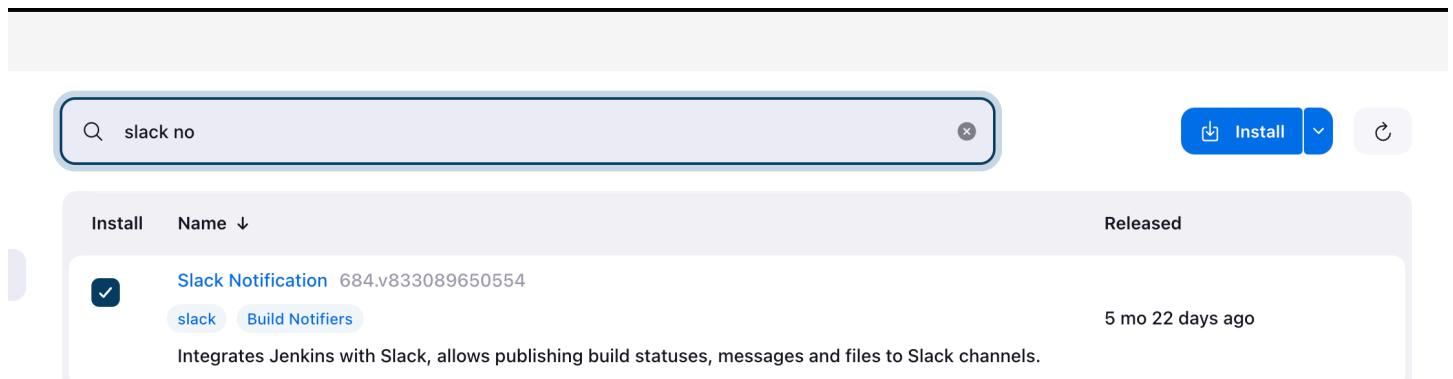


# JENKINS INTEGRATION WITH SLACK & SPLUNK

## SLACK INTEGRATION:

STEP-1: SETUP JENKINS

STEP-2: INSTALL SLACK NOTIFICATION PLUGIN



STEP-3: CREATE ACCOUNT ON SLACK USING GOOGLE ACCOUNT.



# First of all, enter your email address

We suggest using the email address that you use at work.

**Continue**

OR

 Continue with Google

 Continue with Apple

Already using Slack?

[Sign in to an existing workspace](#)

**click on continue with Google**



Confirmed as [awsanddevops18@gmail.com](mailto:awsanddevops18@gmail.com) Change

# Create a new Slack workspace

Slack gives your team a home – a place where they can talk and work together. To create a new workspace, click on the button below.

[Create a workspace](#)



By continuing, you're agreeing to our main services agreement, user terms of service and Slack supplemental Terms. Additional disclosures are available in our privacy policy and cookie policy.

**click on create workspace**

Step 1 of 4

## What's the name of your company or team?

This will be the name of your Slack workspace – choose something that your team will recognise.

DevOps

Next

**Enter your team name or company name**

Step 2 of 4

# What's your name?

Adding your name and profile photo helps your teammates to recognise and connect with you more easily.

MUSTAFA SHAIK

**Your profile photo (optional)**

Help your teammates to know that they're talking to the right person.



Edit photo

Next

Enter your name

Step 3 of 4

# Who else is on the DevOps team?

Add colleagues by email

 Add from Google Contacts

Example ellis@gmail.com, maria@gmail.com

Next

 Copy invitation link

Skip this step

Enter your colleague mail ids for collaboration

## Create a channel



Name

# deployment-team

65

Channels are where conversations happen around a topic. Use a name that is easy to find and understand.

Invite external people  PRO

Next

Enter any channel name.

The screenshot shows a Slack interface. At the top, there's a search bar with 'Search DevOps' and a help icon. Below the search bar, the channel name '# deployment-team' is displayed with a dropdown arrow. To the right of the channel name are icons for 'M 1', 'Huddle', and 'Canvas'. A link '+ Add a bookmark' is also visible. The main area shows a message from 'MUSTAFA SHAIK' at 14:54 stating 'joined #deployment-team.' followed by a message 'Hi Team'. Below the messages is a message input field with placeholder text 'Message #deployment-team' and various rich text and media icons. The date 'Today' is shown above the message input field.

#### STEP-4: INTEGRATE THIS SLACK TO JENKINS

INSTALL JENKINS PLUGIN IN SLACK

CLICK ON PROFILE -----> TOOLS & SETTINGS -----> MANAGE APPS

The screenshot shows the Slack web interface. On the left, the sidebar for the 'DevOps' workspace is visible, featuring sections for 'Home', 'More', 'Tools & settings' (which is currently selected), and 'Sign in on mobile'. A context menu is open over the '# deployment-team' channel, listing options like 'Customise workspace', 'Workflow Builder', 'Analytics', 'Settings', 'Workspace settings', 'Edit workspace details', 'Administration', 'Manage members', and 'Manage apps'. The 'Manage apps' option is highlighted with a blue bar. At the bottom of the screen, a confirmation message reads: 'Are you sure? Without notifications, you'll never receive updates from this channel.'

## SEARCH FOR JENKINS

The screenshot shows a search results page with the query 'JENKINS' entered in the search bar. The results are displayed in a card-based format. The first result is 'Jenkins CI' with a Jenkins logo icon. Below it are other results: 'Zenduty' with a person icon, 'marbot' with a blue cat-like icon, and 'BuildPulse' with a blue square icon. At the bottom of the page, there are two dropdown menus labeled '▼' containing the text 'Anyone'.

[← Browse apps](#)



## Jenkins CI

Description

Permissions

Security & compliance

Jenkins CI is a customisable continuous integration server with over 600 plugins, allowing you to configure it to meet your needs.

This integration will post build notifications to a channel in Slack.

[Add to Slack](#)

[Learn more & Support](#)

[Privacy policy](#)

[Terms](#)

Categories

Developer tools

## CLICK ON ADD TO SLACK

[Browse apps](#) > [Jenkins CI](#) > New configuration



## Jenkins CI

An open-source continuous integration server.

Jenkins CI is a customisable continuous integration server with over 600 plugins, allowing you to configure it to meet your needs.

This integration will post build notifications to a channel in Slack.

### Post to channel

Start by choosing a channel where Jenkins notifications will be posted.

# deployment-team

▼

or [create a new channel](#)

[Add Jenkins CI integration](#)

**SELECT OUR CHANNEL (deployment-team) AND CLICK ON ADD JENKINS CI INTEGRATION**

**STEP-5: NOW GO TO JENKINS ----> MANAGE JENKINS ----> SYSTEM ----> SLACK**

## Slack

Workspace ?

devops-iy03319

Credential ?

slack token

+ Add ▾

Default channel / member id ?

deployment-team

Custom slack app bot user ?

Advanced ▾

Success

Test Connection

add **sub-domain, workspace and credentials**(slack token) using secret text. we will get this **slack token and sub-domain** name from slack page.

### Step 3

Once it's installed, click on **Manage Jenkins** again in the left navigation and then go to **Configure system**. Find the **Global Slack notifier settings** section and add the following values:

- Team subdomain: `devops-iy03319`
- Integration token credential ID: Create a secret text credential using `pXY02V1PnyAWwM9yqL9tCVEt` as the value

The other fields are optional. You can click on the question mark icons next to them for more information. Press **Save** once you've finished.

**Note:** Please remember to replace the integration token in the screenshot below with your own.

NOW OPEN YOUR SLACK YOU WILL GET A MESSAGE

Search DevOps

# deployment-team

+ Add a bookmark

## # deployment-team

You created this channel today. This is the very beginning of # deployment-team. [Add description](#)

[Add colleagues](#)

Today

MUSTAFA SHAIK 14:54 joined #deployment-team.

MUSTAFA SHAIK 14:56 Hi Team

MUSTAFA SHAIK 15:00 added an integration to this channel: [jenkins](#)

 jenkins APP 15:06 Slack/Jenkins plugin: you're all set on <http://54.160.206.179:8080/>

B I S | P | E E | E | </> | ↵

Message #deployment-team

+ Aa ⌂ @ | □ ④ | □

▶ | ↴

NOW LETS BUILD ANY JOB USING POST BUILD ACTIONS IN JENKINS AND TEST IT.

```
post {
    always {
        echo 'Slack Notifications'
        slackSend (
            channel: '#channel name', message: "*${currentBuild.currentResult}:* Job ${env.JOB_NAME} \n build
${env.BUILD_NUMBER} \n More info at: ${env.BUILD_URL}"
        )
    }
}
```

## SPLUNK INTEGRATION:

## STEP-1: LAUNCH EC2 INSTANCE WITH T2.MEDIUM AND 25GB EBS VOLUME

## STEP-2: GO TO slack.com and CREATE ACCOUNT.

## STEP-3: INSTALL SLACK ON OUR SERVER.

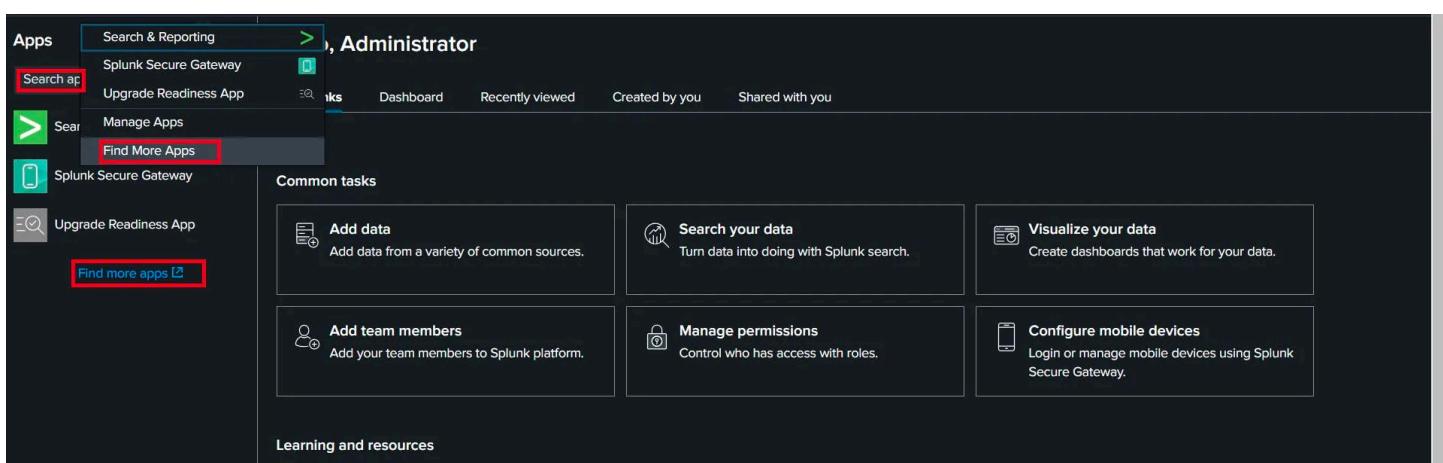
- cd /opt/
- wget -O splunk-9.0.1-82c987350fde-Linux-x86\_64.tgz "https://download.splunk.com/products/splunk/releases/9.0.1/linux/splunk-9.0.1-82c987350fde-Linux-x86\_64.tgz"
- tar -zxvf splunk-9.0.1-82c987350fde-Linux-x86\_64.tgz
- cd splunk/bin/
- sudo ./splunk start --accept-license

## STEP-4: NOW ACCESS SPLUNK DASHBOARD (public-ip:8000) and Login

## STEP-5: INSTALL JENKINS ON SPLUNK

In Splunk Dashboard

Click on Apps → Find more apps



Search for Jenkins in Search bar

You will get Splunk app for Jenkins and click on install

splunk>enterprise Apps ▾

Administrator ▾ 2 Messages ▾ Settings ▾ Activity ▾ Help ▾ Q Find

### Browse More Apps

Jenkins X

Best Match Newest Popular 1 Apps

CATEGORY

- IT Operations
- Security, Fraud & Compliance
- Business Analytics
- Utilities
- IoT & Industrial Data
- DevOps
- Directory Service
- Email
- Endpoint
- Firewall
- Generic
- Identity Management
- Information
- Investigative

 **Splunk App for Jenkins** Install

Splunk App for Jenkins provides deep insights into your Jenkins master and slave infrastructure, job and build details such as console logs, status, artifacts, and an incredibly efficient way to analyze test results. The app provides out-of-the-box dashboards and search capabilities to enable organizations to run a high performing Jenkins cluster a... [More](#)

Category: DevOps | Author: Splunk Works | Downloads: 17164 | Released: 4 years ago | Last Updated: a year ago | View on Splunkbase

You will be prompted to provide your Splunk credentials. That's why we created a Splunk account

splunk>enterprise Apps ▾

Administrator ▾ Messages ▾ Settings ▾ Activity ▾ Help ▾ Q Find

### Browse More Apps

Jenkins X

Best Match Newest 1 Apps

CATEGORY

- IT Operations
- Security, Fraud & Compliance
- Business Analytics
- Utilities
- IoT & Industrial Data
- DevOps
- Directory Service
- Email
- Endpoint
- Firewall
- Generic
- Identity Management
- Information
- Investigative
- Network Access Control
- Network Device
- Network Security
- Reputation
- Sandbox
- SIEM
- Threat Intel

**Login and Install** X

Enter your Splunk.com username and password to download the app.

.....

[Forgot your password?](#)

Splunk App for Jenkins provides deep insights into your Jenkins master and slave infrastructure, job and build details such as console logs, status, artifacts, and an incredibly efficient way to analyze test results. The app provides out-of-the-box dashboards and search capabilities to enable organizations to run a high performing Jenkins cluster a... [More](#)

Category: DevOps | Author: Splunk Works | Downloads: 17164 | Released: 4 years ago | Last Updated: a year ago | View on Splunkbase

The app, and any related dependency that will be installed, may be provided by Splunk and/or a third party and your right to use these app(s) is in accordance with the applicable license(s) provided by Splunk and/or the third-party licensor. Splunk is not responsible for any third-party app and does not provide any warranty or support. If you have any questions, complaints or claims with respect to an app, please contact the applicable licensor directly whose contact information can be found on the Splunkbase download page.

Splunk App for Jenkins is governed by the following license:  
[End User License Agreement for Third-Party Content](#)

I have read the terms and conditions of the license(s) and agree to be bound by them. I also agree to Splunk's [Website Terms of Use](#).

Cancel Agree and Install

Click on Agree and install

Now click on Go home

## Complete

Splunk App for Jenkins was successfully installed.

[Open the App](#)

[Go Home](#)

[Done](#)

On homepage of Splunk, you will see Jenkins been added

The screenshot shows the Splunk Enterprise homepage. On the left sidebar, under the 'Apps' section, the 'Splunk App For Jenkins' icon is highlighted with a red box. The main content area displays a 'Hello, Administrator' message and several 'Common tasks' cards. One of these cards, 'Splunk App For Jenkins', is also highlighted with a red box. The card contains a brief description: 'Add your team members to Splunk platform.'

In the Splunk web interface, go to Settings -----> Data Inputs.

The screenshot shows the Splunk Enterprise interface. At the top, there's a navigation bar with 'splunk>enterprise' and various dropdowns like 'Messages', 'Settings', 'Activity', 'Help', and 'Find'. Below the navigation is a sidebar titled 'Apps' with a search bar and a list of installed apps: 'Search & Reporting', 'Splunk App For Jenkins', 'Splunk Secure Gateway', and 'Upgrade Readiness App'. A link to 'Find more apps' is also present. The main content area is titled 'Hello, Administrator' and features several sections: 'Common tasks' (Add data, Search your data, Add team members, Manage permissions), 'Learning and resources' (Product tours, Learn more with Splunk Docs, Extend your capabilities, Join the Splunk Community, See how others use Splunk), and a 'Data inputs' section. The 'Data inputs' section is part of a larger 'DATA' category which includes 'Forwarding and receiving', 'Indexes', 'Report acceleration summaries', 'Virtual indexes', 'Source types', and 'Ingest actions'. The 'Data inputs' section itself contains links for 'Data inputs', 'Forwarding and receiving', and 'Indexes'.

Click on HTTP Event Collector.

The screenshot shows the 'Data inputs' page. The title is 'Data inputs' and it says 'Set up data inputs from files and directories, network ports, and scripted inputs. If you want to set up forwarding and receiving between two Splunk instances, go to Forwarding and receiving.' Below this is a table titled 'Local inputs' with columns 'Type', 'Inputs', and 'Actions'. The table lists several input types: 'Files & Directories' (15 inputs), 'HTTP Event Collector' (0 inputs, highlighted with a red box), 'TCP' (0 inputs), 'UDP' (0 inputs), 'Scripts' (25 inputs), and 'Splunk Assist Instance Identifier' (1 input). Each row has a '+ Add new' button in the 'Actions' column.

Click on Global Settings

The screenshot shows the 'HTTP Event Collector' token management page. The title is 'HTTP Event Collector' and it says 'Data Inputs > HTTP Event Collector'. There are buttons for 'Global Settings' (highlighted with a red box) and 'New Token'. Below this is a table with columns 'Name', 'Actions', 'Token Value', 'Source Type', 'Index', and 'Status'. A message at the bottom says 'No tokens found.'

Set All tokens to enabled

Uncheck SSL enable

Use 8088 port and click on save

The screenshot shows the 'Edit Global Settings' dialog. At the top, there are two buttons: 'Enabled' (highlighted with a red box) and 'Disabled'. Below them are fields for 'Default Source Type' (with a dropdown menu), 'Default Index' (set to 'Default'), 'Default Output Group' (set to 'None'), 'Use Deployment Server' (unchecked), 'Enable SSL' (unchecked and highlighted with a red box), and 'HTTP Port Number' (set to '8088'). At the bottom right of the dialog is a green 'Save' button (highlighted with a red box).

Now click on New token

The screenshot shows the 'HTTP Event Collector' dashboard. At the top right, there are buttons for 'Global Settings' and a green 'New Token' button (highlighted with a red box and an arrow pointing to it). The main area displays a table with columns: Name, Actions, Token Value, Source Type, Index, and Status. A message at the bottom says 'No tokens found.'

Provide a Name and click on next

The screenshot shows the 'Add Data' wizard. The top navigation bar includes 'Add Data', 'Select Source', 'Input Settings', 'Review', and 'Done'. The 'Next >' button is highlighted with a red box. On the left, there's a sidebar with options like 'Files & Directories', 'HTTP Event Collector' (selected), 'TCP / UDP', 'Scripts', 'Splunk Assist Instance Identifier', 'Systemd Journald Input for Splunk', 'Log4j Input for the Splunk platform', and 'Splunk Secure Gateway'. On the right, a configuration form for a new token is shown. It includes fields for 'Name' (set to 'Jenkins' and highlighted with a red box), 'Source name override?' (optional), 'Description?' (optional), 'Output Group (optional)' (set to 'None'), and 'Enable indexer acknowledgement' (unchecked). Below the form is a 'FAQ' section with several questions.

Click Review

The screenshot shows the 'Add Data' process in Splunk. The current step is 'Input Settings'. At the top, there is a progress bar with four steps: 'Select Source' (green), 'Input Settings' (green), 'Review' (white), and 'Done' (white). Below the progress bar, there are sections for 'Source type' and 'Index'. Under 'Source type', it says: 'The source type is one of the default fields that the Splunk platform assigns to all incoming data. It tells the Splunk platform what kind of data you've got, so that the Splunk platform can format the data intelligently during indexing. And it's a way to categorize your data, so that you can search it easily.' There are three buttons: 'Automatic' (selected), 'Select', and 'New'. Under 'Index', it says: 'The Splunk platform stores incoming data as events in the selected index. Consider using a "sandbox" index as a destination if you have problems determining a source type for your data. A sandbox index lets you troubleshoot your configuration without impacting production indexes. You can always change this setting later. Learn More'.

Click Submit

The screenshot shows the 'Add Data' process in Splunk. The current step is 'Review'. At the top, there is a progress bar with four steps: 'Select Source' (green), 'Input Settings' (green), 'Review' (green), and 'Done' (white). Below the progress bar, there is a table of settings:

Input Type	Token
Name	Jenkins
Source name override	N/A
Description	N/A
Enable indexer acknowledgment	No
Output Group	N/A
Allowed indexes	N/A
Default index	default
Source Type	Automatic
App Context	launcher

Click Start searching

The screenshot shows the 'Add Data' process in Splunk. The current step is 'Done'. At the top, there is a progress bar with four steps: 'Select Source' (green), 'Input Settings' (green), 'Review' (green), and 'Done' (green). Below the progress bar, there is a message: '✓ Token has been created successfully. Configure your inputs by going to Settings > Data Inputs'. There is a 'Token Value' field containing '757be2ee-eb37-4529-a8f2-9cf7c12e'. Below the token value is a 'Start Searching' button, which is highlighted with a red box. There are also other buttons: 'Add More Data', 'Download Apps', and 'Build Dashboards'. To the right of these buttons, there is text: 'Search your data now or see examples and tutorials.', 'Add more data inputs now or see examples and tutorials.', 'Apps help you do more with your data. Learn more.', and 'Visualize your searches. Learn more.'

Now let's copy our token again

In the Splunk web interface, go to **Settings > Data Inputs.**

The screenshot shows the Splunk web interface with the following details:

- Top Bar:** splunk>enterprise Apps ▾ Administrator ▾ 1 Messages ▾ Settings ▾ Activity ▾ Help ▾ Q Find
- Left Sidebar:** Home, New Search (source="http:Jenkins"), No Event Sampling, Events, Patterns, Statistics, Visualization, List ▾, Format, 20 Per Page ▾, i Time, Event.
- Right Sidebar (Settings Menu):**
  - DATA:** Data inputs (highlighted with a red box), Forwarding and receiving, Indexes, Report acceleration summaries, Virtual indexes, Source types, Ingest actions.
  - DISTRIBUTED ENVIRONMENT:** Indexer clustering, Forwarder management, Federated search, Distributed search.
  - USERS AND AUTHENTICATION:** Roles, Users, Tokens, Password management, Authentication methods.
- Middle Panel:** Add Data, Explore Data, Monitoring Console.

Click on HTTP event collector

The screenshot shows the Splunk Data Inputs page with the following details:

- Section Header:** Data inputs
- Description:** Set up data inputs from files and directories, network ports, and scripted inputs. If you want to set up forwarding and receiving between two Splunk instances, go to [Forwarding and receiving](#).
- Local inputs Table:**

Type	Inputs	Actions
Files & Directories Index a local file or monitor an entire directory.	15	+ Add new
<b>HTTP Event Collector</b> Receive data over HTTP or HTTPS. (highlighted with a green box)	1	+ Add new
TCP Listen on a TCP port for incoming data, e.g. syslog.	0	+ Add new
UDP Listen on a UDP port for incoming data, e.g. syslog.	0	+ Add new
Scripts Run custom scripts to collect or generate more data.	25	+ Add new

Now copy your token

The screenshot shows the Splunk Enterprise interface for managing tokens. At the top, there are navigation links for 'Administrator', 'Messages', 'Settings', 'Activity', 'Help', and a search bar. Below the header, the title 'HTTP Event Collector' and the path 'Data Inputs > HTTP Event Collector' are displayed. A button for 'New Token' is visible. The main area shows a table of tokens with columns for Name, Actions, Token Value, Source Type, Index, and Status. One token named 'Jenkins' is listed, with its token value highlighted by a green box.

## Add Splunk Plugin in Jenkins

Go to Jenkins dashboard

Click on Manage Jenkins → Plugins → Available plugins

Search for Splunk and install it.

The screenshot shows the Jenkins dashboard under the 'Manage Jenkins' section, specifically the 'Plugins' page. On the left, there are navigation links for 'Updates', 'Available plugins' (which is selected and highlighted in grey), 'Installed plugins', and 'Advanced settings'. The main area has a search bar with 'splunk' typed in. Below the search bar, a list of available plugins is shown. The 'Splunk' plugin, version 1.10.1, is highlighted with a green box. It has a checked checkbox next to the 'Install' button. Other details shown for the plugin include 'Build Notifiers', 'Build Reports', 'Other Post-Build Actions', and a release date of '7 mo 27 days ago'.

Again Click on Manage Jenkins → System

Search for Splunk

Check enable

HTTP input host as SPLUNK PUBLIC IP

HTTP token that you generated in Splunk

Jenkins ip and apply.

## Splunk for Jenkins Configuration

Enable

HTTP Input Host ?  
3.110.197.211 **SPLUNK PUBLIC IP**

HTTP Input Port ?  
8088

HTTP Input Token ?  
757be2ee-eb37-4529-a8f2-9cf7c12a5c18 **SPLUNK TOKEN**

SSL Enabled ?

Send All Pipeline Console Logs ?

Jenkins Master Hostname ?  
13.234.48.89 **JENKINS PUBLIC IP**

Testing...

**Save** **Apply**

## RESTART SPLUNK:

The screenshot shows the Splunk Enterprise dashboard. On the left, there's a 'Jenkins Health' panel. On the right, the 'Settings' menu is open, displaying various configuration options like 'Add Data', 'Explore Data', 'Monitoring Console', 'Knowledge', 'Data', etc. The 'Server controls' option under the 'SYSTEM' section is specifically highlighted with a red box.

restart and login again

The screenshot shows the 'Server controls' page. It features a prominent green button at the top center labeled 'Restart Splunk'. Below the button, there's a small note: 'Click the button below to restart Splunk.'

Now go to Jenkins Dashboard and run some sample Jobs. Then data will gets stored on splunk dashboard

splunk>enterprise Apps ▾

Administrator ▾ 2 Messages ▾ Settings ▾ Activity ▾ Help ▾ Find

Build Analysis Job Insight Test Analysis Custom Panel Search User ▾

**Builds**

### Build Analysis

Configure filters to return Jenkins builds matching that criteria. Click on the desired record to get detailed results about that build.

Jenkins Master	Jenkins Node	Job	Build Parameters <small>?</small>	Build	Status	Time
Select...	Select... ▾	Select... ▾		Select... ▾	Select... ▾	Today ▾

Zoom To Selection Zoom Out Deselect

0 00:00 00:30 01:00 01:30 02:00 02:30 03:00 03:30 04:00 04:30 05:00 05:30 06:00 06:30 07:00 07:30 08:00

Wed, 31 Jan 2024

i	Jenkins Master ▾	Job ▾	Build ▾	StartTime ▾	Jenkins Node ▾	Duration ▾	Status ▾
>	54.160.206.179	job-2	3	2024-01-31 09:56:01	(built-in)	00:00:00.177	✓
>	54.160.206.179	job-3	7	2024-01-31 09:54:53	(built-in)	00:00:01.514	!
>	54.160.206.179	job-3	6	2024-01-31 09:51:52	(built-in)	00:00:00.665	!
>	54.160.206.179	job-3	5	2024-01-31 09:50:29	(built-in)	00:00:00.056	!
>	54.160.206.179	job-3	4	2024-01-31 09:49:30	(built-in)	00:00:00.745	✓
>	54.160.206.179	job-3	3	2024-01-31 09:48:04	(built-in)	00:00:00.577	✓
>	54.160.206.179	job-3	2	2024-01-31 09:46:04	(built-in)	00:00:00.701	!
>	54.160.206.179	job-3	1	2024-01-31 09:44:59	(built-in)	00:00:00.781	!
>	54.160.206.179	Job-1	11	2024-01-31 09:43:36	(built-in)	00:00:00.767	!
>	54.160.206.179	Job-1	10	2024-01-31 09:42:39	(built-in)	00:00:01.848	!

-----\*\*\*\*\*-----\*\*\*\*\*----- ❤️ HAPPY LEARNING ❤️ -----\*\*\*\*\*-----\*\*\*\*\*-----