Semaphore Integration

SemaphoreCI

Semaphore is a cloud-based automation service for building, testing and deploying software. Whenever you push your code, Semaphore will automatically run your custom designed build, test and deploy pipeline.

Combining this with AutonomIQ's autonomous platform will revolutionise the entire phase of quality assurance of the product.

Semaphore-Autonomiq

For helping with integration of Semaphore with Autonomiq, a sample integration file semaphore.yml has been provided in https://github.com/Autonomiq/Connectors under .semaphore. Other supporting code can also be referred to from there.

Setup

Please refer to https://docs.semaphoreci.com/ for more customisation on setting up Semaphore Continuous Integration for your product.

Listed below are some fundamental steps in setting up a sample project with Autonomiq

1. Navigate to your Semaphore web interface
2. Click on New and select the Git repository https://github.com/Autonomiq/Connectors
3. Modify semaphore.yml file under .semaphore folder as needed

Whenever a change is added to your commit this will be triggered,

Configuration file

The configuration semaphore.yml file should be customised as per product requirement.

There are multiple blocks in the configuration file. Each consisting of different jobs. The commands listed under the jobs will execute your requirements of the job in sequential order.

For integration with AutonomIQ few files and commands need to be changed as per your product's requirement. This is listed below.

port_forward.sh

The port where your application is deployed in will be forwarded to Autonomiq's platform. For this below details should be filled.

Remote port - Remote port to which your application is to be forwarded to
app_port - Port where your application is running

remote server url - For e.g.
ubuntu@ec2-54-183-112-83.us-west-1.compute.amazonaws.com

Command to execute

User has the freedom to execute testcases, test suite, excel/csv. Below is the base command and the customisations possible with it.

Base command:

./sanitypython/bin/python test_executor.py

Add the following to the base command to execute the corresponding Case/Suite etc

Suffix	Type	Format	Sample
-f	Files [Testcase files]	Filepath to csv/xls file	../**/*.csv [Picks all csv files]
-su	Suite	ProjectName|SuiteName	Geranium|Regression
-pr	Project	ProjectName	Geranium
-r	Recorder Files	File path to JSON	../**/*.json

Eg:

./sanitypython/bin/python test_executor.py -f ../other_tests/test.csv
./sanitypython/bin/python test_executor.py -su Geranium|Regression
./sanitypython/bin/python test_executor.py -pr Geranium

Other inputs can be

Suffix	Type	Format	Sample
-s	Server - Endpoint for Autonomiq Server	URL	https://google.com
-u	Username	Username	someUser
-p	Password	Password	somePassword
-c	Cleanup the temporary Project	True/False	FALSE

Sample of the Autonomiq tests Block is given below. The changes in the command mentioned should be made here.

```
- name: "Autonomiq tests"
  task:
    jobs:
    - name: Autonomiq
      commands:
        - checkout
        - echo "make Autonomiq"
        - cd py
        - ./sanitypython/bin/python test_executor.py -f ../tests/test.csv
```

Execution

The configuration file already has the setup to push the files to GIT once the tests have been triggered.

For further customisation for conditional executions such as pushing the code change only if there is no failure etc further changes in the commands needs to be done to the configuration file.

Once all the setup is done whenever there is any code commit, Semaphore will trigger all the blocks and subsequent tasks in the configuration file sequentially.

The status of this can be observed from Semaphore's web interface.