Deployment Process Description

This document serves to provide a description of the deployment process that we follow at CloudFoxable Inc. The purpose of this document is twofold: (1) To properly and completely document our deployment process, and (2) to provide enough information for our authorized deployers to follow this process.
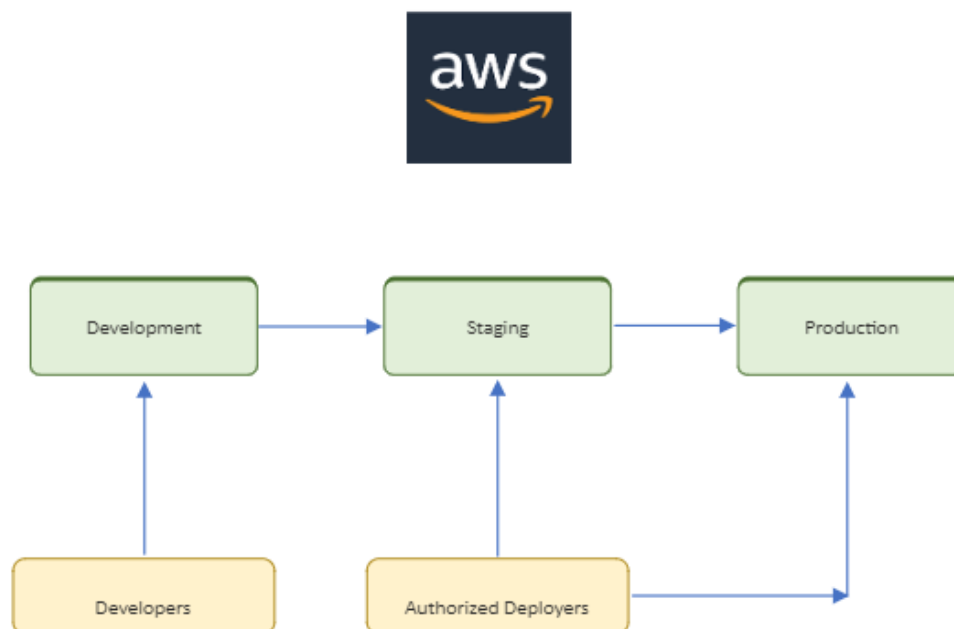
Environments

CloudFoxable Inc. uses Amazon AWS to host its applications. As per cloud security best practices, we maintain separate environments for our Development, Staging, and Production environments:

Development: Our development environment is where changes are introduced and implemented. Our developers have significant permissions in this environment as they need to be able to write and deploy code and make infrastructural changes to support our applications. This environment may be unstable due to constant changes that are introduced.

Staging: Our staging environment is where stable applications are deployed after development is finished. Permissions are much more restricted in our staging environment than in our development environment, with only a limited set of authorized deployers having access and permissions to make changes here. The staging environment is for testing of our applications before they are deployed to production. The staging environment should be stable and it should mirror production as closely as possible with the only differences being that production data should not be present in staging.

Production: Our production environment is where public-facing applications are hosted. This environment contains sensitive customer information. Access and permissions are severely restricted to only our designated authorized deployers.

Deployment

Below are the steps to deploy code to production:

1. Developers write code and create architecture in the Staging environment. All code development is subject to our rigorous code review process, which includes a security review as per our "Security Review Process.pdf" document.
2. Once code is approved, one of our authorized deployers will then deploy it to our Staging environment.
3. The code, architecture, and applications undergo a testing process, which includes QA testing, regression testing, unit testing, basically all the variations of testing.
4. Assuming all the tests passed, one of our authorized deployers will then deploy to production, where the changes then go live for our customers.