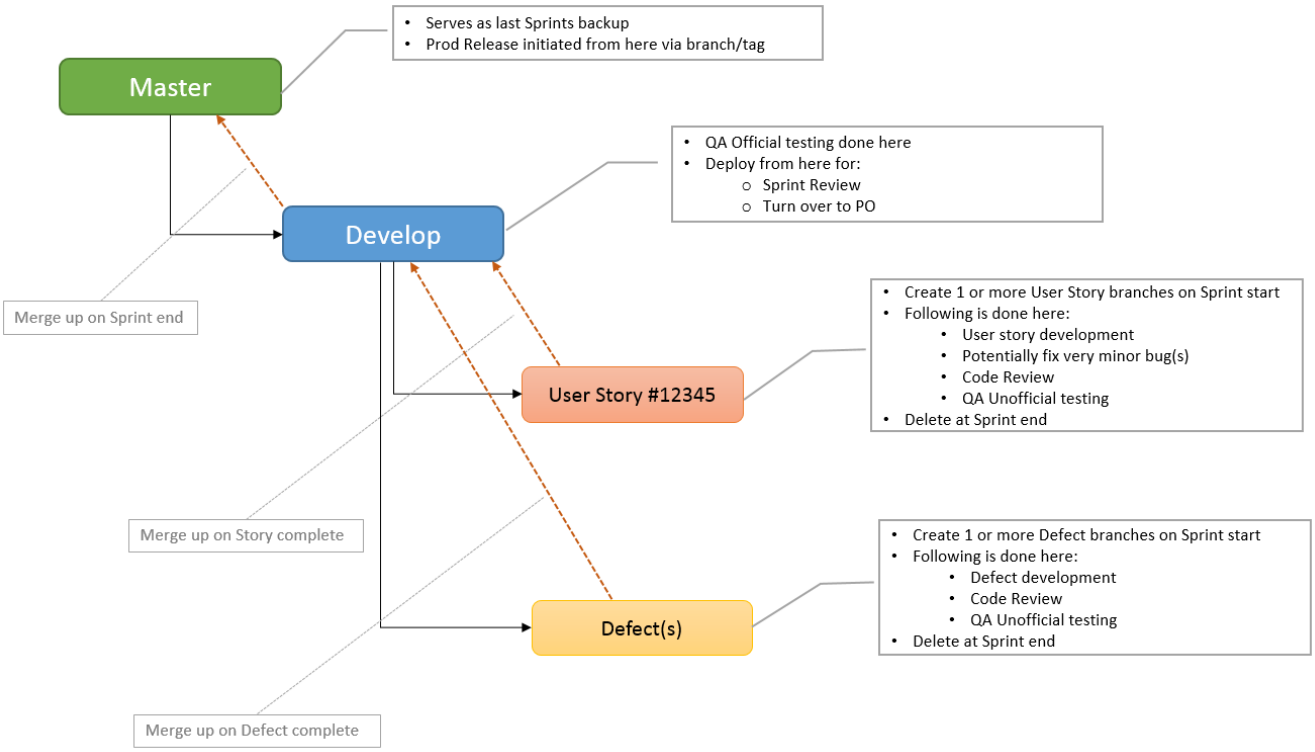
Git Branching Guide (With Git Bash)

This page covers the branching strategy to be used by Custom. It is based on the Gitflow workflow.

> Run the following in Git Bash to store off your credentials:
>
> git config --global credential.helper wincred

Summary Diagram



Start Of Sprint - Create New Story Branch

1. Checkout develop and ensure it is up to date.

```
git checkout develop
git pull
```

2. Create new feature branch from develop for story and switch to branch.

```
git checkout -b [name of new branch]
```

3. Push the branch to origin.

```
git push origin [name of new branch]
```

Story Complete - Merge Story Branch To Develop

> Before merging your story to develop, ensure your code has been reviewed via a pull request.
>
> NB - the base for the pull request should be **develop**, not master.

1. Merge origin/develop into story branch.

```
git fetch
git merge origin/develop
```

2. Fix any merge conflicts and commit.
3. Run full build against feature branch, running all unit/integration tests (including Grunt linting and JS unit tests).
4. Push branch to origin

```
git push origin [name of story branch]
```

5. Ensure your code is reviewed via a pull request
6. Checkout develop

```
git checkout develop
```

7. Pull latest version into develop.

```
git pull
```

8. Merge story branch into develop.

```
git merge [name of story branch]
```

> This should always be a fast-forward merge. If any merge conflicts appear at this point then roll back the merge (`git merge --abort`) and merge the latest develop into the story branch again.

9. Push the merge to develop.

```
git push origin develop
```

Sprint Complete - Merge Develop To Master

1. Check all story branches have been merged to develop. Command below lists all branches which haven't been merged.

```
git branch --no-merged origin/develop
```

2. Merge develop to master (this should always be a fast forward merge)

```
git checkout master
git pull
git merge origin/develop
```

3. Push the merge to master.

```
git push origin master
```

Post Sprint Clean Up - Delete Story Branches

1. Delete story branches locally.

```
git branch -d [name of story branch]
```

2. Delete story branches from origin.

```
git push origin :[name of story branch]
```

3. Update list remote branch.

```
git remote update origin --prune
```

4. List both local and remote branches that have not been merged - useful in determining which branches are ready to be deleted

```
git branch -a --no-merged
```

Create Release

1. Checkout master and update to latest version.

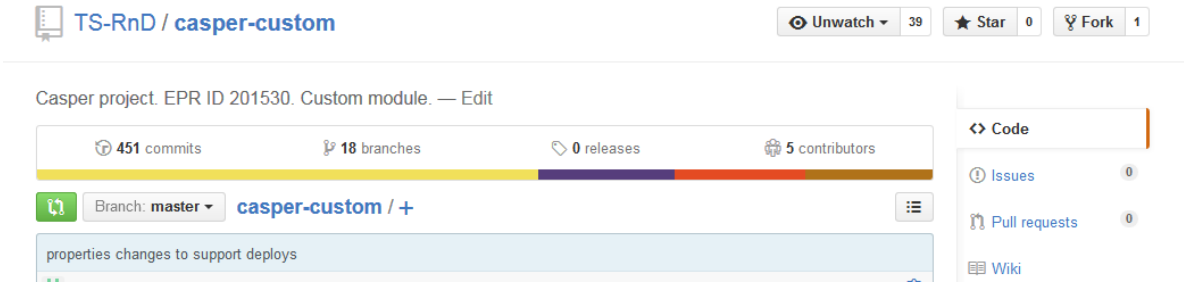
```
git checkout master
git pull
```

2. Update master branch pom versions to release version.
3. Push the master branch to origin.

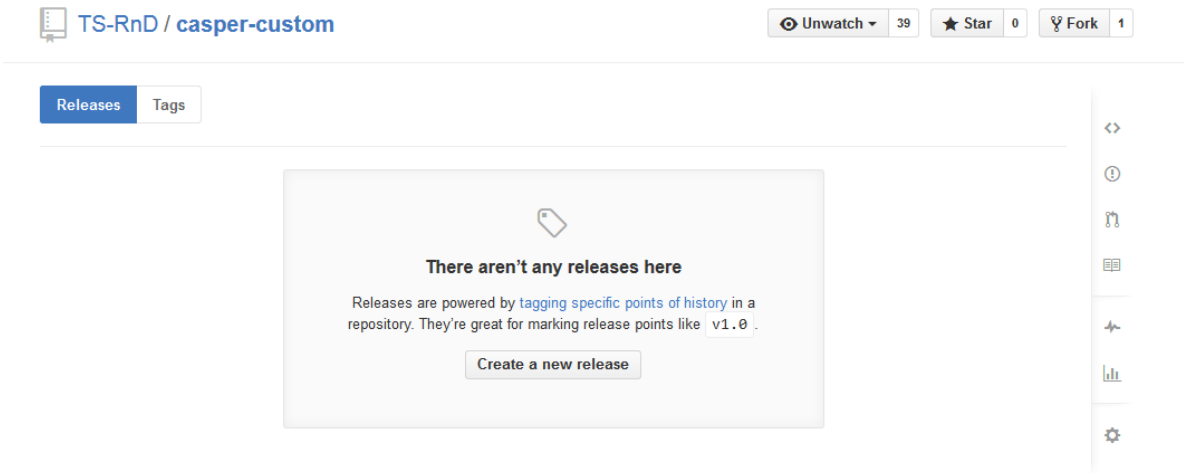
```
git push origin master
```

4. Run Jenkins build against master (uploads release artifacts to nexus).

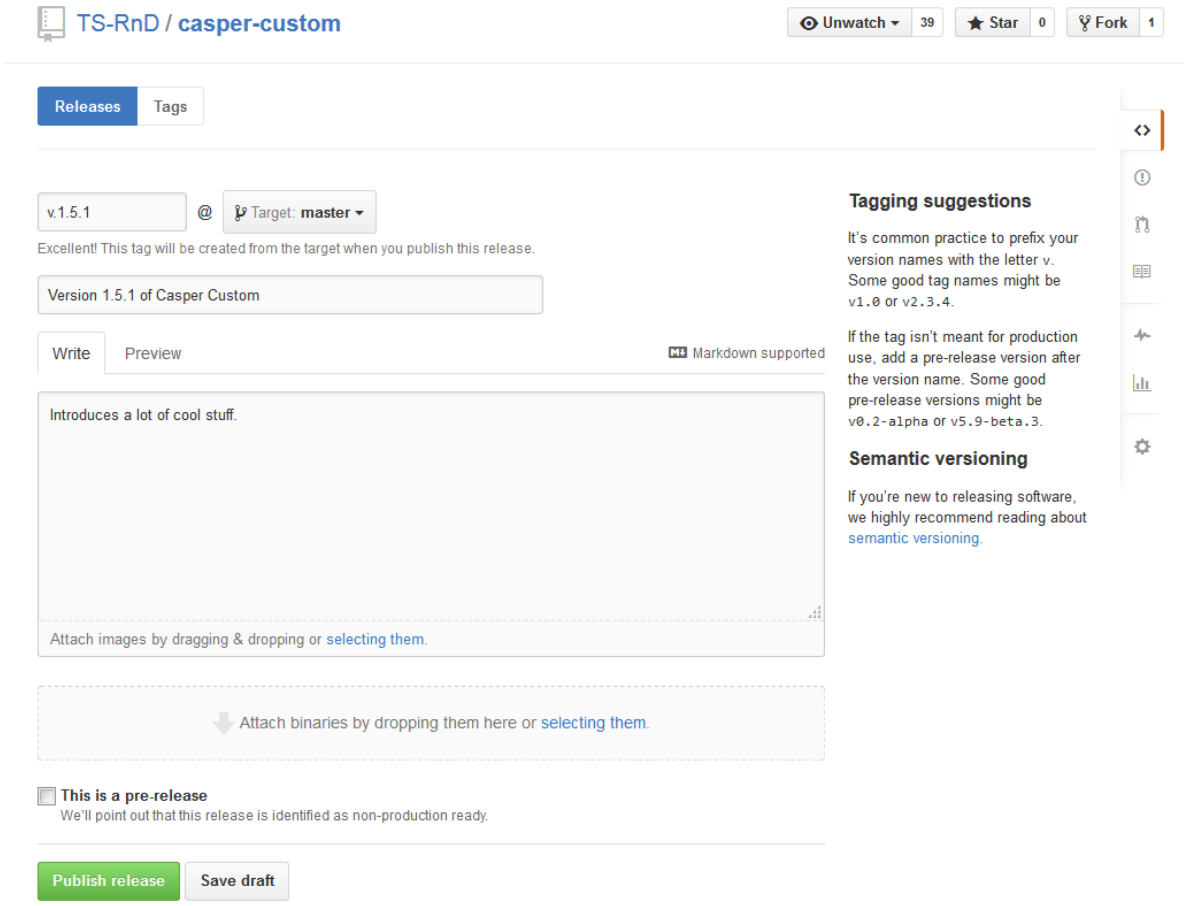
5. Create release in GitHub:
    a. Click on the **Releases** tab



    b. Click **Create a new release**



    c. Fill in the release details and click **Publish release**



6. Update the develop poms to the next snapshot version.