



Multi-Branch CI/CD Deployment with Jenkins and Docker


1. Configure Jenkins Server.


 **Jenkins**


Dashboard >

+ New Item

 Build History

 Manage Jenkins

 My Views

 Open Blue Ocean

Build Queue

No builds in the queue.

Build Executor Status

(0 of 2 executors busy)

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job


Set up a distributed build

Set up an agent

Configure a cloud


Learn more about distributed builds


Add description


 **Jenkins**


Dashboard >

+ New Item

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Build Queue

No builds in the queue.

Build Executor Status

(0 of 2 executors busy)

All

| S | W | Name ↓ | Last Success | Last Failure | Last Duration | | F |
|-----|---|----------------------|--------------|--------------|---------------|---|---|
| ... | ☀ | Branch-Base-Pipeline | N/A | N/A | N/A | ▶ | ★ |

Icon: S M L

Add description

Dashboard > Branch-Base-Pipeline > Configuration

Configure

General

Triggers

Pipeline

Advanced

☐ Preserve stashes from completed builds ?

☒ This project is parameterised ?

Choice Parameter ?

Name ?

BRANCH-DEPLOY

Choices ?

DEV
QA

Description ?

Plain text Preview

Configure

- General
- Triggers
- Pipeline
- Advanced

Script ?

```
1 pipeline {
2   agent any
3
4   parameters {
5     choice(
6       name: 'BRANCH_DEPLOY',
7       choices: ['DEV', 'QA'],
8       description: 'Select the branch to deploy'
9     )
10  }
11
12  environment {
13    DOCKER_IMAGE = "my-node-app:${BUILD_NUMBER}"
14    CONTAINER_NAME = "Node-app"
15  }
16
17  stages {
18    stage('Checkout Code') {
19      steps {
20        echo "Checking out code from branch: ${params.BRANCH_DEPLOY}"
21        git branch: "${params.BRANCH_DEPLOY}", url: 'https://github.com/sham9394/node-app.git'
22      }
23    }
24  }
```

Save

Apply

2. Build Trigger with Parameter: "DEV"

- Status
- Changes
- Build with Parameters
- Configure
- Delete Pipeline
- Full Stage View
- Favorite
- Open Blue Ocean

Pipeline Branch-Base-Pipeline

This build requires parameters:

BRANCH_DEPLOY

DEV

Build

Cancel

- Status
- Changes
- Build with Parameters
- Configure
- Delete Pipeline
- Full Stage View
- Favorite
- Open Blue Ocean
- Stages
- Rename
- Pipeline Syntax

Branch-Base-Pipeline

Add desc

Stage View

| Average stage times: (full run time: ~21s) | | | | | |
|--------------------------------------------|---------------|--------------------|---------------------|------------------------|---------------------------|
| | Checkout Code | Build Docker Image | Clean Old Container | Start Docker Container | Declarative: Post Actions |
| #1 | 2s | 8s | 3s | 3s | 235ms |
| Aug 01 12:52 | 2s | 8s | 3s | 3s | 235ms |

Permalinks

- Last build (#1), 33 ms ago

Builds

Filter

Today

#1 12:52

Dashboard > Branch-Base-Pipeline > #1

Status

</> Changes

📄 Console Output

📄 Edit Build Information

⚙️ Parameters

🕒 Timings

🔗 Git Build Data

🌊 Open Blue Ocean

✅ #1 (1 Aug 2025, 12:52:25)

📝 Add description

🔄 Keep this build forever

🕒 Started by user sham chaudhari

🕒 This run spent 15 ms waiting in the queue.

🔗 git


Revision: 6b8ef8fa3b1681b86b208a6448e10003222f8e3
Repository: <https://github.com/sham9394/node-app.git>
• refs/remotes/origin/DEV

</>

No changes.

Started 13 sec ago

Build has been executing for 13 sec

 **Jenkins**

🔍

🔔

🛡️

🔴

sham chaudhari

🔗 log out

Dashboard > Branch-Base-Pipeline > #1

Status

</> Changes

📄 Console Output

📄 Edit Build Information

🗑️ Delete build '#1'

⚙️ Parameters

🕒 Timings

🔗 Git Build Data

🌊 Open Blue Ocean

🔗 Pipeline Overview

🔄 Restart from Stage

🔄 Replay

📋 Pipeline Steps

📁 Workspaces

✅ Console Output

📄 Download

📄 Copy

📄 View as plain text

Started by user sham chaudhari

[Pipeline] Start of Pipeline

[Pipeline] node

Running on Jenkins in C:\ProgramData\Jenkins\.jenkins\workspace\Branch-Base-Pipeline

[Pipeline] {

[Pipeline] withEnv

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Checkout Code)

[Pipeline] echo

Checking out code from branch: DEV

[Pipeline] git

The recommended git tool is: NONE

No credentials specified

> git.exe rev-parse --resolve-git-dir C:\ProgramData\Jenkins\.jenkins\workspace\Branch-Base-Pipeline\.git # timeout=10

Fetching changes from the remote Git repository

> git.exe config remote.origin.url <https://github.com/sham9394/node-app.git> # timeout=10

Fetching upstream changes from <https://github.com/sham9394/node-app.git>

> git.exe --version # timeout=10

> git --version # 'git version 2.50.0.windows.2'

> git.exe fetch --tags --force --progress -- <https://github.com/sham9394/node-app.git> +refs/heads/*:refs/remotes/origin/* # timeout=10

Welcome to My Node.js App output Appearing from DEV Branch...!

Click below to get a random programming quote:

[Get Quote](#)

3. Build Trigger with Parameter: “QA”

Jenkins

sham chaudhari

log out

Dashboard > Branch-Base-Pipeline >

Status

Changes

Build with Parameters

Configure

Delete Pipeline

Full Stage View

Favorite

Open Blue Ocean

Stages

Pipeline Branch-Base-Pipeline

This build requires parameters:

BRANCH_DEPLOY

Select the branch to deploy

QA

Build

Cancel

Jenkins

sham chaudhari

log out

Dashboard > Branch-Base-Pipeline >

Status

Changes

Build with Parameters

Configure

Delete Pipeline

Full Stage View

Favorite

Open Blue Ocean

Stages

Rename

Pipeline Syntax

Branch-Base-Pipeline

Add description

Stage View

Average stage times:
(full run time: ~18s)

| | Checkout Code | Build Docker Image | Clean Old Container | Start Docker Container | Declarative: Post Actions |
|----------------------------------|---------------|--------------------|---------------------|------------------------|---------------------------|
| #2 Aug 01 13:00 No Changes | 2s | 7s | 2s | 2s | 325ms |
| #1 Aug 01 12:52 No Changes | 2s | 8s | 3s | 3s | 235ms |

Permalinks

- Last build (#2), 0.1 sec ago
- Last stable build (#1), 8 min 24 sec ago
- Last successful build (#1), 8 min 24 sec ago
- Last completed build (#1), 8 min 24 sec ago

Builds

Filter

Today

#2 13:00

Jenkins

sham chaudhari

log out

Dashboard > Branch-Base-Pipeline > #2

Status

Changes

Console Output

Edit Build Information

Delete build '#2'

Parameters

Timings

Git Build Data

Open Blue Ocean

Pipeline Overview

Restart from Stage

#2 (1 Aug 2025, 13:00:50)

Add description

Keep this build forever

Started by user sham chaudhari

Started 1 min 7 sec ago
Took 16 sec

This run spent:

- 19 ms waiting;
- 16 sec build duration;
- 16 sec total from scheduled to completion.

git

Revision: 227ada5d2fd941cc49c9dc8780663fd6aa5621d

Repository: https://github.com/sham9394/node-app.git

- refs/remotes/origin/QA

No changes.

Dashboard > Branch-Base-Pipeline > #2

- Status
- Changes
- Console Output
- Edit Build Information
- Delete build '#2'
- Parameters
- Timings
- Git Build Data
- Open Blue Ocean
- Pipeline Overview
- Restart from Stage
- Replay
- Pipeline Steps
- Workspaces

Console Output

Download Copy View as plain text

```
Started by user sham chaudhari
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\.jenkins\workspace\Branch-Base-Pipeline
[Pipeline] {
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Checkout Code)
[Pipeline] echo
Checking out code from branch: QA
[Pipeline] git
The recommended git tool is: NONE
No credentials specified
> git.exe rev-parse --resolve-git-dir C:\ProgramData\Jenkins\.jenkins\workspace\Branch-Base-Pipeline\.git # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/sham9394/node-app.git # timeout=10
Fetching upstream changes from https://github.com/sham9394/node-app.git
> git.exe --version # timeout=10
> git --version # 'git version 2.50.0.windows.2'
> git.exe fetch --tags --force --progress -- https://github.com/sham9394/node-app.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git.exe rev-parse "refs/remotes/origin/000f000f" # timeout=10
```

Welcome to My Node.js App Output Appering from QA Branch.....!

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