E360's use of git, git-flow, BitBucket, and Deploybot (draft)

We need to tighten up our development process, in order to do so we will be using these tools:

- Git – following the git-flow process – this will provide better branching and merging capabilities than svn. As an added bonus we can use BitBucket (which doesn't support svn hosting)
- BitBucket – tightly integrated with JIRA as they are both made by Atlassian. You can create a branch from a ticket, add the KEY in a commit and it is auto-linked back to the ticket
- Deploybot – This app links to BitBucket and allows us to set up different environments that are mapped to different branches of the git repo

Git and git-flow

We will be using git-flow, first proposed as a blog post here:

https://nvie.com/posts/a-successful-git-branching-model/

This is a visualization of the model from the post

The key elements are:

- Master is ALWAYS ready for production
- Release branch is checked on stage before pushing to Master

BitBucket

You can add a branch from a ticket in JIRA

Print Issue

Assignee:	Brian Gerrity
Reporter:	Brian Gerrity
Votes:	0
Watchers:	1 Stop watching this issue
Created:	Yesterday
Updated:	Yesterday

Development

Create branch

Agile

View on Board

...

Create branch

Repository*	edvance_360/v8
Branch from	master
Branch name*	LMS-3937-move-login-class-to-git

master

LMS-3937-move-login-class-to-git

Create branch   Cancel
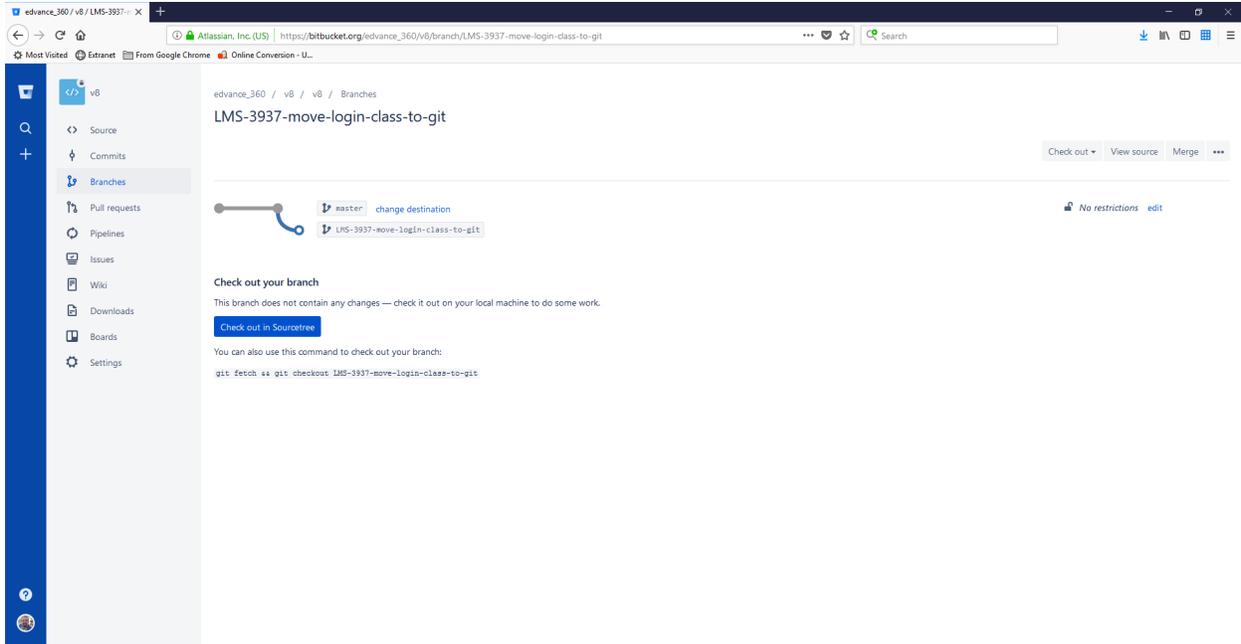
Use the KEY for the JIRA ticket you are working on in your commit message and it gets automatically linked to the JIRA ticket in 2 places:

1) In the list of commits in BitBucket:

2) In the ticket itself in JIRA

Deploybot

Currently we have 3 environments:

- Dev – linked to the development branch, auto deploys on commit
  - o   Uses v8-dev db on AWS RDS
  - o   Has the following urls set up:
    - ▪ https://lakestreet-dev.edvance360.com (Training/Corporate)
    - ▪ https://pondview-dev.edvance360.com (K-12)
    - ▪ https://emeritus-dev.edvance360.com (Higher Education)
- Stage – linked to the Release-8.4 branch [currently], auto deploys on commit
  - o   Uses v8-stage db on AWS RDS
  - o   Has the following urls set up:
    - ▪ https://lakestreet-stage.edvance360.com (Training/Corporate)
    - ▪ https://pondview-stage.edvance360.com (K-12)
    - ▪ https://emeritus-stage.edvance360.com (Higher Education)
- Production – manual commits from the Master Branch

Process

- Developers work on new features in their own branch, branched from development, this can be done:

- o   Directly from git
- o   From the JIRA ticket
- When Development branch is ready for testing, it is merged to Release Branch
- QA/Helpdesk Team tests all new features and general functionality for regression bugs on Stage server
- When Stage/Release is ready we merge with Master
- Any tickets that require a quick fix for current Production are a "Hotfix" and should have their own branch off of Master
  - o   Test locally
  - o   Merge back to Master
  - o   Deploy to Prod for final testing, we can "Rollback" with Deploybot in case of problems