









Jenkins 1

1. Create 2 users: developer1, developer2. The developer1 should be able to build job1 only and can't change the job configuration. The developer2 can configure and build the job2, also he is able to view job1 but can't build/configure it.

Users

These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

User ID		Name		
	developer1	developer1		
	developer2	developer2		
	jay13ptn	Jay_patel		

 [add description](#)

All




+

S	W	Name ↓	Last Success	Last Failure	Last Duration	
		job1	N/A	N/A	N/A	
		job2	N/A	N/A	N/A	

Icon: [S](#) [M](#) [L](#)

[Legend](#)  [Atom feed for all](#)  [Atom feed for failures](#)  [Atom feed for just latest builds](#)

Item roles

Role	Pattern	Credentials					Job								Run			SCM	Lockable Resource			
		Create	Delete	ManageDomains	Update	View	Build	Cancel	Configure	Create	Delete	Discover	Move	Read	Workspace	Delete	Replay	Update	Tag	Reserve	Unlock	V
	dev1-job1	"Job1"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	dev2-job1	"Job1"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	dev3-job1	"Job2"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Item roles

User/group	developer1-job1	developer2-job1	developer2-job2	
	Anonymous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	developer1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	developer2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

User/group to add

Add

Node roles



Jenkins

developer1
log out

Jenkins
enable auto refresh

People
Build History
My Views

BUILD QUEUE

No builds in the queue.

ALL

S	W	Name ↓	Last Success	Last Failure	Last Duration
		Job1	20 min - #3	N/A	20 ms

2. Create a Jenkins Job to create a calculator. It should give you a dropdown to ask Addition, Subtraction, Multiplication or Division and email the results.

General

Source Code ManagementBuild TriggersBuild EnvironmentBuildPost-build Actions

Description

Calculator-ask Addition, Subtraction, Multiplication or Division and email the results.

[Plain text] [Preview](#)

☐ Discard old builds

☐ GitHub project

☐ This build requires lockable resources

☒ This project is parameterized

Choice Parameter

Nameoperation

Choicesaddsubmul

☐ This build requires lockable resources

☒ This project is parameterized

Choice Parameter

Name: operation

Choices:

- add
- sub
- mul
- div

Description:

[Plain text] [Preview](#)

String Parameter

Name: num1

Default Value: 0

Description:

[Plain text] [Preview](#)

☐ Trim the string

[Add Parameter](#)

[Save](#) [Apply](#)

String Parameter

Name: num2

Default Value: 0

Description:

[Plain text] [Preview](#)

☐ Trim the string

[Add Parameter](#)

[Apply](#)

Build

Execute shell

Command:

```
case $operation in
  "add") echo $((num1 + num2)) > /home/jay/results.txt
        break
        ;;
  "sub") echo $((num1 - num2)) > /home/jay/results.txt
        break
        ;;
  "mul") echo $((num1 * num2)) > /home/jay/results.txt
        break
        ;;
  "div") echo $((num1 / num2)) > /home/jay/results.txt
        break
        ;;
esac
```

[See the list of available environment variables](#)

Save Apply

This build requires parameters:

operation

num1	33
------	----

Build

Page 10 of 10

Console Output

```
Started by user Jay_patel
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/calculator
No emails were triggered.
[calculator] $ /bin/sh -xe /tmp/jenkins2873422341591222893.sh
+ echo 396
+ break
Email was triggered for: Always
Sending email for trigger: Always
Sending email to: elliot13anderson@gmail.com
Finished: SUCCESS
```

result for operation 33 mul 12 Inbox x

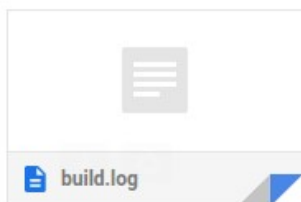


elliot13anderson@gmail.com

 4:11

to me ▾

396



3. Create jenkins parameterized job which on selecting the different Env. will display different web pages by nginx.

Environment based nginx webserver

[Plain text] [Preview](#)

☐ Discard old builds

☐ GitHub project

☐ This build requires lockable resources

☒ This project is parameterized

Choice Parameter

Name

ENV

Choices

ENV1
ENV2
ENV3

Save

Apply

Build

Execute shell

Command

```
sudo rm -rf /var/www/html/jenkins/*  
sudo cp /home/jay/Documents/jenkins/$ENV.html /var/www/html/jenkins/
```

[See the list of available environment variables](#)

Advanced...

```
server {  
    listen 80;  
    root /var/www/html/jenkins;  
    server_name xyz.com www.xyz.com;  
  
    index index.php index.html ENV1.html ENV2.html ENV3.html;  
    access_log /var/log/nginx/xyz.access.log;  
    error_log /var/log/nginx/xyz.error.log;  
  
    error_page 404 /404.html;  
}
```

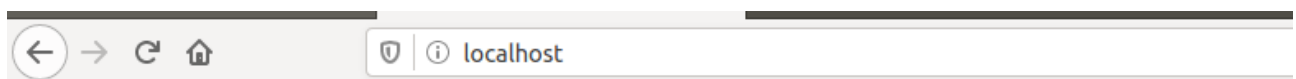
```
jay@Jay-Patel:Documents (master)$ echo "<h1> Nginx ENV1 Page" > ENV1.html
jaj@Jay-Patel:Documents (master)$ echo "<h1> Nginx ENV2 Page" > ENV2.html
jaj@Jay-Patel:Documents (master)$ echo "<h1> Nginx ENV3 Page" > ENV.html
jaj@Jay-Patel:Documents (master)$ echo "<h1> Nginx ENV3 Page" > ENV3.html
```

Project Parameterized

This build requires parameters:

ENV

Build



Nginx ENV2 Page

4. Create a job which on its failure will trigger another job.

Post-build Actions

Build other projects

Projects to build

project1

- ☐ Trigger only if build is stable
- ☐ Trigger even if the build is unstable
- ☒ Trigger even if the build fails

Add post-build action ▾

Project error



[Workspace](#)



[Recent Changes](#)

Downstream Projects

[project1](#)


Permalinks

- [Last build \(#2\), 1 min 17 sec ago](#) ▾
- [Last failed build \(#2\), 1 min 17 sec ago](#)
- [Last unsuccessful build \(#2\), 1 min 17 sec ago](#)
- [Last completed build \(#2\), 1 min 17 sec ago](#)

Console Output

```
Started by user Jay_patel
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/error
[error] $ /bin/sh -xe /tmp/jenkins1806439985140173603.sh
+ mkdir /home/jay/jay13467.txt
mkdir: cannot create directory '/home/jay/jay13467.txt': Permission denied
Build step 'Execute shell' marked build as failure
Triggering a new build of project1
Finished: FAILURE
```

5. Create a job which can set a cronjob on another server. This server contains a script on its home directory and the script will print the two string parameters which will be given by the jenkins job.

Scope	Global (Jenkins, nodes, items, all child items, etc)
ID	dd240465-4492-4332-946f-aaadff7f2978
Description	aws-ec2
Username	ubuntu
Private Key	<div><input checked="" type="radio"/> Enter directly</div> <div><div>Key</div><div><div> Concealed for Confidentiality</div><div>Replace</div></div></div>
Passphrase	

Save

Hostname ?

Port ?

Credentials Add ?

Pty ☐ ?

serverAliveInterval ?

timeout ?

Successfull connection

Check connection

Delete

☐ This build requires lockable resources

☒ This project is parameterized

String Parameter X ?

Name ?

Default Value ?

Description

[Plain text] [Preview](#) ?

☐ Trim the string ?

Save Apply

Build

Execute shell script on remote host using ssh X ?

SSH site

Command

Execute each line ☐ ?

Hide command from console output ☐

Add build step

Project ssh-aws

This build requires parameters:

param1	<input type="text" value="Hello"/>
param2	<input type="text" value="Jay"/>
<input type="button" value="Build"/>	

Console Output

```
Started by user Jay\_patel
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/ssh-aws
[SSH] script:
param1="Hello"
param2="Jay"

./jay.sh $param1 $param2
echo "* * * * * sh /home/ubuntu/jay.sh >> /home/ubuntu/results.txt" | crontab -

[SSH] executing...
Hello Jay


[SSH] completed
[SSH] exit-status: 0

Finished: SUCCESS
```

6. Create a job in which: Pull Dockerfile from GitHub, build it and push to Dockerhub. The docker image should have the tag: git commit id.

jaypttn / gitjenkins

This repository does not have a description 

 Last pushed: never

Loading plugin extensions

 Pending


Source Code Management

☐ None

☒ Git

Repositories

Repository URL

Credentials 

Advanced...

Add Repository

Branches to build


Branch Specifier (blank for 'any')

Docker Build and Publish


Repository Name

Tag

Docker Host URI

Server credentials 

Docker registry URL

Registry credentials 

Advanced...

Add build step

Console Output

```
Started by user Jay_patel
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/dockerpsuhgit
No credentials specified
> git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/jaypttn/dockerexample.git # timeout=10
Fetching upstream changes from https://github.com/jaypttn/dockerexample.git
> git --version # timeout=10
> git fetch --tags --progress -- https://github.com/jaypttn/dockerexample.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision a9dccf0ba724baf7a185549369069c39cb4d1d75 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f a9dccf0ba724baf7a185549369069c39cb4d1d75 # timeout=10
Commit message: "Docker file updated"
> git rev-list --no-walk a9dccf0ba724baf7a185549369069c39cb4d1d75 # timeout=10
[dockerpsuhgit] $ docker build -t jaypttn/gitjenkins:a9dccf0ba724baf7a185549369069c39cb4d1d75 --pull=true /var/lib
/jenkins/workspace/dockerpsuhgit
Sending build context to Docker daemon 51.2kB

Step 1/5 : From ubuntu
latest: Pulling from library/ubuntu
```

IMAGE	docker pull jaypttn/gitjenkins:latest 	
latest		
Last updated an hour ago by jaypttn		
DIGEST	OS/ARCH	COMPRESSED SIZE 
a3898d09d4fb	linux/amd64	70.02 MB

IMAGE	docker pull jaypttn/gitjenkins:a9dccf0ba724baf7a185549369069c39cb4d1d75 	
a9dccf0ba724baf7a185549369069c39cb4d1d75		
Last updated an hour ago by jaypttn		
DIGEST	OS/ARCH	COMPRESSED SIZE 
a3898d09d4fb	linux/amd64	70.02 MB

7. Host a static website on s3.

Its static content should be in git repo. When a person commits any change in the repo, the job should automatically reflect the changes in the s3 website.

Installing Plugins/Upgrades

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Amazon Web Services SDK	<div><div></div></div> Installing
Javadoc	<div><div></div></div> Pending
Maven Integration	<div><div></div></div> Pending
Copy Artifact	<div><div></div></div> Pending
S3 publisher	<div><div></div></div> Pending
Loading plugin extensions	<div><div></div></div> Pending

Amazon S3 profiles

S3 profiles	Profile name	<input type="text" value="jays3access"/>	?
	Use IAM Role	<input type="checkbox"/>	?
	If ticked uses the instance IAM role to access S3.		
	Access key	<input type="text" value="AKIASXL6B65OXNUMWNX6"/>	?
	AWS access key		
	Secret key	<input type="password" value="....."/>	?
AWS secret key			
Check passed!			<button>Test Connection</button>

Save

Apply

Git

Repositories

Repository URL

Credentials

Branches to build

Branch Specifier (blank for 'any')

Repository browser

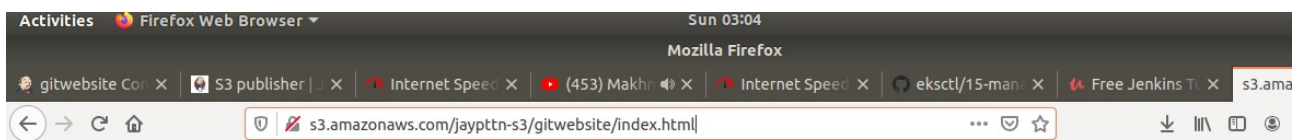
Additional Behaviours

Publish artifacts to S3 Bucket

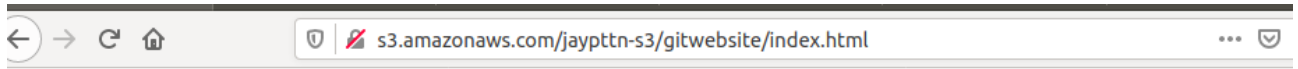
S3 profile

Files to upload

Source	<input type="text"/>
Exclude	<input type="text"/>
Destination bucket	<input type="text" value="jaypttn-s3"/>
Storage class	<input type="text" value="STANDARD"/>
Bucket Region	<input type="text" value="us-east-1"/>
No upload on build failure	<input type="checkbox"/>
Publish from Slave	<input type="checkbox"/>
Manage artifacts	<input type="checkbox"/>
Server side encryption	<input type="checkbox"/>
Flatten directories	<input type="checkbox"/>



Jenkins page of s3 bucket



Jenkins page of s3 bucket

edited Jenkins page of s3 bucket

We can also do this question by installing jenkins on EC2 machine and then using github webhook and we have to use build triggers GitHub hook trigger for GITScm polling and then it will automatically get the latest build of website.