Duck Creek Environment Variables

Duck Creek Technologies provides a suite of software for the insurance industry, often requiring specific environment variables to be set for its components and services to run correctly.

We have 3 Domains:

* Dev Domain
* Pre-prod
* Prod

In Dev Domain we have 4 Environment Variables:

* Dev01/Appo1
* Dev02/Appo2
* Dev03/Appo3
* Devo4/Appo4

Devo1/Appo1:

Appo1 is inhouse QA testing environment, where our test engineers run test on the give codes and give 1st level of clearance for that code base.

Devo2/Appo2:

Appo2 is Client QA testing environment, where the QA engineers from the client run test on the given codes and verify the codes and gives us the clearance or sign off to deploy the codes to preprod environment. If found any bugs the cycle repeats from stage 1.

Devo3/Appo3:

Appo3 is Sandbox, majorly known as base OS with duck creek template installed. This is used as a reference for comparison of some functionalities with base template. In critical situations like working on Hotfix cases we use this Appo3 environment.

Dev04/Appo4:

Appo4 is a Time Travel environment. When we have situations to test code with future timeline, we use this Appo4 environment.

In Pre-Prod Domain we have 3 Environments:

* Perf
* UAT
* DBG

Perf:

Perf is a 2nd stage of Testing environment in known as performance environment. This is used Hotfix cases. Here Client QA engineers tests the code and validates it.

UAT:

UAT is User Acceptance Test. Here 2nd stage of Testing is done in on demand step. Client QA test engineers run the tests and validate the code and provides approval to proceed further.

DBG:

DBG is a debug environment, when we have any issues in production, we have the same code as we have in prod and try to debug the issues in this environment. If this issue is not impacting business, then the code changes will be made in next sprint cycle and if this is impacting we will initiate hotfix cycle.

In Prod Domain we have 2 Environments:

* Prod
* DR

Prod:

Prod is nothing but production environment and here after all stages of testing and approvals when we have the stable code after the sprint cycle we deploy our code to production.

DR:

DR is nothing but Data Recovery Environment. The Prod environment and DR environment data bases are kept in Sync. When an Environment is down due to any unforeseen errors, we launch the DR environment for maintaining high availability. As the databases are kept in sync this will be a emergency replica in another available region.

**Branching Strategies**

In our inhouse, we have 2 branching strategies:

* Happy Path/ On Demand Step
* Sad path/ Hotfix

On Demand Step:

In On Demand Step, we two major branches

* Main
* Dev

Main branch is where the initial code is placed. From the main branch the developers create feature branch. Here for every ticket the developer must create only a single ticket.

From the feature branch the developers pull their code to (ODWS) On Demand Workstation machine and do further changes as per the ticket basis and further the branch is merged with dev branch and from the dev branch the code is deployed in Appo1 Environment after valid approvals from their in-team architects or leads. Our inhouse QA testing engineers run tests and validates and from the appo1 the branch is merged to Main branch.

From Main branch the code is then pushed to Appo2 and here Client QA test engineers run the test and validates and give approvals to proceed to next stage.

From Appo2 the code is pushed to UAT and then to prod.

Hotfix Path

When and why?

In Production when we get any breakage, or we need to do any immediate changes else it may have business impact and the fix need be made in not more than 2 days then hotfix branching strategy is brought online.

1st a hotfix branch is created and from the previous production stable code from main branch is pulled to hotfix branch and feature branches are made. The developers fix the code as per the ticket basis and then the feature branches are merged back to hotfix branch.

In the next step, the tested code is pushed to Appo3 or Appo4 and our inhouse QA engineers run tests and validates the code and further it is moved to Perf environment and client QA engineers run the tests and validates the code and provides clearance to push the code to Prod and then further the branch is merged with main branch