

# Documentation on BitBucket Pipelines

## Components:

test, staging, or production Its, stating of the pipelining define the build process of the repo which we are want to create a pipeline.

### - step:

A group of execution can be consider as a step. We can define no.of steps based on the creation on pipeline.

### Default:

Common tag which execute are every push on to the repo. If we want to stop triggering we can specify the [skip ci ] in the commit tag.

Branches: which applies to all branch level creation.

### Pull-requests:

triggers on applying pull on the repo branch. If we ant to make trigger to all branches on pull request we use in place of the branches.

### Tag:

tag specific build pipelines in git hub

```
'*-linux':  
  - step:  
    name: Build for *-linux tags  
    script:  
      - echo "Hello, Linux!"
```

The tag should match with the tag in git repo.

### Custom:

this property are getting to triggered on manual.

### Parallel:

It's a property which can run set of steps under it together.

### Pipelines:

#### Default:

#### Parallel:

#### Steps:

#### -step:

Name: parallel step

Script:

Echo "I am parallel"

#### -step:

Name: parallel

Script:

Echo "I am in parallel"

Branches:

Master:

-step:

Name: non parallel

Script:

- Echo "non-pararlle"

Staging:

It is used to group few steps inside the staging for execution.  
which beneficial to make clear execution.

pipelining:

defaults:

staging:

name: build and deploy

steps:

- Step:

Name: building

Script:

./build-app.sh

- step:

Name: deploy

Script:

./deply-app.sh

branches:

pull-requests:

tag:

custom:

deployment:

Make the environment for the deployment set as test , staging and  
production

pipelining:

default:

-stag:

name: staging

steps:

-step:

Name: build

Script:

Echo "building step"

-step:

Name: testing

Script:

Echo: "testing step"

branches:

pull-requests:

tag:

name:

used in step, stage and pipe

triggers:

automatic and manual and it are on parent of stage, step

step:

This property is used to define the execution unit. They executed in the ordered way.

Each step in yam file are executed in a separate container with followed script.

They have the properties we can use with it like:

Image:

to run a different image.

Services: specific defined service

Caches: specific defined cache

Artifacts: to retain the artifact for following steps to use

Trigger: make it manual/automatic.

Clone: manual clone to the repo.

Parent properties are - (default, parallel, custom, branches, tags, steps)

Child properties: (name,script,after-script,image,services,deployment,trigger,caches,clone,artifacts,conditions)

Script:

we can make set of cmds execution in steps.

Parent: (step)

Child: (pipe)

Size:

which place to increase the size of memory for services and script. 1x default and 2x double the previous.

After-script:

which is to execute after the script property is completed. Note : if any of the property in the after-script is failed then there wont affect to the final out come.

Parent- (step)

Child- (pipe)

Name:

this property is displayed in the pipeline log. It for stage,step,pipe,

#### Fail-fast:

this property is used to set up in steps execution. If , its is : false then it wont effect to the parallel group step if it set :true then whole steps are halted.

Parents: (step, parallel)

#### Artifacts:

which contain the build artifacts for project execution.

Downloads: true/false

Paths:

#### Pipes:

they make the complex properties more easier by passing the requires variables if necessary.

We can create a custom pipes and use them .

#### Runner:

#### Condition:

Which is to set and only on meets the condition. It will execute the step.

Child( changesets, includepaths)

#### Service:

This property is used then bit will create a separate container execution for the service which make the execution fast.

#### Deployment:

Place the environment for stage or step for execution. defaults environments are staging, test, production for these properties.