sdi

KeyWe Cloud Environment (Test, Staging) with Continuous Integration and Deployment process

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Objective

Build a reliable dev, deploy, test, approve and launch environment using a CICD pipeline and 4 stage Cloud environment.

Current Environment

	SSL	Compute	Database	Pull/Push Method
Development	None	Local Compute	Local Database	FTP
Production	AWS ALB	Separate EC2 instance.	Prod RDS instance	FTP

New Proposed environment

	SSL/WAF	Compute	Database	Pull/Push Method
Development	None	Local Compute	Local Database	GitHub
Testing	AWS	Separate EC2 instance	Separate Test RDS Database	GitHub
Staging	AWS	Separate EC2 instance	Prod RDS instance	GitHub
Production	AWS	Separate EC2 instance.	Prod RDS instance	GitHub

Website

We will create a CI/CD Pipeline to move the updated codes from the Development to the Testing Server & then to the Staging & Production servers.

The KeyWe team will add new tasks (whether it's a new feature(s), changes in the existing feature(s) and/or bugs) in **Jira** .

Development

When the developer is ready, he/she will change the status to **In Progress** in Jira. The developer(s) will work on the task(s) on a server we will designate as Development server. Once he/she completes the task(s), he / she will commit the codes to GitHub. SDI will create a CodePipeline to push the updated codes from GitHub to the Testing server. The developer will change the status to **In Review** in Jira**.**

KeyWe - Test Environment

The developer will then notify the KeyWe team with release notes to review & provide feedback on the points on the Testing Server. If everything looks good, the KeyWe team will change the status to **Done** in Jira**.**

If there are any issues, the KeyWe team will report to the Development Team. The KeyWe team will change the status back to **In Progress** in Jira.

If the KeyWe team wants a task to go LIVE, they will change the task status to the **Release to Staging** in Jira.

Staging Environment

The developer(s) will push ONLY the tasks whose status is **Release to Staging** to a Staging server. It will occur twice in a month.

NOTE: The Staging server will be a mirror copy of the Production server; its primary purpose is to test the completed task(s) on the mirrored copy of production to ensure that the updated code doesn't break the existing Production server application. No actual code development will ever take place on a Staging server.

KeyWe Team will initiate the test process on the points that were released to the Staging Server. Any issues reported will be reviewed by the SDI Development team. KeyWe will add all the reported issues in Jira. SDI will rollback all the points that were released to the Staging server.

Production Environment

If everything goes well in the above steps, SDI will proceed to make the approved features/bug resolutions live on the **Production Environment**.

KeyWe - Production Test

The developer will then notify the KeyWe team to review & provide feedback on the points that were pushed to the Production Server.

If there are any issues, the KeyWe team will report it to the Development Team. The KeyWe team will move the task back to **In Progress** in Jira. SDI will rollback all the points that were released to the Production server.

Mobile apps

SDI will create 3 source repositories (Development, Staging & Production) for both iOS & Android in GitHub.

Every time the development team completes a task which includes manual testing, he/she will create a branch & commit the code to the Development Repo in GitHub.