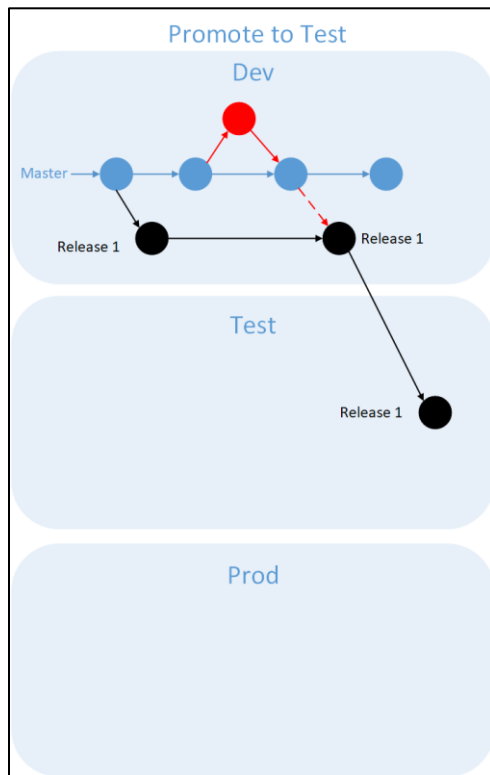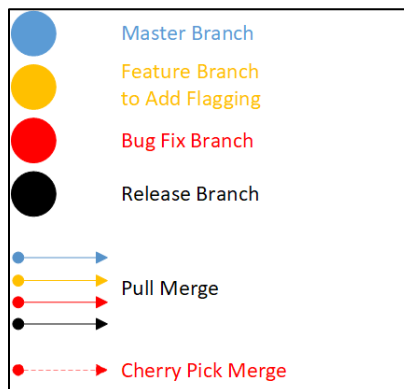**Figure 34: Test Promotion Workflow**

Figure 35: Quick Reference Legend

5.7   Bug Fix in Test

Follow the *Bug Fix in Dev* steps outlined previously in Section 5.5. After the update has been merged into the main master repository (Figure 36), the owner or maintainer of the main repository needs to complete the following steps.

After cherry-picking the change into the Development release branch, switch to the release branch that is currently in Test and repeat the following steps.

Switch to the release branch currently in Test

git checkout <release branch>

Cherry-pick the changes into the release branch using the copied sha key

git cherry-pick -x <sha key>

Push the change to the remote repository:

git push

Navigate to the runuser directory on the test server and pull down the changes:

git pull

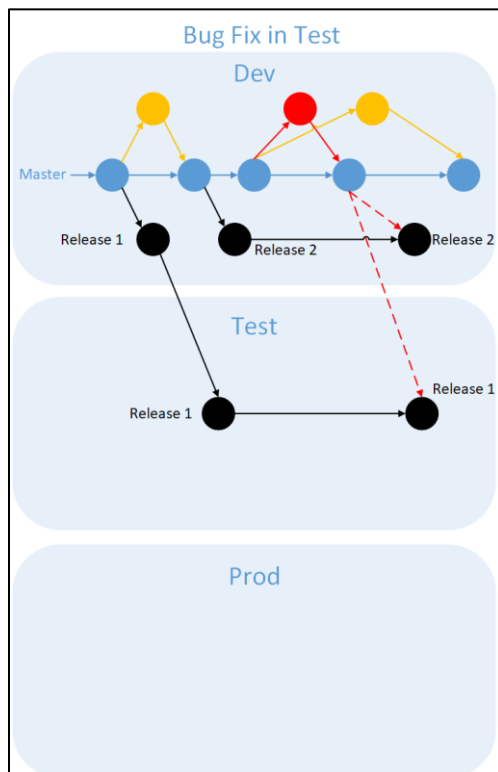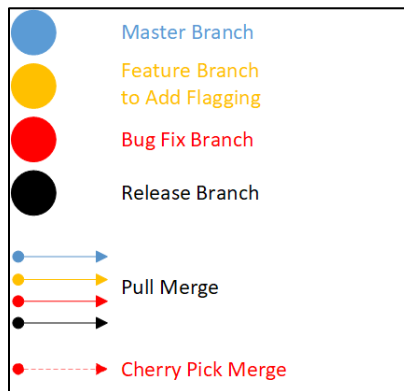**Figure 36: Bug Fix Post-Test Deployment Workflow**

Figure 37: Quick Reference Legend

5.8 Promotion to Production

When code is ready to be promoted to the production environment, check out the appropriate release branch to the run user directory on the Production server (Figure 38). The following workflow is completed off the master remote repository for the project.

Example Workflow

If this is the first promotion to production, navigate to the run user directory on the Prod server:

git checkout <remote repo location>

Otherwise, pull the most recent code:
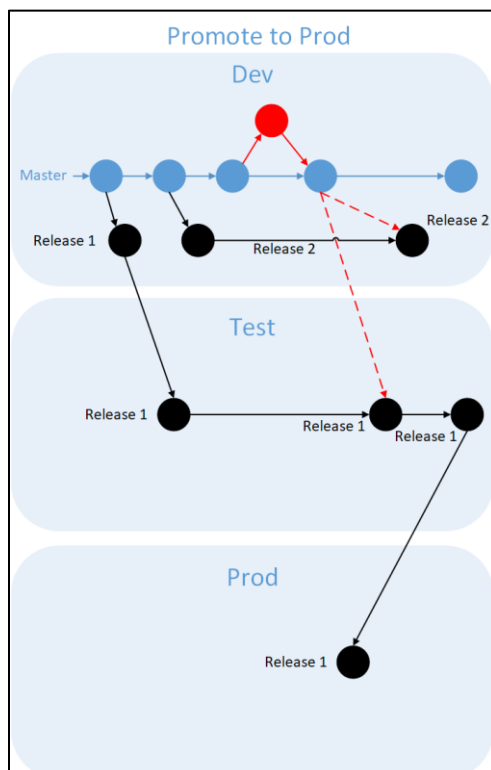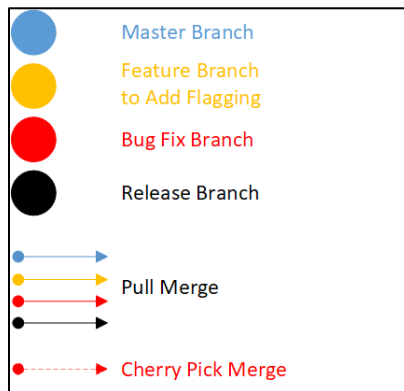
git pull

Figure 38: Prod Promotion Workflow

Figure 39: Quick Reference Legend

5.9   Big Fix in Production

Follow the Bug Fix in Test steps outlined in Section 5.7. After the update has been merged into the main master repository (Figure 40), the owner or maintainer of the main repository needs to complete the following steps.

After cherry-picking the change into the Test release branch, switch to the release branch that is currently in Production and repeat the following steps.

Switch to the release branch currently in Production:

git checkout <release branch>

Cherry-pick the changes into the release branch using the copied sha key

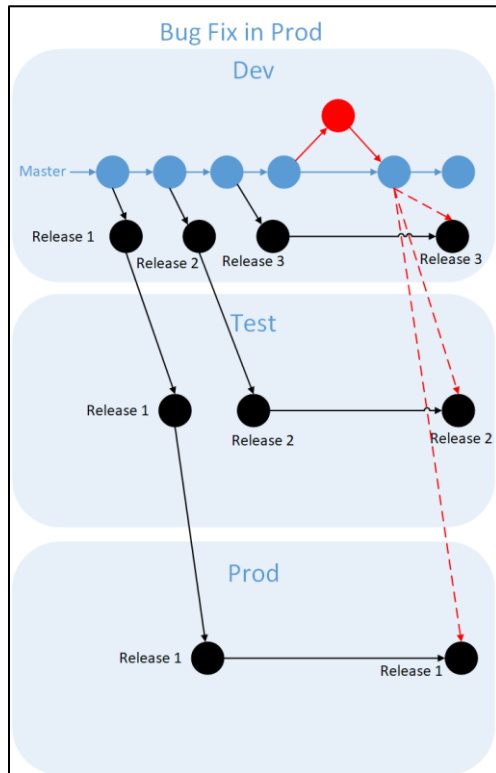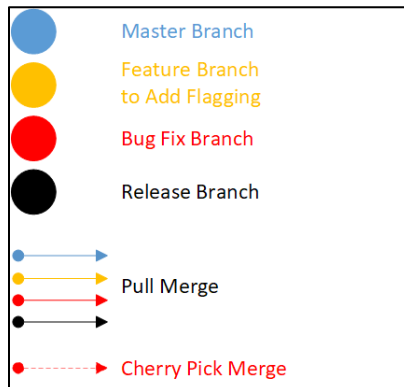*git cherry-pick -x <sha key>*

Push the change to the remote repository:

git push

Navigate to the runuser directory on the production server and pull down the changes:

git pull

Figure 40: Bug Fix Post-Prod Promotion Workflow

Figure 41: Quick Reference Legend

6 Additional Resources

Refer to the following resources for additional information:

- https://trunkbaseddevelopment.com/

- https://youtu.be/t_4lLR6F_yk

- https://martinfowler.com/articles/feature-toggles.html

Appendix A: Terms, Definitions, and Acronyms

Term	Definition
LOB	Line of business (aka TLA); project-specific code used in SAS tools
QA	Quality assurance
SVN	Subversion
TLA	Project-specific code used in SAS tools (aka LOB)
USPS	US Professional Services

Document Information

Document Control

Title	US Professional Services and Delivery: Git Best Practices Leveraging Git for Customer Engagements
Version	1.0
Date	26-JAN-2021 12:44 PM

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Revision History

Jira Ticket	Date	Version	Name	Description
SSO-20327	11-AUG-2020	0.1	Van James	Created initial version
	24-AUG-2020	0.2	Michelle Mebust	Incorporated revisions
	24-AUG-2020	1.0	Michelle Mebust	Finalized document