

Project Deployment

GIT :

1. Create a github account
2. Create a repo
3. Upload application source files to the repo
4. Upload web content files to the repo

ENVIRONMENTS REQUIRED :

1. Create Dev Environment
2. Create QA Environment
3. Create Staging Environment
4. Create Production Environment

JENKINS JOBS :

1. Create a Jenkins Job to download From Git
2. Create a Jenkins Job to Build Maven
3. Deploy to Dev Environment
4. Deploy to QA Environment
5. Deploy To Staging Environment
6. Approve for Deploy to Production
7. Deploy to Production

AWS PART

1. Create an AMI of Production Instance
2. Create Launch Configuration
3. Create Auto Scaling Group
4. Create Load Balancer

Upload web content files to the repo

command : `git clone -b <branch name> <repo url>`

- Branch name : Branch created for deployment
- Repo url : Git Repo URL

command `wget https://s3.amazonaws.com/softqinstallables/business-1.zip`

- The above URL has web content files

command : `ls -ltr`

```
-rw-r--r--. 1 root root 1230523 Jun 5 13:57 business-1.zip
drwxr-xr-x. 4 root root      55 Jun 5 14:02 webcontent
root@ip-10-0-0-159 ~#
```

command : `cp business-1.zip webcontent`

command : `cd webcontent`

command : `ls -ltr`

```
drwxr-xr-x. 3 root root 32 Jun 5 14:02 shoppingcart
-rw-r--r--. 1 root root 12 Jun 5 14:02 README.md
-rw-r--r--. 1 root root 1230523 Jun 5 14:11 business-1.zip
```

command : `git branch`

```
root@ip-10-0-0-159 webcontent]# git branch
* first
```

- first is the branch created

command : `git add business-1.zip`

command : `git status`

```
root@ip-10-0-0-159 webcontent]# git status
On branch first
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    new file:   business-1.zip
```

command : git commit -m "adding web content files"

```
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:

    git config --global user.name "Your Name"
    git config --global user.email you@example.com




After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 business-1.zip
```

command : git push origin first

Verify :

 shoppingcart	added shopping cart	17 hours ago
 README.md	Initial commit	17 hours ago
 business-1.zip	adding web content files	13 minutes ago

ENVIRONMENTS REQUIRED

1. Create DEV Environment
 - Install httpd and Configure VHOSTS
 - Install apache tomcat

Install httpd and Configure VHOSTS

Command : `sudo yum install wget`

Command : `sudo yum install httpd`

Command : `service httpd status`

Command : `service httpd start`

Command : `service httpd status`

Verify in Browser : Access Dev Machine ip

- Open port 80 for Dev Instance

Configure VHOSTS :

```
mkdir -p /etc/httpd/conf/vhosts
```

```
vi /etc/httpd/conf/vhosts/dev.yourwebsite.com.conf
```

```
<VirtualHost *:80>
```

```
ServerAdmin webmaster@admin.com
```

```
DocumentRoot /var/www/html/yourname-dev
```

```
ServerName dev.yourwebsite.com
```

```
</VirtualHost>
```

Save and Exit : `esc, wq!`

```
vi /var/www/html/yourname-dev/index.html
```

```
<html>
```

```
<h1>Hi This is dev website</h1>
```

```
</html>
```

Save and Exit : `esc, wq!`

```
vi /etc/httpd/conf/vhosts/qa.yourwebsite.com.conf
```

```
<VirtualHost *:80>  
ServerAdmin webmaster@admin.com  
DocumentRoot /var/www/html/yourname-qa  
ServerName qa.yourwebsite.com  
</VirtualHost>
```

Save and Exit : esc, wq!

```
vi /var/www/html/yourname-qa  
<html>  
<h1>Hi This is QA website</h1>  
</html>  
Save and Exit : esc, wq!
```

```
vi /etc/httpd/conf/vhosts/staging.yourwebsite.com.conf
```

```
<VirtualHost *:80>  
ServerAdmin webmaster@admin.com  
DocumentRoot /var/www/html/yourname-staging  
ServerName staging.yourwebsite.com  
</VirtualHost>
```

Save and Exit : esc, wq!

```
vi /var/www/html/yourname-staging  
<html>  
<h1>Hi This is Staging website</h1>  
</html>  
Save and Exit : esc, wq!
```

```
vi /etc/httpd/conf/vhosts/www.yourwebsite.com.conf
```

```
<VirtualHost *:80>
```

```
ServerAdmin webmaster@admin.com
```

```
DocumentRoot /var/www/html/yourname-production
```

```
ServerName www.yourwebsite.com
```

```
</VirtualHost>
```

Save and Exit : esc, wq!

```
vi /var/www/html/yourname-production
```

```
<html>
```

```
<h1>Hi This is Production website</h1>
```

```
</html>
```

Save and Exit : esc, wq!

Include Vhosts directory in httpd.conf

```
vi /etc/httpd/conf/httpd.conf
```

Insert the below line :

```
Include /etc/httpd/conf/vhosts/*.conf
```

Save and Exit : esc, wq!

Verification of Environments :

1. If windows Open command prompt
2. Run as Administrator

command : notepad C:\Windows\System32\drivers\etc\hosts

Add below entries in last lines :

dev.yourwebsite.com	<Respective IP Address>
qa.yourwebsite.com	<Respective IP Address>
staging.yourwebsite.com	<Respective IP Address>
www.yourwebsite.com	<Respective IP Address>

Save and Exit : ctrl + s

Open Browser :

Access : dev.yourwebsite.com
qa.yourwebsite.com
staging.yourwebsite.com
www.yourwebsite.com

JENKINS

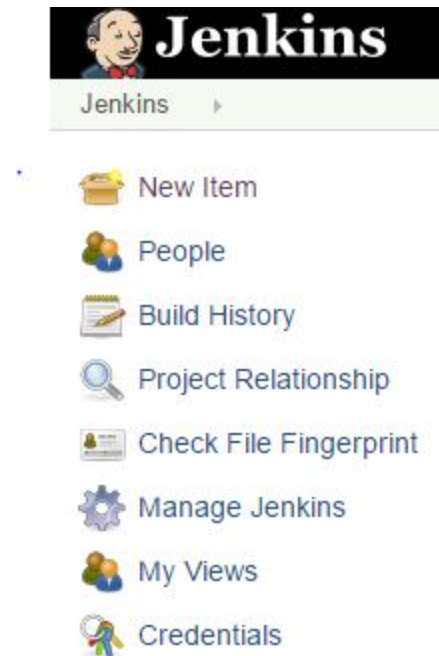
Create Jenkins Job to Download from git

Step1 :

Login to Jenkins at <EC2-Ip Address>:8080/jenkins

Step 2 :

Click New Item

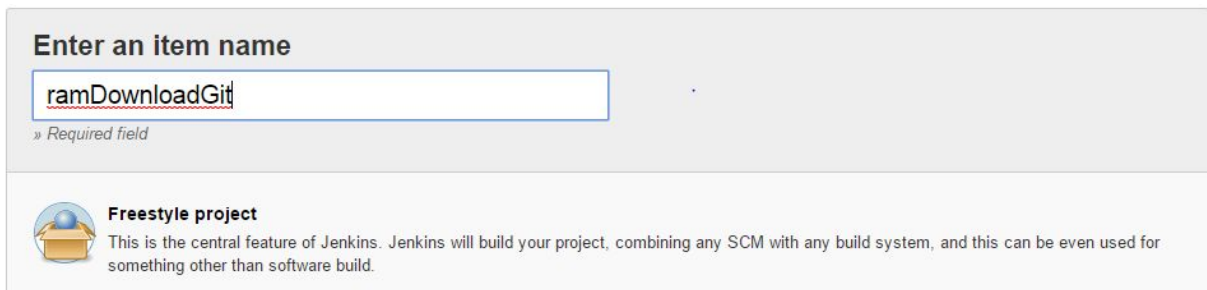


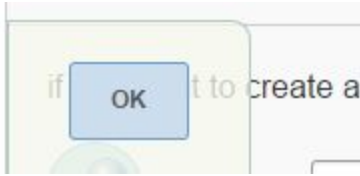
Step 3 :

Name the Job as : <yourName>DownloadGit

Select Free Style Project

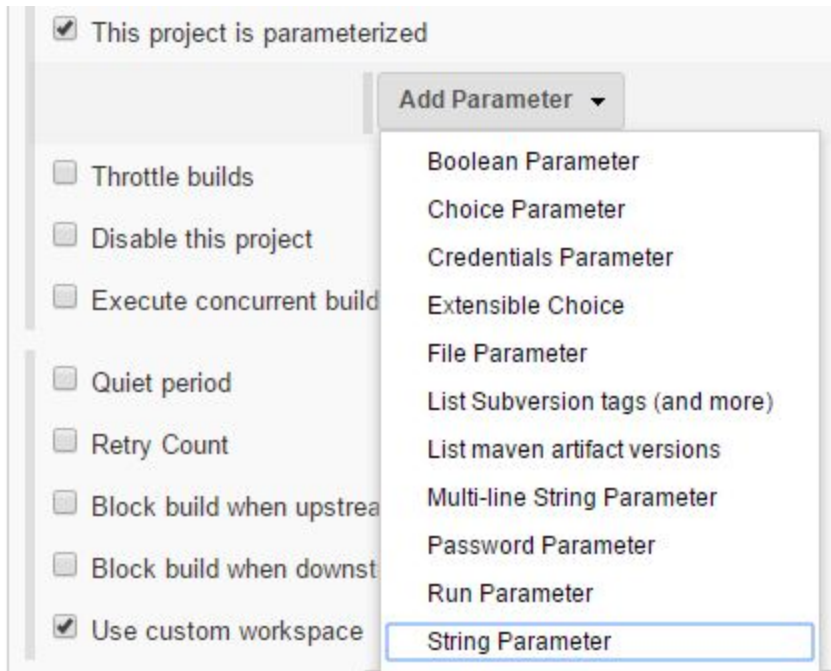
Click OK

The image shows a dialog box titled 'Enter an item name'. It has a text input field containing the text 'ramDownloadGit'. Below the input field is a small text label that says '» Required field'. Below the input field is a section titled 'Freestyle project' with a box icon. The text below this title reads: 'This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.'



Step 4 :
Fill General Section of the Job as Below

A screenshot of the 'General' section of a job configuration interface. The interface has a tabbed header with 'General' selected, followed by 'Source Code Management', 'Build Triggers', 'Build Environment', 'Build', and 'Post-build Actions'. The 'Project name' field contains 'ramDownloadGit'. The 'Description' field contains 'This Job Downloads content from Git'. Below the description is a '[Plain text] Preview' link. A checkbox labeled 'Discard old builds' is checked. Below this is a 'Strategy' dropdown menu set to 'Log Rotation'. Under 'Strategy', there are two input fields: 'Days to keep builds' (empty) and 'Max # of builds to keep' (set to '5'). Below the 'Days to keep builds' field is the text 'if not empty, build records are only kept up to this number of days'. Below the 'Max # of builds to keep' field is the text 'if not empty, only up to this number of build records are kept'. An 'Advanced...' button is located at the bottom right of the section.



Select String Parameter

☒ This project is parameterized

String Parameter

Name

Default Value

Description

[Plain text] [Preview](#)

Add Parameter

☒ Use custom workspace

Directory

Display Name

Step 5 :
Fill Source Code Management Section as below

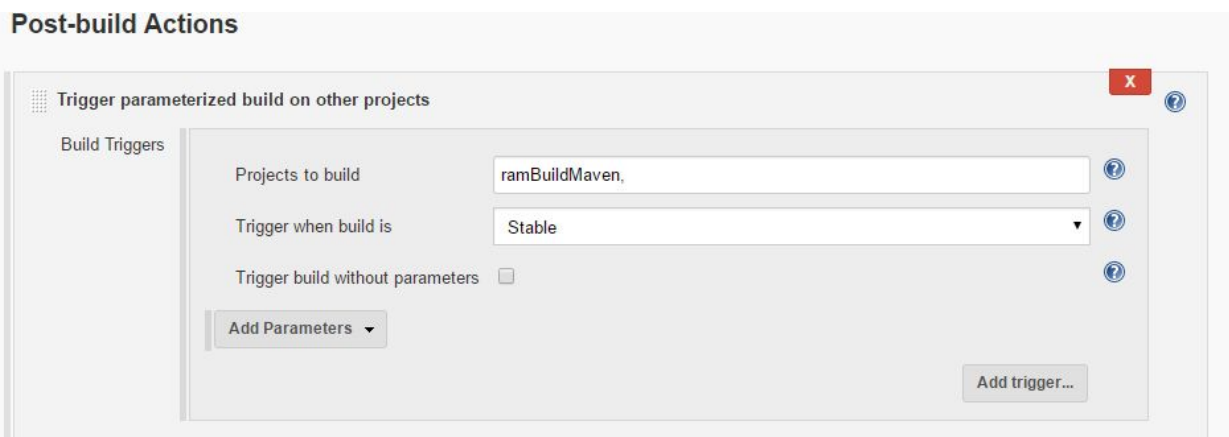
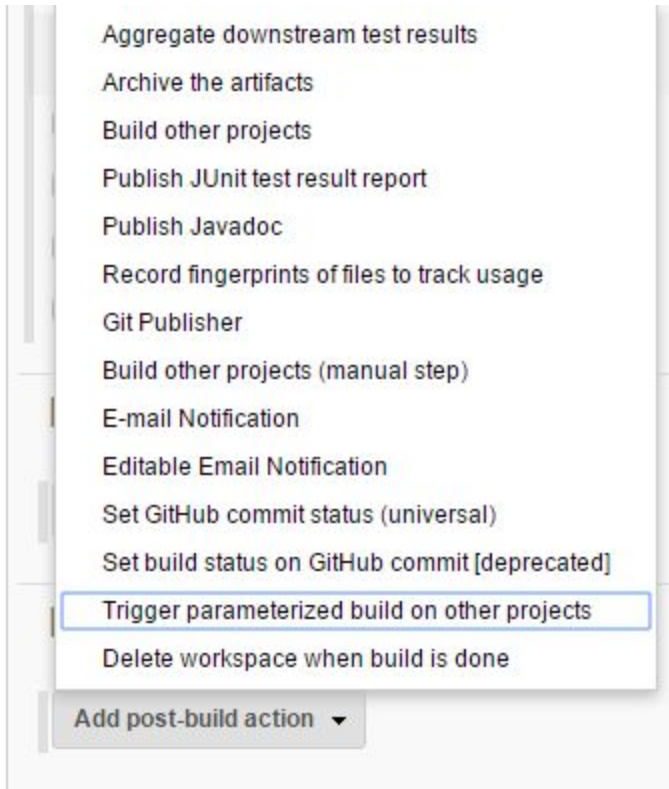
The screenshot shows the 'Source Code Management' configuration page in Jenkins. The tabs at the top are 'General', 'Source Code Management' (selected), 'Build Triggers', 'Build Environment', 'Build', and 'Post-build Actions'. The page title is 'Source Code Management'. On the left, there are two sections: 'Repositories' and 'Branches to build'. In the 'Repositories' section, 'None' is selected, and 'Git' is also selected. The 'Repository URL' is set to 'https://github.com/ramana236/webcontent.git'. The 'Credentials' dropdown is set to 'ramana236/*****'. There are buttons for 'Advanced...', 'Add Repository', and 'Add Branch'. In the 'Branches to build' section, the 'Branch Specifier (blank for 'any')' is set to '*/\$(branch)'. There is a red 'X' icon and a question mark icon next to the input field. There is also an 'Add Branch' button.

Step 6 :
Fill Build Environment as :

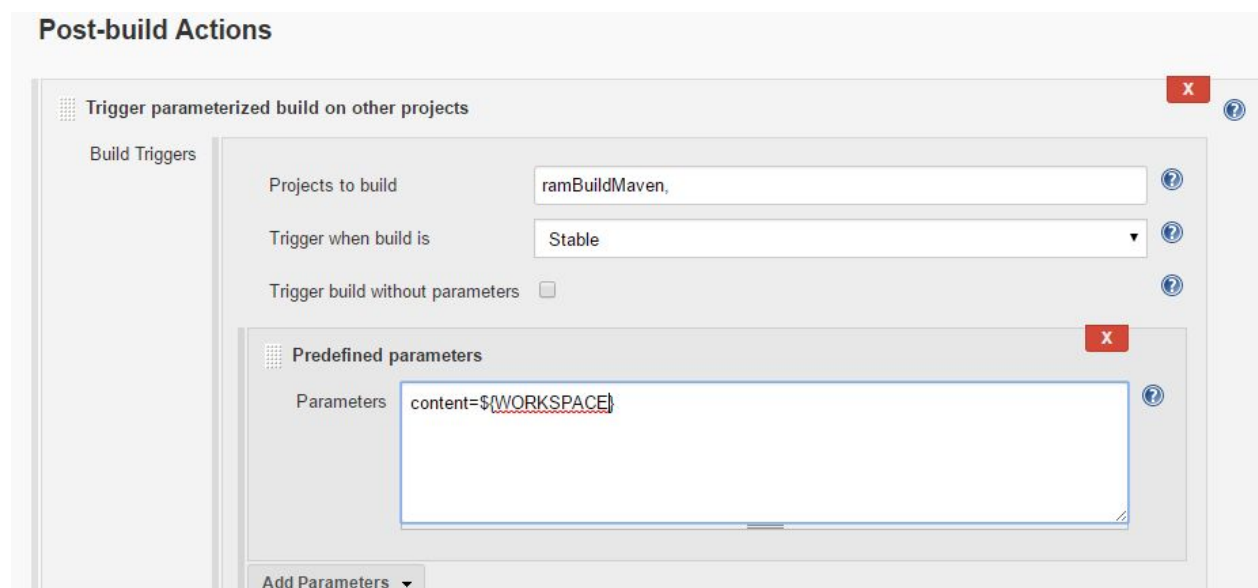
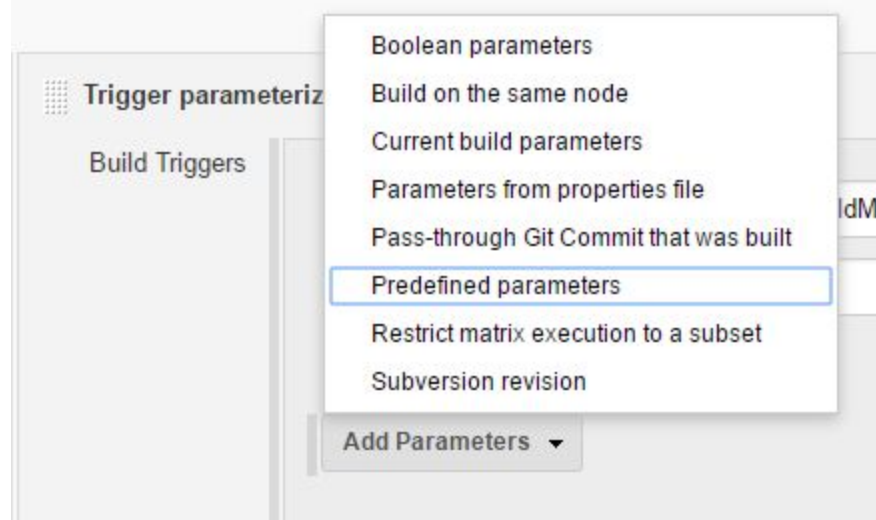
The screenshot shows the 'Build Environment' configuration page in Jenkins. The tabs at the top are 'General', 'Source Code Management', 'Build Triggers', 'Build Environment' (selected), 'Build', and 'Post-build Actions'. The page title is 'Build Environment'. There is a checkbox labeled 'Delete workspace before build starts' which is checked. There is an 'Advanced...' button.

Step 7 :

Under : POST BUILD ACTIONS



Post-build Actions

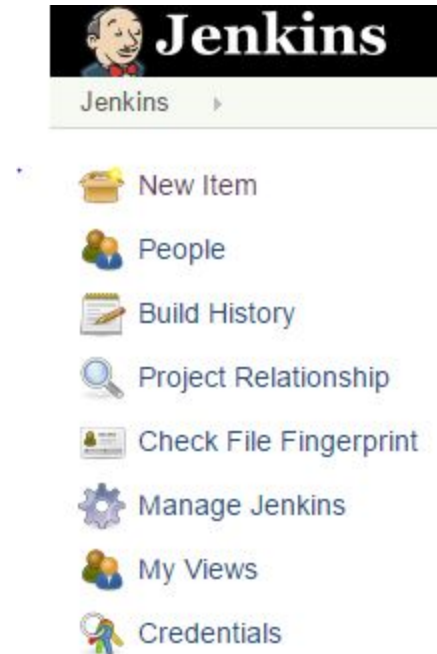


Click On Save

JOB 2 : Build using Maven

Step 1 :

Click New Item

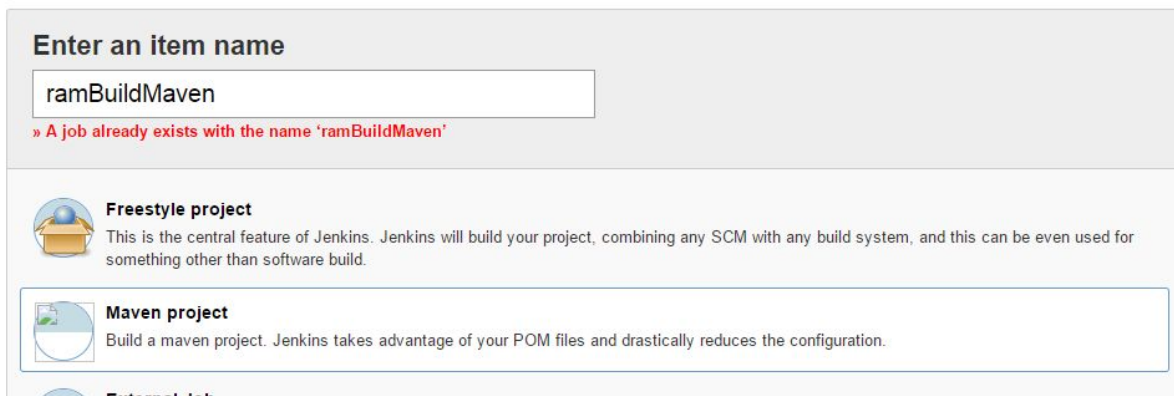


Step 3 :

Name the Job as : <yourName>BuildMaven

Select MavenProject

Click OK

A screenshot of the 'Enter an item name' dialog box in Jenkins. The dialog has a title bar that says 'Enter an item name'. Below the title bar is a text input field containing the text 'ramBuildMaven'. Below the input field is a red error message that says '» A job already exists with the name 'ramBuildMaven''. Below the error message is a list of project types. The first two are 'Freestyle project' and 'Maven project'. The 'Maven project' option is selected, indicated by a blue border around its description box. The 'Freestyle project' option has a description that says 'This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.' The 'Maven project' option has a description that says 'Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.' The 'External job' option is partially visible at the bottom.



Step 2 :

Fill General Section as Below

General Source Code Management Build Triggers Build Environment Pre Steps Build Post Steps Build Settings

Post-build Actions

Maven project name

Description

[Plain text] [Preview](#)

☒ Discard old builds [?](#)

Strategy

Days to keep builds

if not empty, build records are only kept up to this number of days

Max # of builds to keep

if not empty, only up to this number of build records are kept

[Advanced...](#)

☒ This project is parameterized [?](#)

String Parameter [X](#) [?](#)

Name [?](#)

Default Value [?](#)

Description

[Plain text] [Preview](#) [?](#)

[Add Parameter](#) ▼

Step 3 :

Fill Build Environment as



The screenshot shows the 'Build Environment' tab selected in a configuration interface. The tabs at the top are: General, Source Code Management, Build Triggers, **Build Environment**, Pre Steps, Build, Post Steps, and Build Settings. Below the tabs is a section titled 'Post-build Actions'. The main content area is titled 'Build Environment' and contains a checkbox labeled 'Delete workspace before build starts' which is checked. Below the checkbox is a button labeled 'Advanced...'. The interface has a light gray background and a clean, modern design.

Step 4 : Fill Pre Steps Section as



The screenshot shows the 'Pre Steps' tab selected in a configuration interface. The tabs at the top are: General, Source Code Management, Build Triggers, Build Environment, **Pre Steps**, Build, Post Steps, and Build Settings. Below the tabs is a section titled 'Post-build Actions'. The main content area is titled 'Pre Steps' and contains a section titled 'Execute shell' with a red close button and a help icon. Below this is a text area for 'Command' containing the following text: `cp -R ${content}/shoppingcart .` and `cp ${content}/business-1.zip .|`. Below the text area is a link that says 'See [the list of available environment variables](#)'. The interface has a light gray background and a clean, modern design.

Step 5 :

Fill Build Section as



The screenshot shows the 'Build' tab selected in a configuration interface. The tabs at the top are: General, Source Code Management, Build Triggers, Build Environment, Pre Steps, **Build**, Post Steps, and Build Settings. Below the tabs is a section titled 'Post-build Actions'. The main content area is titled 'Build' and contains two input fields. The first field is labeled 'Root POM' and has the value 'shoppingcart/pom.xml'. The second field is labeled 'Goals and options' and has the value 'clean compile package'. Both fields have a help icon to their right. The interface has a light gray background and a clean, modern design.

Click on Advanced

☒ Use custom workspace

Directory

Maven Validation Level

Settings file

File path

Global Settings file

File path

Step 6 :
Fill post Build Action as

Post-build Actions

Trigger parameterized build on other projects

Build Triggers

- Boolean parameters
- Build on the same node
- Current build parameters
- Parameters from properties file
- Pass-through Git Commit that was built
- Predefined parameters**
- Restrict matrix execution to a subset
- Subversion revision

Add Parameters ▾

Trigger parameterized build on other projects

Build Triggers

Projects to build

No such project 'ramDeploytoDev'. Did you mean 'ramBuildMaven'?

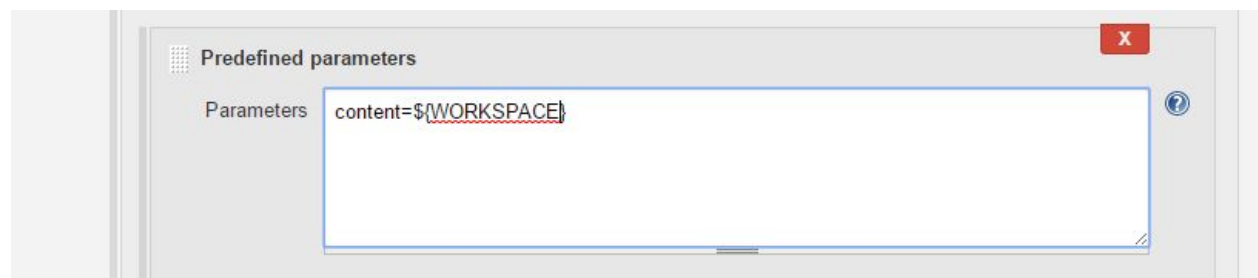
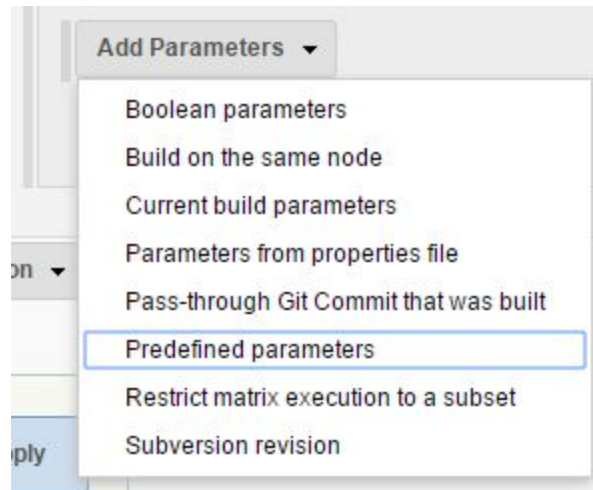
Trigger when build is

Trigger build without parameters ☐

Trigger build from child projects ☐

Add Parameters ▾

Add trigger...



Configure SSH Machines

2. SSH Configuration

Configure Dev, QA, Staging and Prod Machines

Step 1 :

Navigate to Jenkins Dashboard

 Manage Jenkins

 My Views

 Credentials

Click on Manage Jenkins

 New version of Jenkins (2.58) is available for [download](#)



[Configure System](#)

Configure global settings and paths.

Click on Configure System

Scroll Down Until You see the below snippet

Publish over SSH

Jenkins SSH Key

Passphrase

Path to key

Key

Disable exec ☐

SSH Servers

SSH Server

Name QA-Machine


Hostname 10.0.1.244


Username ec2-user


Remote Directory /home/ec2-user


Click on Add


SSH Server


Name 


 Required. Cannot contain < & ' " \

Hostname 

 Required


Username 

 Required

Remote Directory 

Fill the details as above : Instead of ram replace with your Name

Add Key :

Username	ec2-user
	 Required
Remote Directory	/home/ec2-user
<input checked="" type="checkbox"/> Use password authentication, or use a different key	
Passphrase / Password	
Path to key	
Key	<div>N8r6BJq6amPbd40/GXte2OT ApDxdUVra5sP0E7J96Oj7II9FFXOhQfcL065ybR4 WD0DcmFOpJK7qYdygqpMB o1JVzFeR/ocaKgQNCjJ4a3TBAoGBAJ7wWQJZj BTy9kJ0Wf0b1paBFOIHMvLr TpKVWZv0Cnb2YE6WvF5v/hvmgD5m6n7nBeOk</div>
Jump host	
Port	22
Timeout (ms)	300000

Paste this content in place of Key :

-----BEGIN RSA PRIVATE KEY-----

MIIEpAIBAAKCAQEA mN3W7fgYz38VRciWV6HSf16lRoehKxR3P+k9Qg1J
Gtm1zkml+hWKJuV1veyG
iafxwbxXcPHyPscOVE0AYwjufsuVRI5c7L0EV1yfYxgcC5nOV6N1m4eHdx
WBOHZm2Bf7blVKj6C9
G9chH7pX5DaoVGqNuGgjvB9RkrRSEoj17bBHxzAalSIKIKhu7UzIVacaQlf
d7GT59FcE+V+zNoO8
2dWvndnouslZbBf3fah4kzEAZj/kL3B12VPxgH9eupyd/8+8qWUNIWy6W+B
OTw8zhuno//Sm9/IE
9zY3pvWoWCu1sW+aVaiHldLeWJ1zOCWSsRdRQ2bp75kSFV227AohowI
DAQABAolBAENmjL2gBIB2
2ApMxv0cfJNsR7MxWf6Ep4+mZzwYX4NXOrlaBvSdSqybv65d+3P2eMHT
KTrDcuv7GHZS/TitV3rQ
iKARpSc8sA1U6XHz3XN+wzpJZHN0AzRjog2rGHbMSEUuitZ1AfScuhqY
RZegxm1YYdNY3Qu2ui0
WPrbvJNv1e5Nbn52y7uRstswUIK6SkMcdUUT/y4PfeFZ3GBR96GvazBxj+
XW4xCTFvxl4xjqZ3ri
IkrcGNKKj8KkjLPBEdT4dUGzmrfgojAssS1ON7Dkp0tFc7wEXskFtFpJoHI3
BDmPgrRYeAQYCdCk
QkRZHx/ZBEZrGRfW3gizXPG1PAECgYEA5Kgl637iMd4f8aOgm6HOvNhb
Yb3H8FKiQZ5RZFrn9O90
IA4dhgBzyn55t/Djksse/zVDCBWAGgvxVQt+jLQheAPdxmeS+tHbR72r4K
BLA/hm99hzc7c8Vg5
nF9cYU91UxkM37vGixvh2U3jluJGNV0iosYyO0yl0z9h/8iagnMCgYEAqyW
HzXUsw0dxAxomR02
Fo/qaJtlJofHFbRubzp0KYx69jCCQ+cRJ/Ooq7We6sLLh8RV49nR2avLs0k
OET/zKuxYtC2baTmW
wQpRXn9yxNm4/Zs3SWnRh2H+nUOlzEBajUG+VRL60qmpdGFam2L0UB
DWBvInpUFI87ZcVrQkqBEC
gYEAzStHozBd3CsYdKTCTwMQUwi7rk8wuSYca06Yb7jWC0RU6XJg8V00
iMzFgNQIDkjFKJervs7A

```
/Gp/+srW2np/+rAakF6PWEXL+FDhPoiWSSgS4t8kjhWAyhnEz9gNN0+p0Z
9XmuWNeELTez3VAfcQ
0k84hd/bMLQyzYJA99dTNJsCgYEAgpU8LNN+t2Kcl30wQcM8BbMBE5ed
ceyfRjxJFqzu/NSm7TjN
66leObF7vKfy/QRr7scrEZKcvwyJe9390cONce6rL66sqXi7Qcbxlr/gRruPvl
zGNyYdkea0btP
waxlawcChj7ZCetR0+6EB5NU/dlau2oAPeLMO0uk4LLKVUECgYA9OMvo
Q/uqWdEJn3HP1jf1r/t+
Qn+9tA4awMulBNJ8CJKV8pOXZyN/jUpyczZYDusjtRWZCtOFw8sYp9Sb
WXrK03yJo8B9QIBdQogu
RuM6c5mJqS7Tlt+Dno9B5OI8KIHIldNuCAs1X2sGcc6ctzIPS0/l+Ak/yw7yLg
TqMgBMV9Q==
-----END RSA PRIVATE KEY-----
```

Proxy host	<input type="text"/>
Proxy port	<input type="text"/>
Proxy user	<input type="text"/>
Proxy password	<input type="password"/>
Success	
<input type="button" value="Test Co"/>	

Click on Test Configuration You need to see Success.

Add one more server for QA

Instead of ram-QA give it as yourname-QA

Instead of ram-QA give it as yourname-Staging

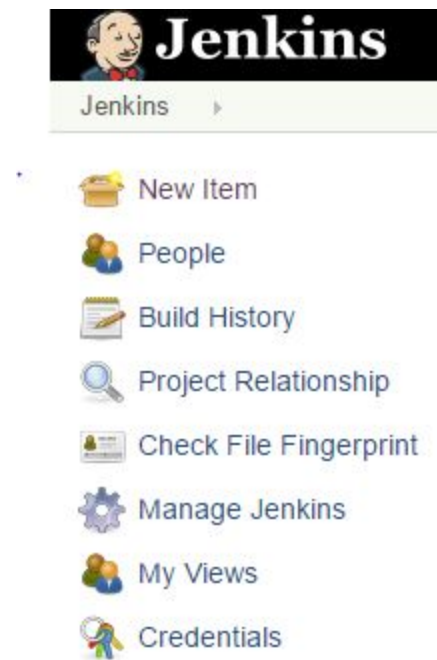
Instead of ram-prod give it as yourname-prod

JOB 3 :

Deploy to Dev Environment

Step 1 :

Click New Item



Step 3 :


Name the Job as : <yourName>DeploytoDev

Select FreeStyleProject

Click OK

Enter an item name

» Required field

**Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Step 4 :
Fill General Section as

The screenshot shows the 'General' configuration tab for a Jenkins job. The 'Project name' field is filled with 'ramDeploytoDev'. The 'Description' field contains the text 'This Job Deploys Content to Dev Environment'. Below the description, there is a '[Plain text] [Preview](#)' link. The 'Discard old builds' checkbox is checked. The 'Strategy' dropdown menu is set to 'Log Rotation'. Below this, there are two input fields: 'Days to keep builds' (which is empty) and 'Max # of builds to keep' (which is filled with '5'). Below the 'Days to keep builds' field, there is a note: 'if not empty, build records are only kept up to this number of days'. Below the 'Max # of builds to keep' field, there is a note: 'if not empty, only up to this number of build records are kept'. An 'Advanced...' button is located at the bottom right of the configuration area.

The screenshot shows the 'Add Parameter' dropdown menu in Jenkins. The menu is open, displaying a list of parameter types. The 'String Parameter' option is highlighted with a blue border. The other options in the list are: Boolean Parameter, Choice Parameter, Credentials Parameter, Extensible Choice, File Parameter, List Subversion tags (and more), List maven artifact versions, Multi-line String Parameter, Password Parameter, Run Parameter, and Throttle builds. The background shows the 'Source Code' section of the Jenkins configuration, with options like 'None' and 'Git' visible.

☒ This project is parameterized

String Parameter

X

Name

content

Default Value

Description

[Plain text] [Preview](#)

Add Parameter ▾

General **Source Code Management** Build Triggers Build Environment Build Post-build Actions

☐ Disable this project

☐ Execute concurrent builds if necessary

☐ Quiet period

☐ Retry Count

☐ Block build when upstream project is building

☐ Block build when downstream project is building

☒ Use custom workspace

Directory

Display Name

Step 5 :

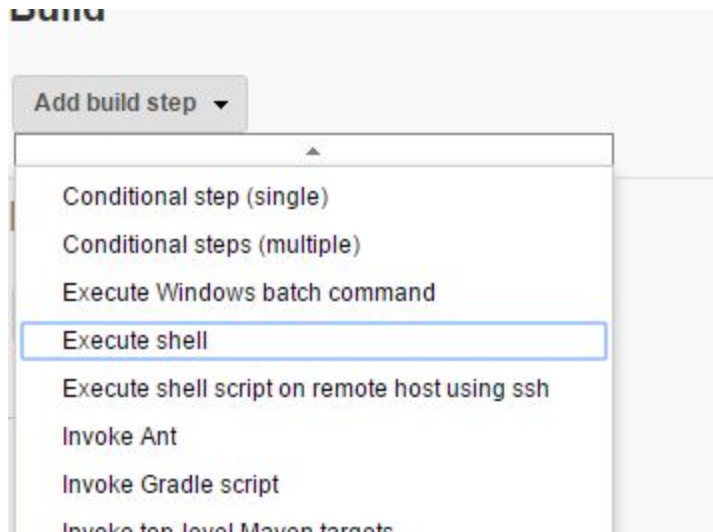
Fill Build Environment Section as

General Source Code Management Build Triggers **Build Environment** Build Post-build Actions

Build Environment

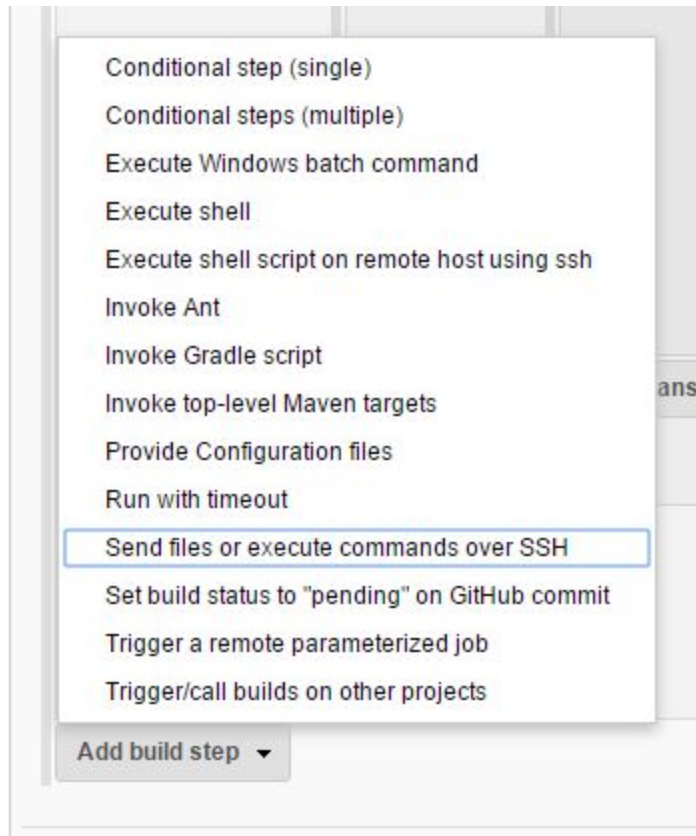
☒ Delete workspace before build starts

Advanced...



cp \${content}/shoppingcart/target/*.war .
cp \${content}/*.zip .

Again Select a Build Step as :



Fill Send Files Section As :

A screenshot of the Jenkins 'Send files or execute commands over SSH' configuration page. The page is titled 'Send files or execute commands over SSH' and has a sidebar with 'SSH Publishers' and 'SSH Server'. The 'SSH Server' section has a 'Name' field with the value 'yourwebsite-dev'. Below this is the 'Transfers' section, which contains a 'Transfer Set' with the following fields: 'Source files' (value: '**/*.war,**/*.*.zip'), 'Remove prefix' (empty), 'Remote directory' (value: 'yourwebsite-dev'), and 'Exec command' (value: 'echo Deploying content to dev\nsudo rm -rf /var/www/html/yourwebsite-dev/*\nsudo unzip /home/ec2-user/yourwebsite-dev/*.zip -d\n/var/www/html/yourwebsite-dev'). A red error message is displayed below the 'Exec command' field: 'Either Source files, Exec command or both must be supplied'. Below the error message is a note: 'All of the transfer fields (except for Exec timeout) support substitution of [Jenkins environment variables](#)'. There are 'Advanced...' buttons next to the 'SSH Server' and 'Transfer Set' sections.

Exec Command :

echo Deploying content to dev

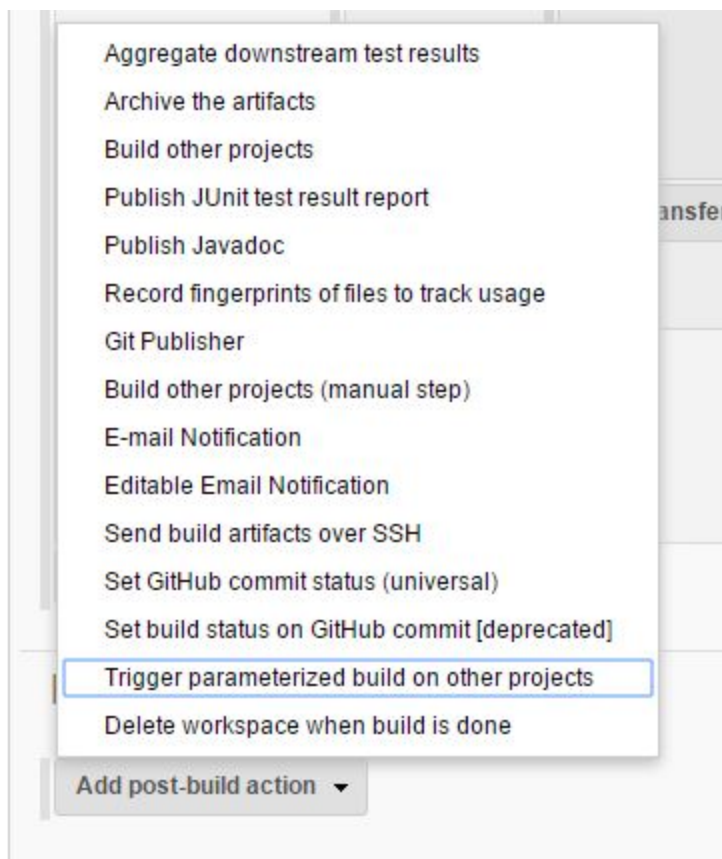
```
sudo rm -rf /var/www/html/yourwebsite-dev/*
```

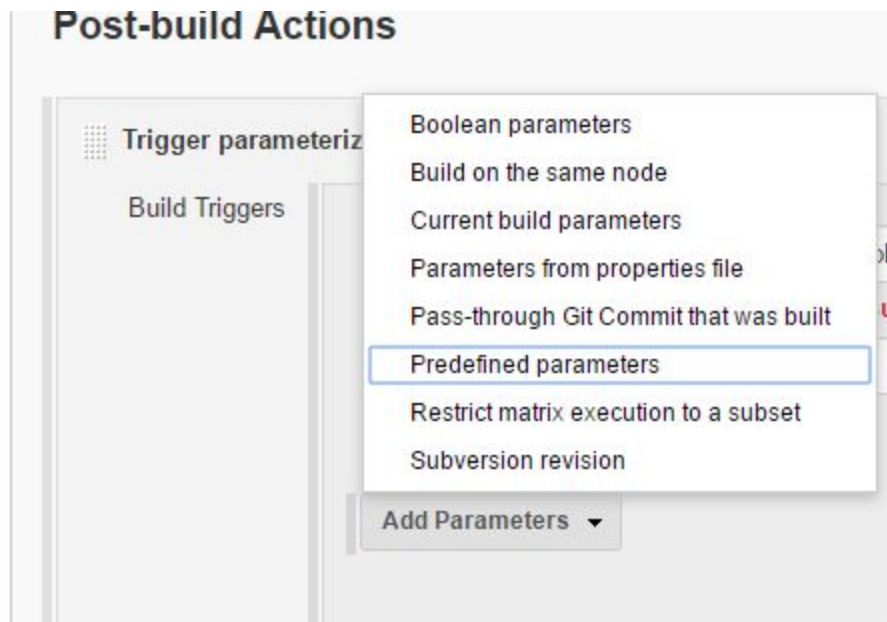
```
Sudo      unzip      /home/ec2-user/yourwebsite-dev/*.zip      -d  
/var/www/html/yourwebsite-dev
```

```
sudo      cp      /home/ec2-user/yourwebsite-dev/shoppingcart.war  
/opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite.war
```

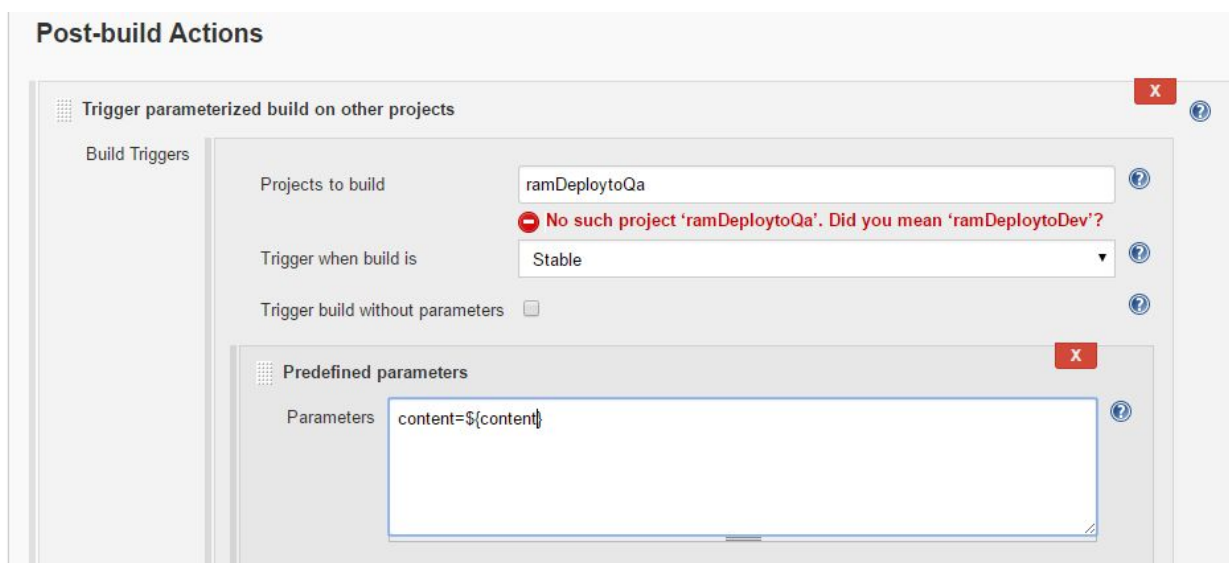
Step 7 :

Select Post Build actions as :





Fill the section as :



Apply and Save

JOB 4 : Deploy To QA


Enter an item name

ramDeploytoQa

» Required field

Scroll Down to CopyFromExisting Job and Select

if you want to create a new item from other existing, you can use this option:

 Copy from ramDeploytoDev

Click OK

Replace All the Names matching with Dev To QA

☒ Use custom workspace

Directory /jenkins-jobs/ramDeploytoQa

Display Name

Send files or execute commands over SSH

SSH Publishers

SSH Server

Name yourwebsite-qa

Transfers

Transfer Set

Source files **/*.war,**/*.zip

Remove prefix

Remote directory yourwebsite-qa

Exec command

```
echo Deploying content to qa
sudo rm -rf /var/www/html/yourwebsite-qa/*
sudo unzip /home/ec2-user/yourwebsite-qa/*.zip -d /var/www/html/yourwebsite-qa
sudo cp /home/ec2-user/yourwebsite-qa/shoppingcart.war /opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite.war
```

Change Exec Commands as :

echo Deploying content to qa

sudo rm -rf /var/www/html/yourwebsite-qa/*

sudo unzip /home/ec2-user/yourwebsite-qa/*.zip -d
/var/www/html/yourwebsite-qa

sudo cp /home/ec2-user/yourwebsite-qa/shoppingcart.war
/opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite.war

- Yourwebsite should be replaced by yourwebsite name


Post-build Actions

Trigger parameterized build on other projects

Build Triggers

Projects to build

ramDeploytoStaging

 No such project 'ramDeploytoStaging'. Did yo

Trigger when build is

Stable

Trigger build without parameters

☐

Predefined parameters

Parameters

content=\${content}

Apply and Save

Job 5 : Deploy to Staging


Enter an item name

ramDeploytoStaging

» Required field

Scroll down to copy Existing Job

if you want to create a new item from other existing, you can use this option:

 Copy from ramDeploytoQa

Click OK

Replace All QA to staging

☒ Use custom workspace

Directory /jenkins-jobs/ramDeploytoStaging

SSH Server

Name yourwebsite-staging

Transfers

Transfer Set

Source files **/*.war,**/*.zip

Remove prefix

Remote directory yourwebsite-staging

Exec command

```
echo Deploying content to qa  
sudo rm -rf /var/www/html/yourwebsite-staging/*  
sudo unzip /home/ec2-user/yourwebsite-staging/*.zip -d /var/www/html/yourwebsite-staging  
sudo cp /home/ec2-user/yourwebsite-staging/shoppingcart.war /opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite-staging
```

Either Source files, Exec command or both must be supplied

```
echo Deploying content to staging
sudo rm -rf /var/www/html/yourwebsite-staging/*
sudo      unzip      /home/ec2-user/yourwebsite-staging/*.zip      -d
/var/www/html/yourwebsite-staging
sudo      cp      /home/ec2-user/yourwebsite-staging/shoppingcart.war
/opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite.war
```

- Replace yourwebsite with yourwebsite name

Post-build Actions

Trigger parameterized build on other projects

Build Triggers

Projects to build:
 ❌ No such project 'ramApproveForProduction'. Did you

Trigger when build is:

Trigger build without parameters: ☐

Predefined parameters

Parameters:

Add Parameters ▼


Click Apply and Save

JOB 6 : Production Approval

Enter an item name

ramApproveForProduction

» Required field

 **Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Select Free Style Project

Click OK

☒ Discard old builds

Strategy: Log Rotation

Days to keep builds:

if not empty, build records are only kept up to this number of days

Max # of builds to keep: 5

if not empty, only up to this number of build records are kept

Advanced...

☒ Promote builds when...

Promotion process

Name: Promote

Visible:

Icon: Gold star

☐ Restrict where this promotion process can be used

Criteria

☐ Custom Groovy script

☒ Only when manually approved

Approvers: admin

Approval Parameters


JOB 7 : Deploy to Production

Enter an item name

ramDeploytoProd

» Required field

if you want to create a new item from other existing,

 Copy from ramDeploytoDev

OK

Click OK

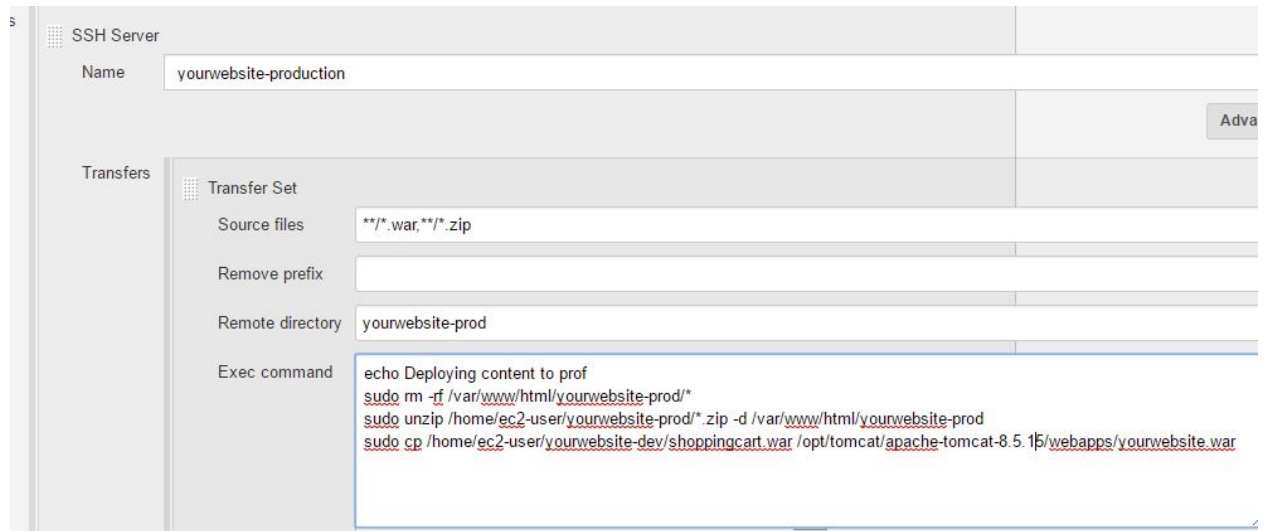
Change Content From Dev to prod

☒ Use custom workspace

Directory /jenkins-jobs/ramDeploytoProd

Display Name

☐ Keep the build logs of dependencies



echo Deploying content to prod

```
sudo rm -rf /var/www/html/yourwebsite-prod/*
```

```
sudo      unzip      /home/ec2-user/yourwebsite-prod/*.zip      -d
/var/www/html/yourwebsite-prod
```

```
sudo      cp      /home/ec2-user/yourwebsite-dev/shoppingcart.war
/opt/tomcat/apache-tomcat-8.5.15/webapps/yourwebsite.war
```

- As there are No Following Jobs Post Build actions can be removed

Post-build Actions

Trigger parameterized build on other projects

Build Triggers

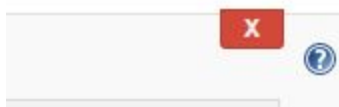
Projects to build: ramDeploytoQa

Trigger when build is: Stable

Trigger build without parameters: ☐

Predefined parameters

Parameters: content=\${content}



Click on this mark

Click Apply and Save

ProxyPass /yourwebsite http://localhost:8080/yourwebsite

ProxyPassReverse

/yourwebsite

http://dev.yourwebsite.com:8080/yourwebsite