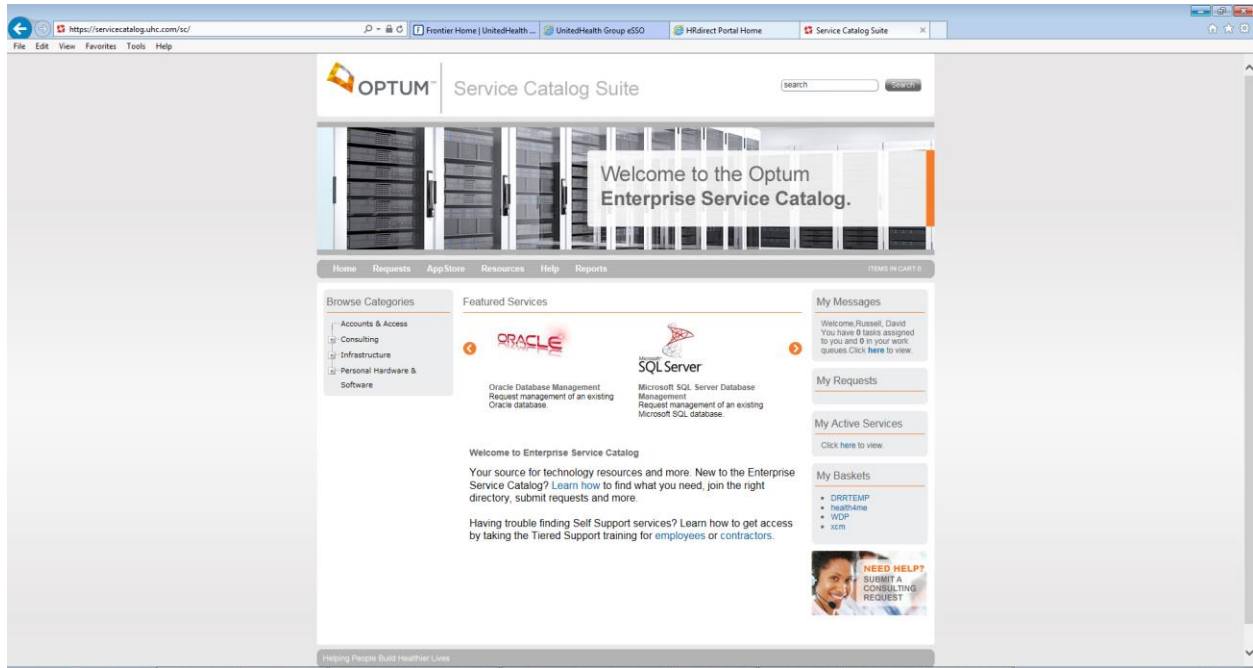


XL deploy & Release Installation Process/Configuration:

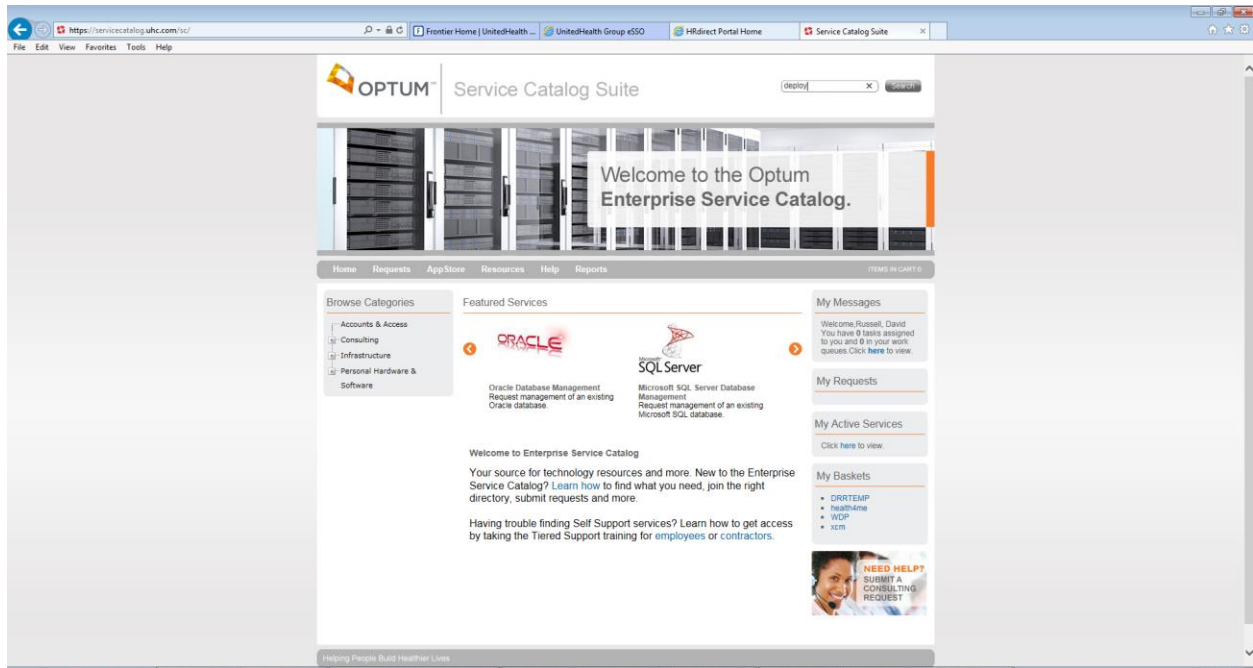
XL deploy & Release Installation Process:

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

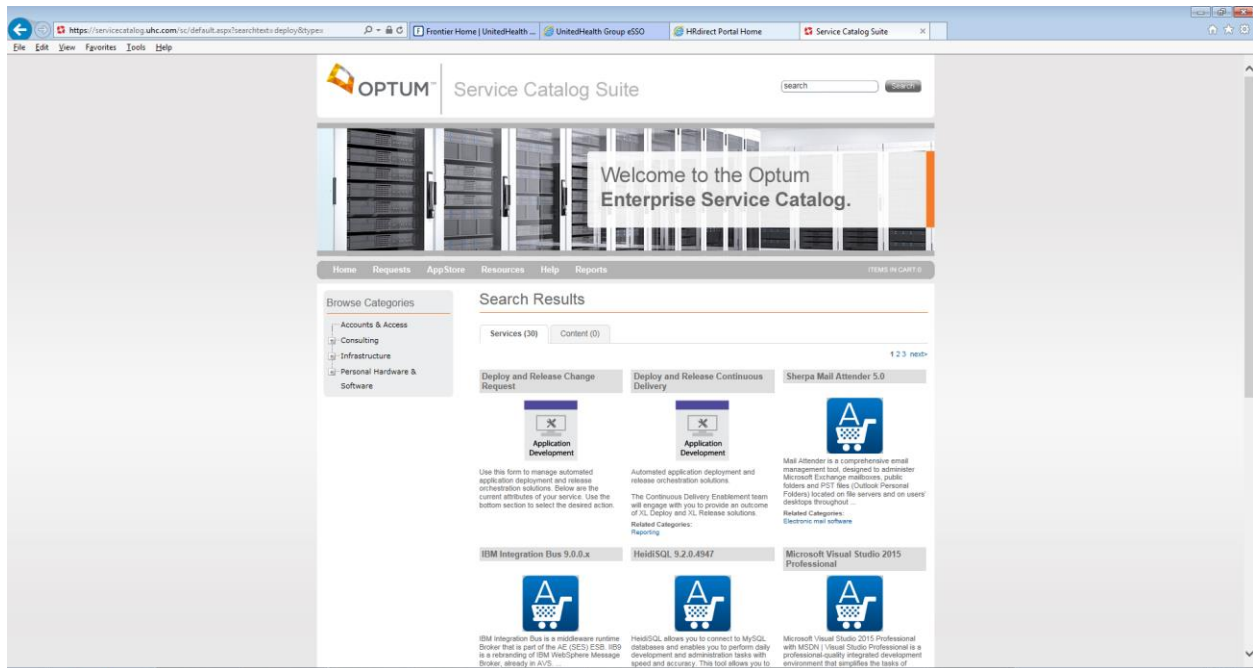
The URL for the service catalog: <https://servicecatalog.uhc.com/sc>



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)

Browser tabs: Frontier Home | UnitedHealth... United-Health Group eSSO HRDirect Portal Home Service Catalog Suite

URL: https://servicecatalog.uhc.com/sc/catalog.product.aspx?parent_category_id=X_Bica


File Edit View Favorites Tools Help

 **Service Catalog Suite**

Home Requests App Store 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.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: Phone: Email: Business Unit:

Project and GL Information for Chargeback: ⓘ
This is for an Infrastructure Service.

Browser tabs: Frontier Home | UnitedHealth... United-Health Group eSSO HRDirect Portal Home Service Catalog Suite

URL: https://servicecatalog.uhc.com/sc/catalog.product.aspx?parent_category_id=X_Bica

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 [v]

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.uhc.com/ask/ask_app.htm

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://ask.uhc.com/tasks/project?task=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.
- Must identify the physical host environment before deploying to a virtual host environment.

The screenshot shows a web browser window with the URL https://servicecatalog.uhc.com/cc/catalog.product.aspx?parent_category_id=xl_bca. The page title is "Frontier Home | United-Health Group eSSO". The form is titled "Service Catalog Suite" and contains the following sections:

- Friendly Name ***: A dropdown menu with "Available" selected.
- Non-User System ID**: A text field with a placeholder "Non-User System ID: This system account will be used to interact with the application's automated build jobs (Jenkins or Anthill Pro) and Artifact, where the deployable artifacts will be stored and retained."
- Non-user system id**: A text field.
- URL of current build locations**: A text field.
- ITG Migration**: A text field with a placeholder "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 ***: Radio buttons for "Yes" and "No".
- Estimated Chargeback**: A text field.
- Number of Users**: A text field.
- Monthly Estimated Cost**: A text field.
- Rules for Use Agreement ***: A section titled "All Network Zones" containing a list of rules:
 - User / Group must have the necessary permissions to influence an environment using these tools.
 - Deployment packages cannot contain any PHI or PCI -sensitive data.
 - Must deploy to a stage-level environment before deploying to a production-level environment.
 - Approved change ticket required for all deployments to a production-level environment.
 - Two approvals required before a deployment to a production-level environment.
- Additional rules for Governmental / Restricted Zones (Tricare)**: A section containing a list of rules:
 - You are deploying into a U.S. Government information system, which includes: (1) this computer, (2) this computer network, (3) all computers connected to this network, and (4) all devices and storage media attached to this network or to a computer on this network. This information system is provided for U.S. Government authorized use only.
 - Unauthorized or improper use of this system or data may result in disciplinary action, as well as civil and criminal penalties.
 - By using this information system, you understand and consent to the following:
 - You have no reasonable expectation of privacy regarding any communication or data transiting or stored on this information system. At any time, and for any lawful Government purpose, the Government may monitor, intercept, and search and seize any communication or data transiting or stored on this information system.
 - Any communication or data transiting or stored on this information system may be disclosed or used for any lawful Government purpose.
- I have read the above and agree.**: A checkbox.
- * denotes a required field**: A note.
- Update Cost As Configured**: A button.
- Add to Cart**: A button.

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		

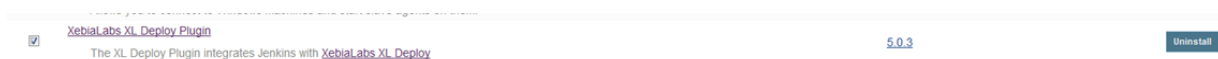
Configuration:

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)

The screenshot shows the Jenkins 'Configure System' page for the 'XL Deploy' and 'XL Release' plugins. The page is titled 'Configure System (Jenkins)' and is accessed via 'https://jenkins.optum.com/tmp/configure'. The 'XL Deploy' section is expanded, showing fields for 'Default Server Uri' (http://deploy.optum.com), 'Default Proxy Uri', 'Connection Pool Size' (10), and 'Credentials'. The 'Credentials' dropdown is set to 'tmpdepl***** (tmpdepl MS domain service account)'. The 'XL Release' section is also visible, with 'Default Server Uri' set to 'https://release.optum.com/'. Both sections have 'Test Connection' and 'Delete' buttons. At the bottom, there are 'Save' and 'Apply' buttons.

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

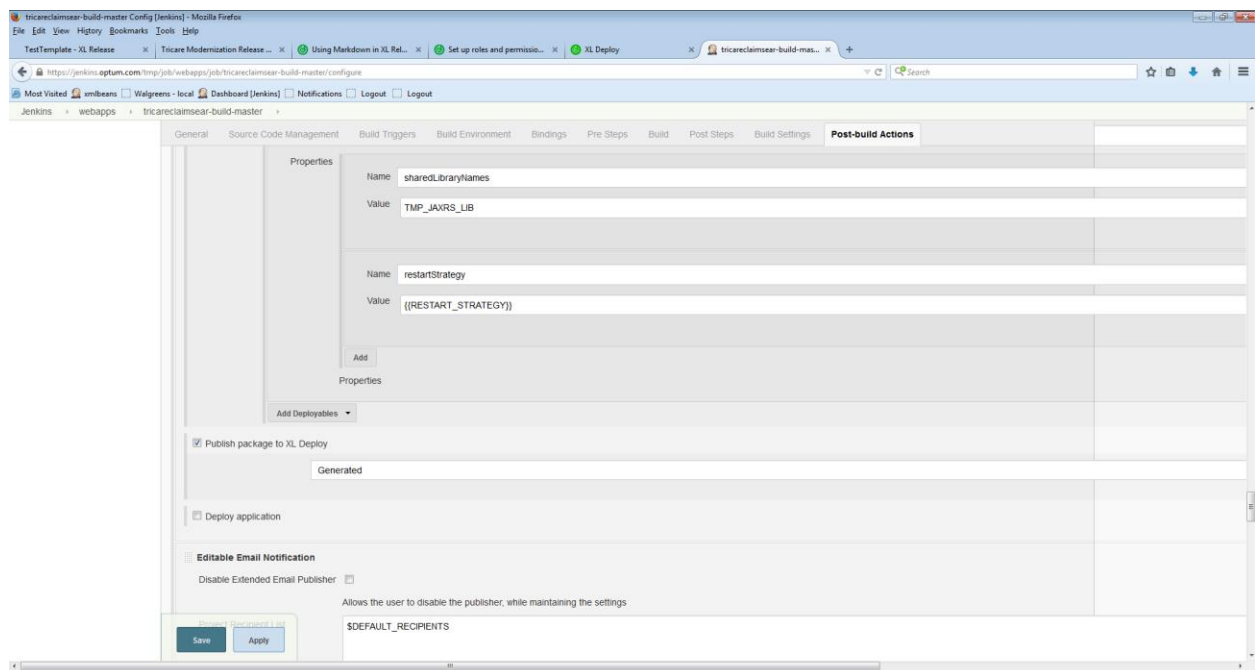
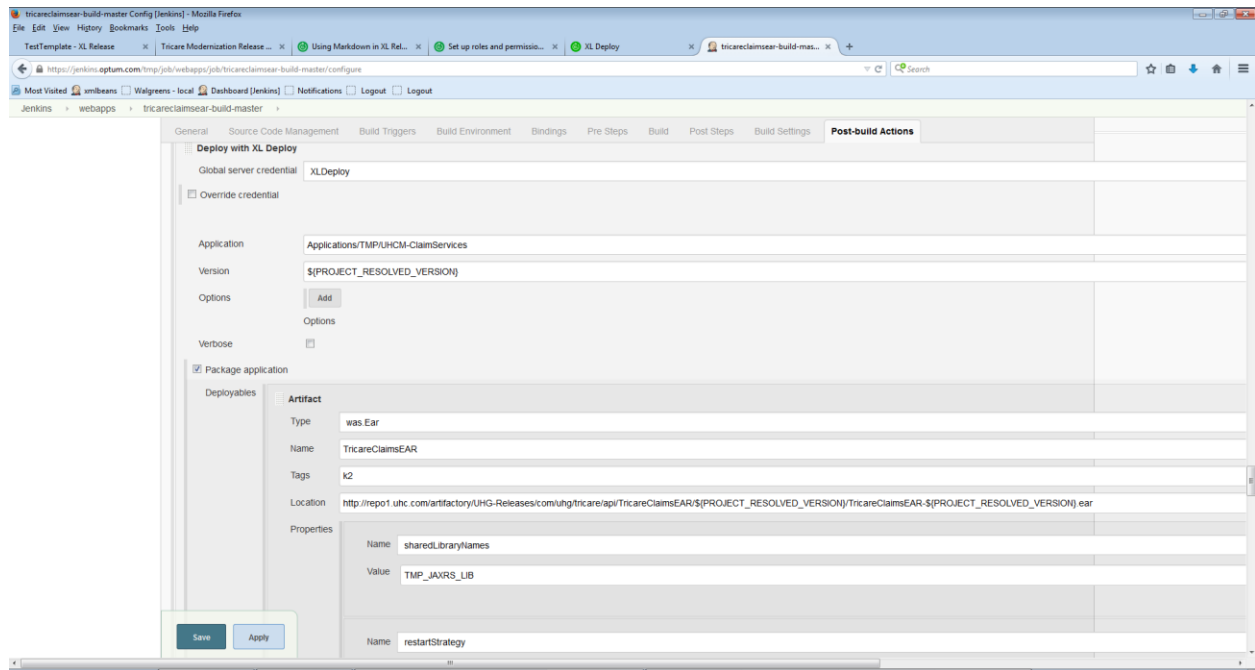
Create new application version

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.

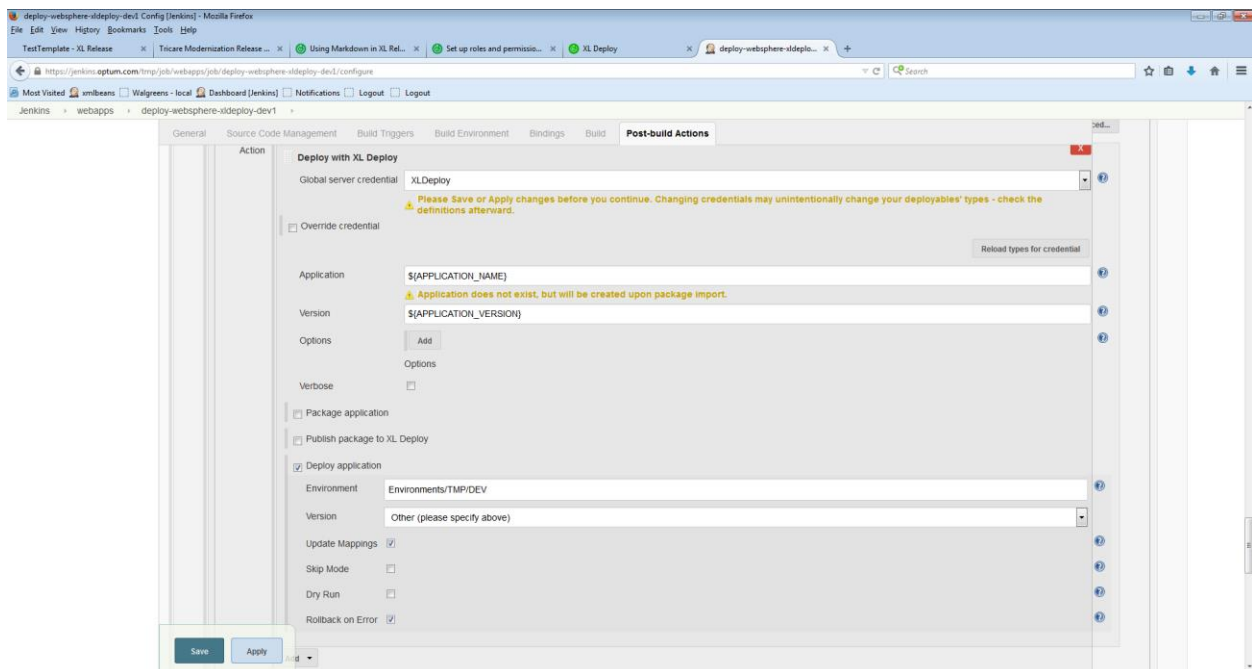
Deploying an application

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.