.
Policies: To prepare for engagement, review the Getting Started with XL Deploy. A Non-User System ID is required to submit this request.
Support Level: Full Support
Contact Information:
My Information: *
Name: Russell, David
Email: david.r.russell@optum.com
Phone: +1(952) 917-5532
Business Unit: Optum Technology
If this service is for someone else, please enter their information below, searching by the recipient's name.
Who This Service Is For: *
Me:
Someone Else:
Name:
Email:
Phone:
Business Unit:
Project and GL Information for Chargeback:
This is for an Infrastructure Service


https://servicecatalog.uhc.com/sc/catalog.product.aspx?parent_category_id=_X_&ca
Frontier Home | UnitedHealth ...
UnitedHealth Group eSSO
HRdirect Portal Home
Service Catalog Suite
File Edit View Favorites Tools Help
Project and GL Information for Chargeback:
This is for an Infrastructure Service Project: *
Yes
No
Configuration
Please select the Active Directory group with the people that will see this service in My Active Services. Note that they will have the ability to make changes to, and decommission, this service.
Group to manage this service in My Active Services *
Active Directory Group *
Use the Description field to give your request a meaningful name that will make it easily identifiable in reports and when performing maintenance after the service is created. Example: Test server for application xyz.
Description *
ASK ID: While not required, for established applications with an ASK ID this will be used for organizational reporting. Additional information can be found here: http://ask/ask_apps.html
ASK Name Filter
ASK Name
ASK ID
ASK Application Owner
The "friendly name" will be used to set up and reference automated deployment and release solutions for your application. It should be intuitive and will be validated to ensure it's unique.
Application Friendly Name *
The Friendly Name must meet the following criteria.
No less than 3 and no more than 15 characters.
No spaces.
Can contain a mix of letters, numbers and underscores, but no other special characters (ex: !, $, &, etc.).
Friendly Name *
Available *
Non-User System ID: This system account will be used to interact with the application's automated build jobs (Jenkins or Anthill Pro) and Artifactory, where the deployable artifacts will be stored and retained.
Non-user system id
If you already have an automated build process(es) in place (Jenkins or Anthill Pro) for the application you wish to set up in XL Deploy, please provide the URLs for each (ex: http://ahp.uhc.com/tasks/project/ProjectTasks/viewDashboard?projectId=XXXX).
URL of current build locations
ITG Migration: If your application already utilizes an ITG Deployment Workflow, please indicate "Yes" and we will mimic your current ITG solution.
ITG Workflow Migration *
Yes
No
Estimated Chargeback
Number of Users
Monthly Estimated Cost
Rules for Use Agreement *
All Network Zones
User / Group must have the necessary permissions to influence an environment using these tools.
Deployment packages cannot contain any PHI or PCI –sensitive data.



We will need GL codes, an existing build service account, the MUI or short name,

Once get the access we need to share Server details into CIS team, they are add all environment set up details.

Environment	Server Name	Location
DEv		
Test		
Stage		
Prod		

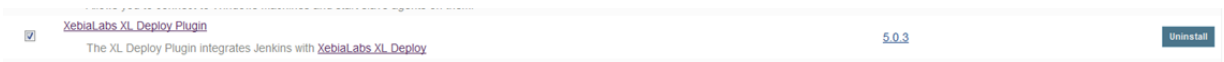
Configuration:

Jenkins Integration with XL Deploy:

XL Deploy and Release both have plugins within Jenkins so you can utilize features such as creating a new application version, deploying an application version to an environment, creating a new release, etc.

Adding Jenkins Plugins

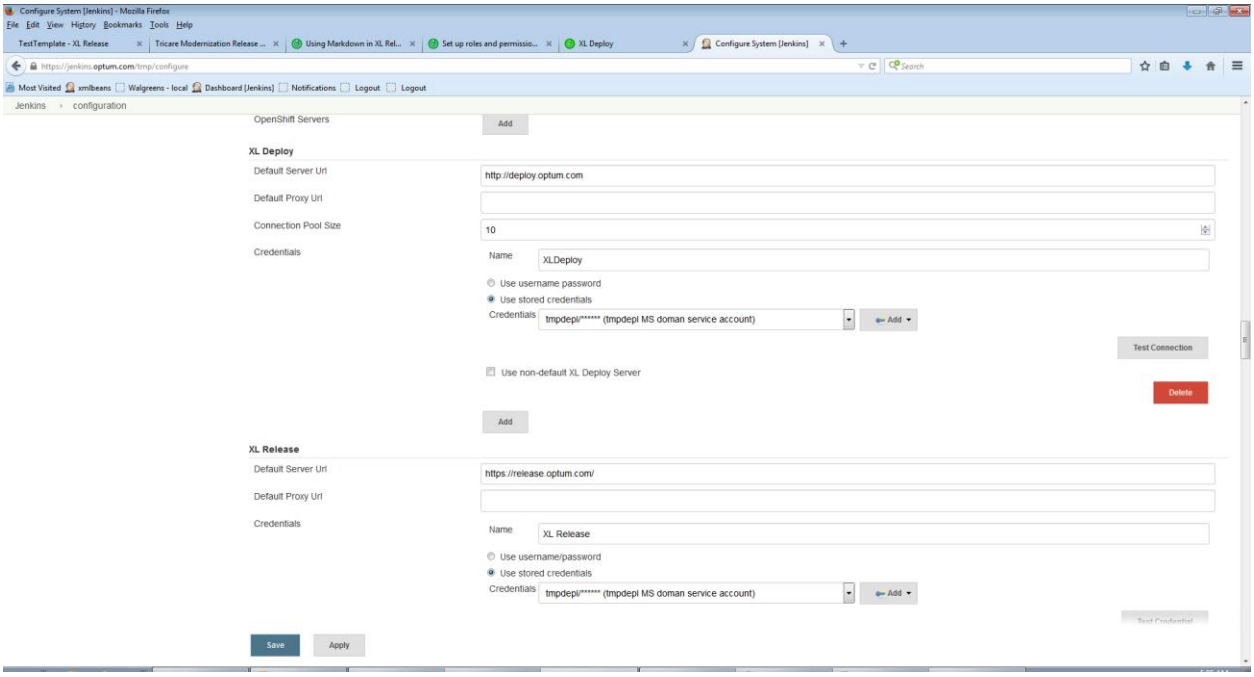
Within the Jenkins plugins we add the two new plugins (Manage Jenkins -> Manage Plugins)



Note: We recently upgraded to version 6.0 of both XL Deploy and XL Release and there are newer plugins versions available.

Global Configuration Changes

We now add global configuration changes for these two plugins (Manage Jenkins -> Configure System)



Note: We added credentials for tmpdepl service account. We use this service account to interact with both XL Deploy and XL Release.

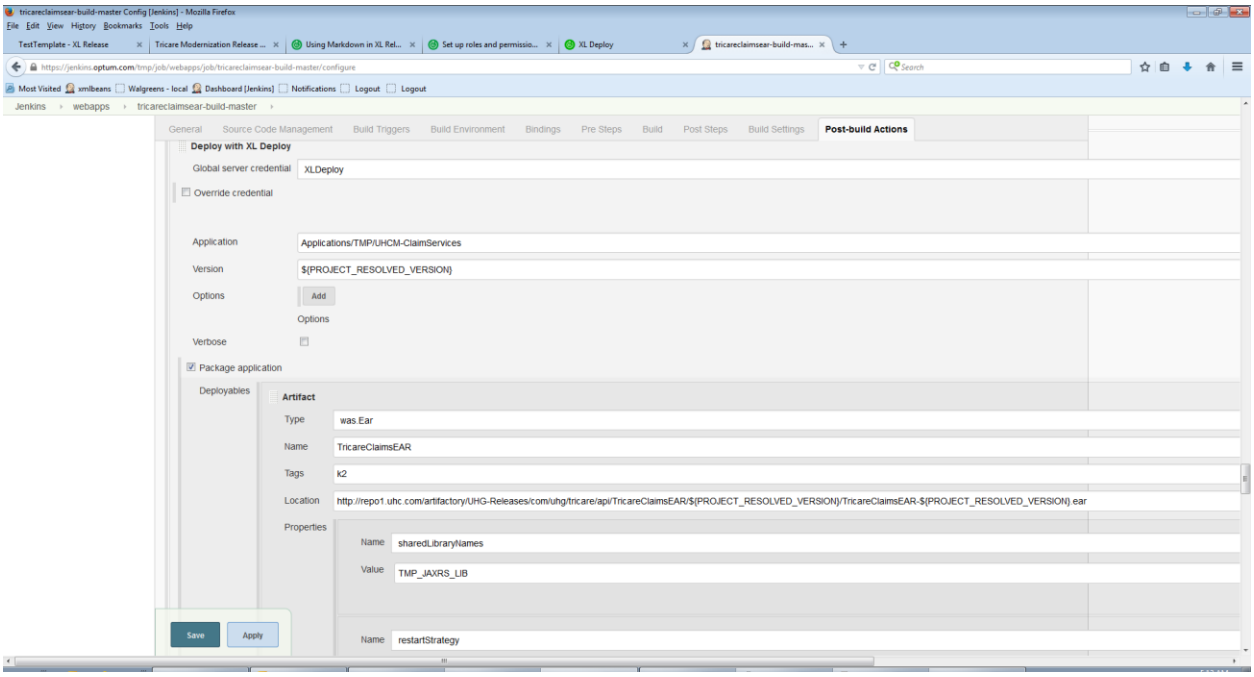
Create new application version

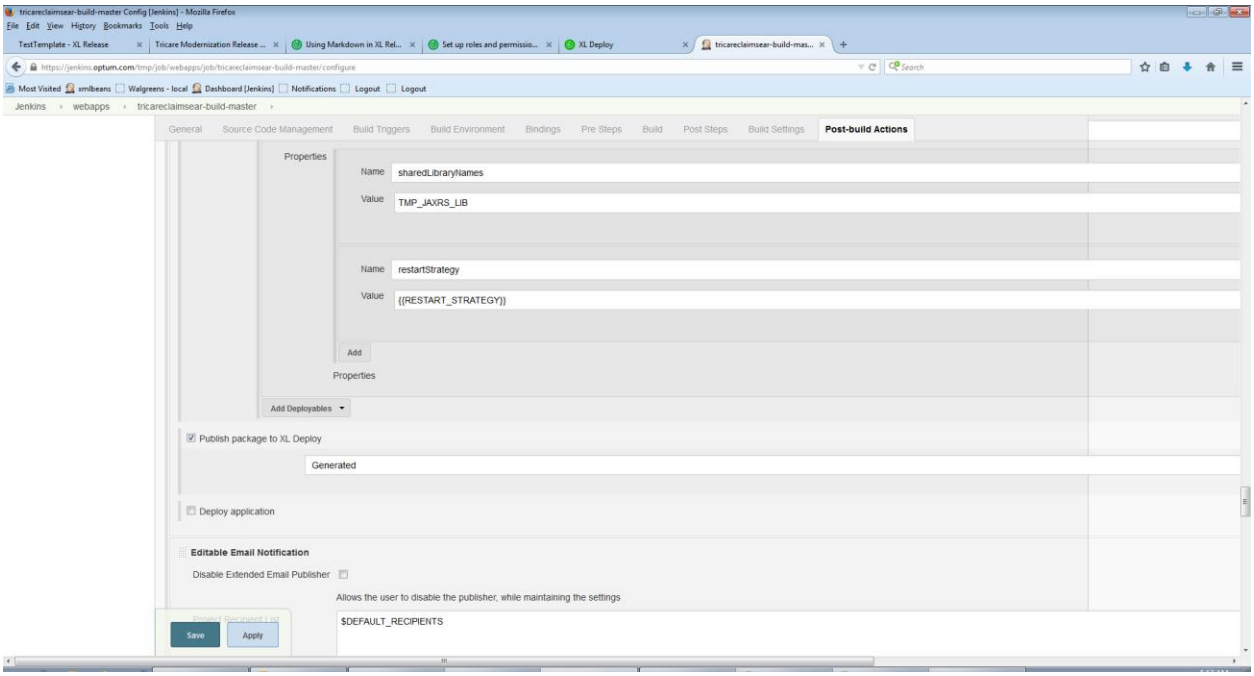
When we build a new deployable application, we can integrate with XL Deploy to add a new version of this application to XL Deploy so it is available to deploy to our dev environment. We add the creation of a new application version to each deployable application Jenkins build project.

Note: You must use artifacts from either Artifactory (repo1.uhc.com) or DTR (Docker Trusted Registry – docker.optum.com) and they must be release artifacts (not snapshot versions). We ensure this by putting a release artifact out to Artifactory with the Jenkins build job.

Under Post Build Actions we add a Deploy with XL Deploy section but we only package the application and do not deploy it. The deployment happens in a separate job for Tricare Modernization Project.

Jenkins job URL: https://jenkins.optum.com/tmp/job/webapps/job/tricareclaimsear-build-master/





There are several items here so let's look at them a bit. There is the application name. This is the name you will find under Applications in XL Deploy tool. In this example, Applications/TMP/UHCM-ClaimServices. Then there is a version which is passed in as a variable because Jenkins generates the version. In this case 1.0.0.$BUILD_NUMBER which is the Jenkins unique incrementing build number.

We check the box to package the application and fill in the type (was.ear), name, tags (k2 to go to k2 JVM in appropriate upper environments), and location of artifact within our production Artifactory instance (repo1.uhc.com)

We also set additional properties that can vary by application. For all of our tricare applications we set a shared library (defined in websphere environments) and a restart strategy option that comes from an environment specific Dictionary defined in XL Deploy.

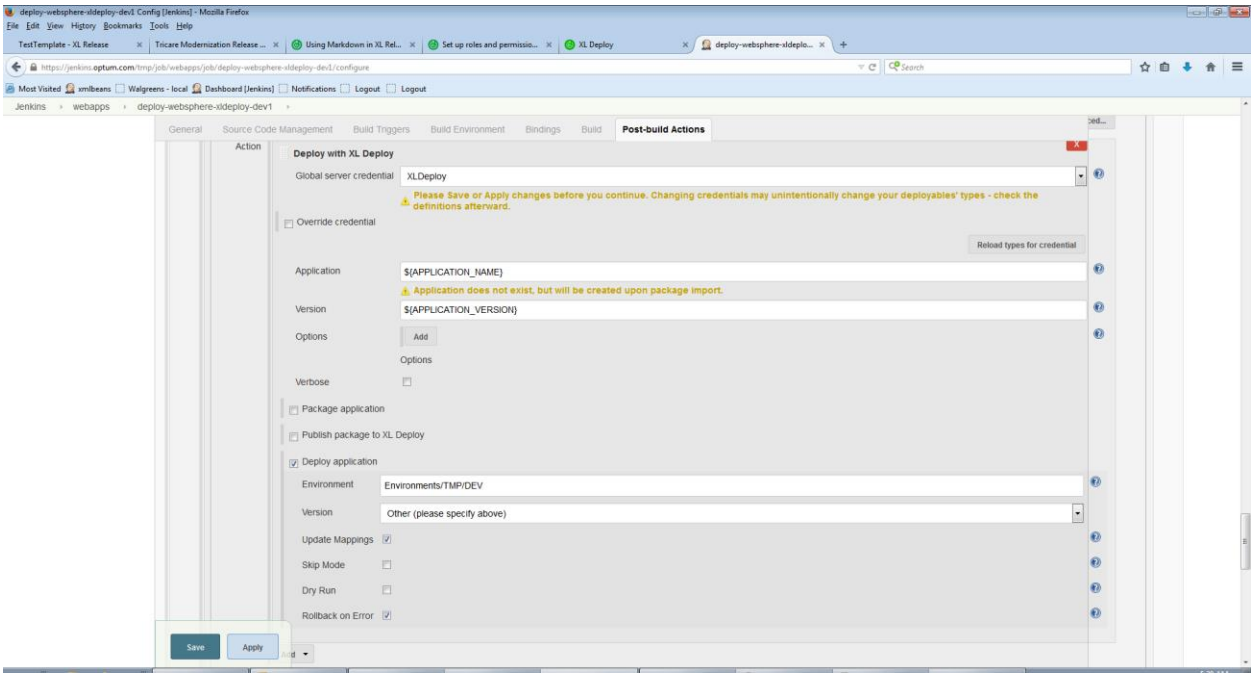
Deploying an application

It is important that if you are deploying multiple applications to one Jenkins server that you must synchronize deployments so only one deployment can occur at a time. If you make sure all deployments go through the same Jenkins job this can be accomplished. If you do not have synchronization concerns you can deploy the app to dev in the Jenkins build job to support continuous delivery.

For Tricare modernization application which we are using as an example it has multiple Websphere EAR applications being deployed that must be synchronized.

The deployment job which is called as a parameterized job following the EAR build, will deploy the application.

Here is the section of the Deploy with XL Deploy in our Deployment job (URL: https://jenkins.optum.com/tmp/job/webapps/job/deploy-websphere-xldeploy-dev1/)



We are passing in Application name and Version as parameters to this job from the build job. The Deploy application box is checked as we packaged and published this in our build job. We target the dev1 environment for deployment and set a couple of options (Update Mappings, and Rollback on Error). These options are common settings that should be used.