# Sending Email Notifications in Jenkins

This document covers the instructions on how to send an email to the developers in Jenkins in the event that a build fails, resulting in an unstable state. This document can be divided into two parts:

1. Setting up an email in Jenkins
2. Creating a new job and testing the email setup

Setting up an email in Jenkins

First, login to your AWS account and start your Ubuntu instance, and then start Jenkins on port 8080. To set up an email in Jenkins, you should perform the following steps .

1. In the Jenkins Dashboard, click on the **Manage Jenkins** option.
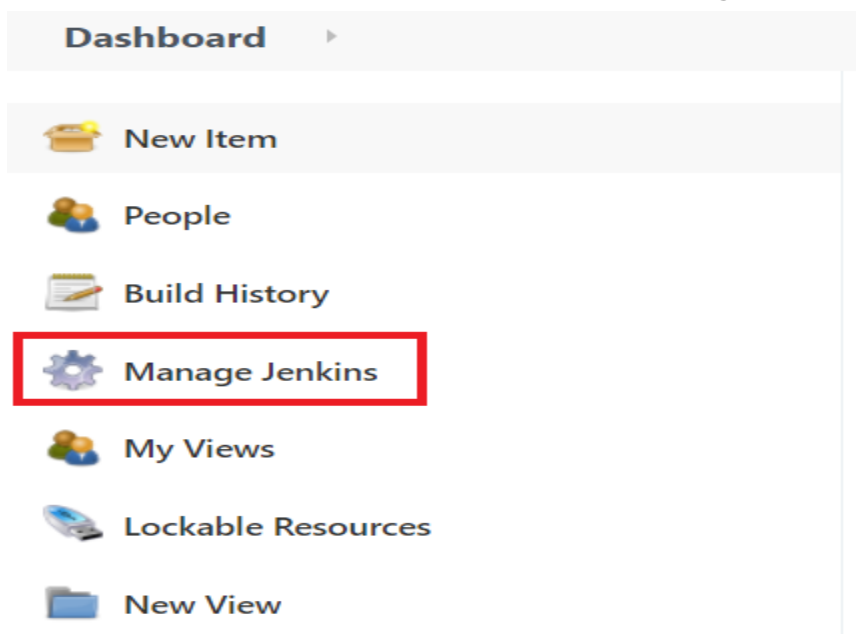
2. Then click on **Manage Plugins**.

System Configuration

Configure System
Configure global settings and paths.

Global Tool Configuration
Configure tools, their locations and automatic installers.

Manage Plugins
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
🔔 There are updates available

Manage Nodes and Clouds
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

3. Go to the **Installed** tab section and check if the **Mailer plugin** and **Email Extension Plugin** are installed or not. In this case, both of the plugins are installed.

Enabled	Name ↓	Version	Previously installed version	Uninstall
☐	**Email Extension Plugin** This plugin is a replacement for Jenkins's email publisher. It allows to configure every aspect of email notifications: when an email is sent, who should receive it and what the email says	2.82		Uninstall
☑	**Jackson 2 API Plugin** This plugin exposes the Jackson 2 JSON APIs to other Jenkins plugins.	2.12.1		Uninstall
☑	**JUnit Plugin** Allows JUnit-format test results to be published.	1.49		Uninstall
☑	**Mailer Plugin**			

Search: email ex | Tabs: Updates, Available, Installed, Advanced

4. If it is not installed, then go to the **Available** tab and install both the plugins.
5. Now go to the **Jenkins Dashboard**.

6. Click on **Manage Jenkins**.
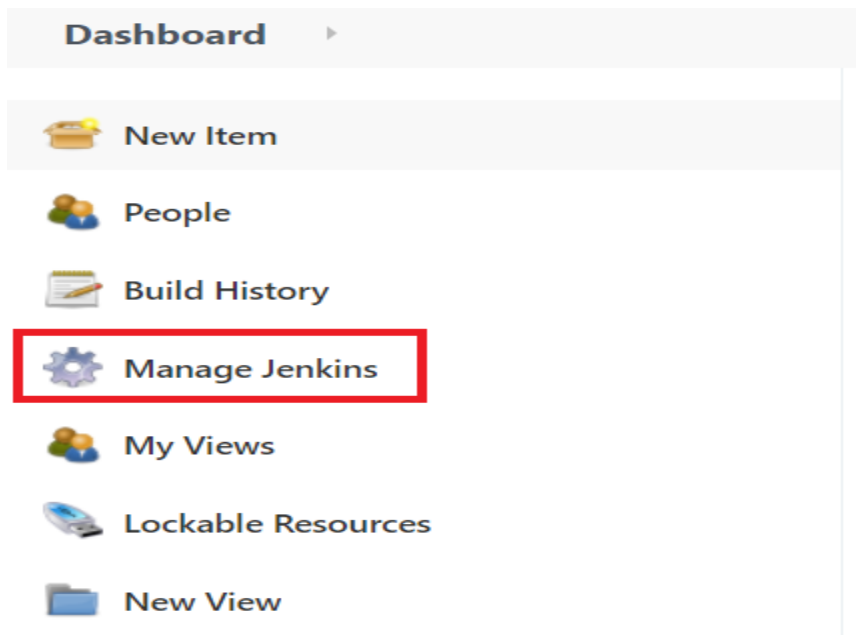
7. Then click on **Configure System** as shown in the image below.

Manage Jenkins

System Configuration

Configure System — Configure global settings and paths.

Global Tool Configuration — Configure tools, their locations and automatic installers.

Manage Plugins — Add, remove, disable or enable plugins that can extend the functionality of Jenkins.

Manage Nodes and Clouds — Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

8. Scroll down and come to the **Jenkins Location**.
9. Here, enter the **System Admin e-mail Address** as shown in the image below.

Jenkins Location

Jenkins URL

http://52.90.191.169:8080/

System Admin e-mail address

Jenkins-Master <drbalat.raju@gmail.com>

10. Then scroll down to the **Extended Email Notification** section.
11. In the **SMTP Server** column enter **smtp.gmail.com**, and in the **SMTP Port** enter the port number **465**, as shown in the image below.

Extended E-mail Notification

SMTP server

smtp.gmail.com

SMTP Port

465

Advanced...

12. Next, scroll down to the **E-mail Notification** section.
13. Here, in the **SMTP Server** enter **smtp.gmail.com**.

14. Then click on the **Advanced** option below.
15. Select the **Use SMTP Authentication** option.
16. Enter the username and password as shown in the image below.

17. Then select the **Use SSL** option.
18. In the **SMTP Port** column, enter **465** as port number.
19. In the **Charset** column, select **UTF-8**.

20. Then select the **Test configuration by sending test email** option.
21. Enter the email ID of the **Test email recipient**.
22. Verify by clicking on the **Test Configuration** option.

23. If your setup is correct, then you should get the message as **Email was successfully sent**.

24. Click on **Apply** and then **Save**.

Creating a new job and testing the email setup

So, let's see what are the various steps involved in testing an email setup.

1. First, create a new **Freestyle project** and click **OK**, as shown in the image below.

2. Scroll down and come to the **Build** section.
3. Click on **Add build step** and select the **Execute shell** option, as shown in the image below.

4. Then write the shell script that you want to execute.
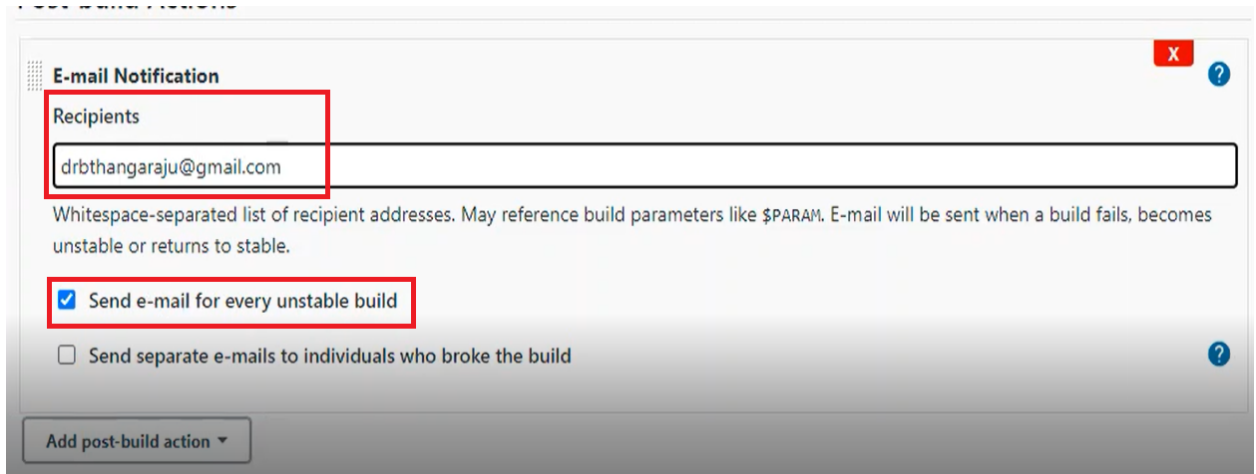5. Next, scroll down and come to the **Post-build Actions** column.

6. Click on **Add post-build action**.
7. Here, choose the **Email Notification** option.
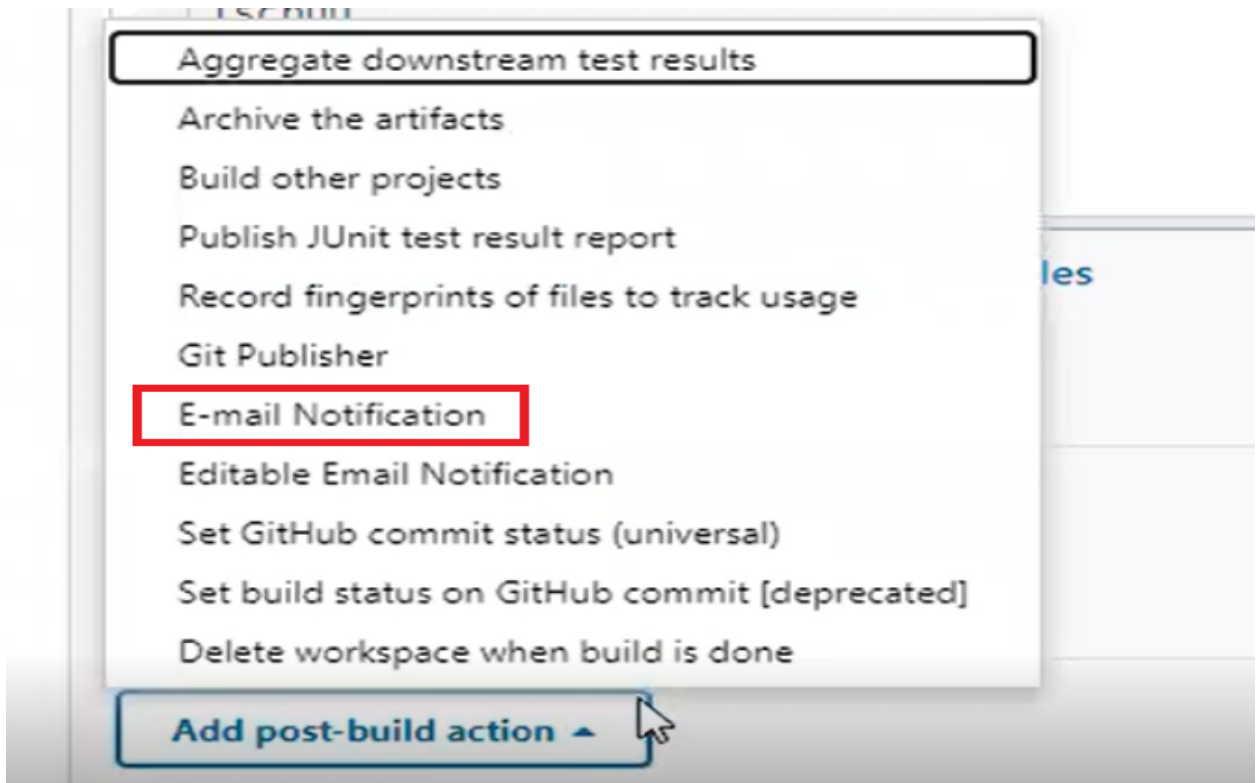
8. Then enter the recipients email addresses in the **Recipients** column, as shown in the image below.
9. Select the **Send email for every unstable build** option.

10. Click on **Apply** and then **Save** the command.

11. Then go to the dashboard and click on **Build Now**. Here, you can see that your project is being built successfully.
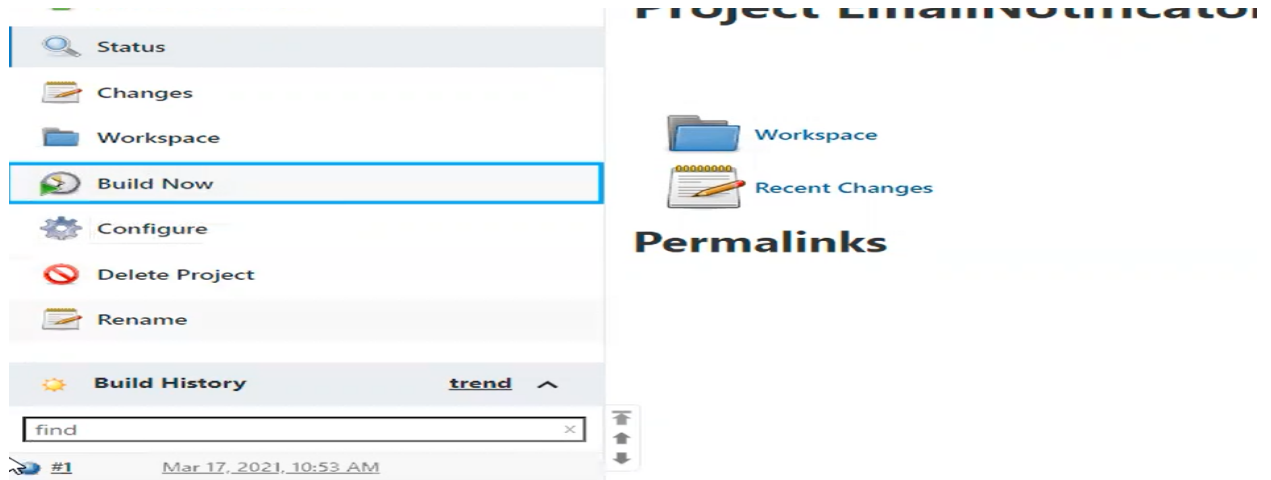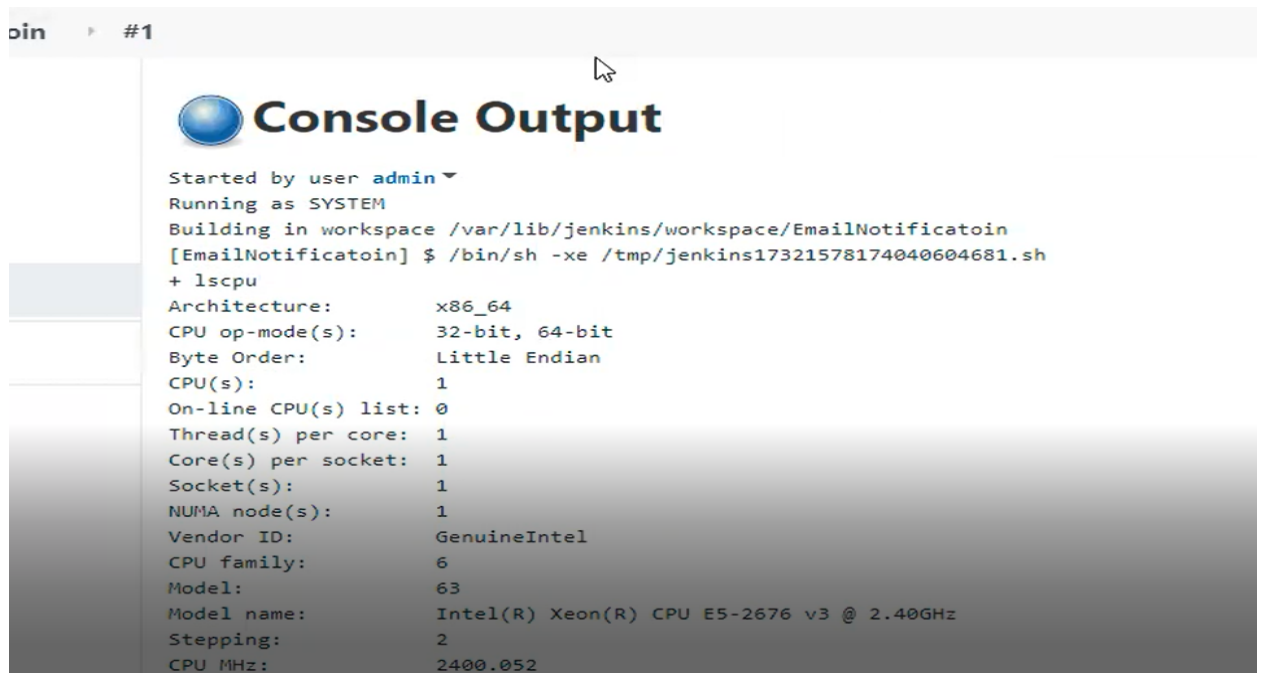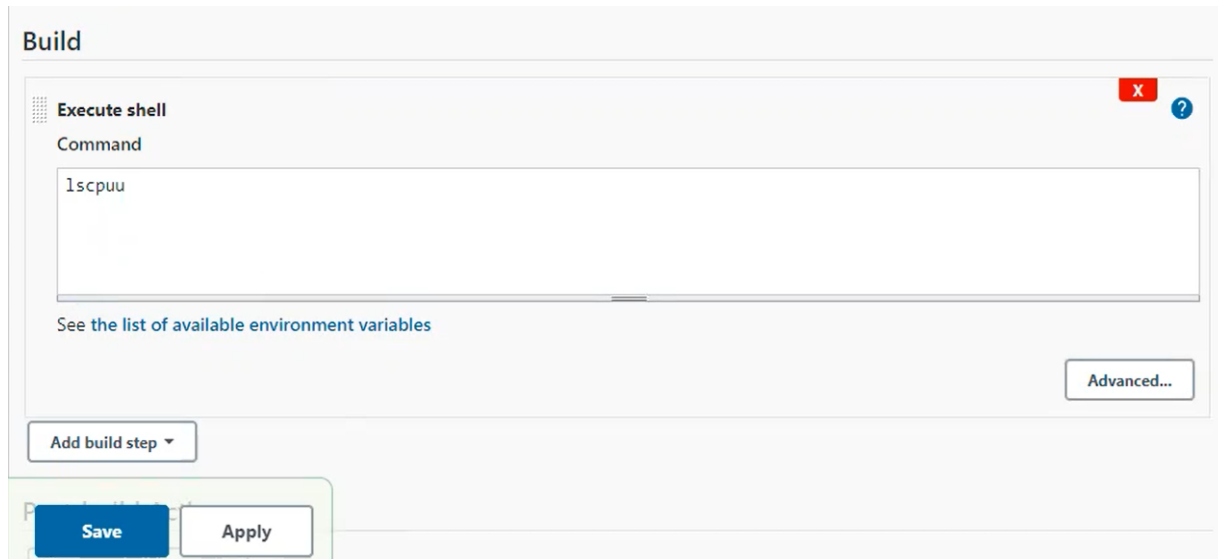
12. Click on the 'build number' in the **Build History** to view the **Console Output**.

13. You will not receive any email as your project was run and completed successfully.
14. Then go back and click on the **Configure** option in the dashboard.
15. Scroll down to the **Build** section.
16. To test the email, type in some incorrect commands, as shown in the image below.

17. Then click on **Apply** and then **Save**.
18. Now, go back to the dashboard and click on **Build Now**.
19. You will see in the **Build History** that your build has failed, as shown in the image below.
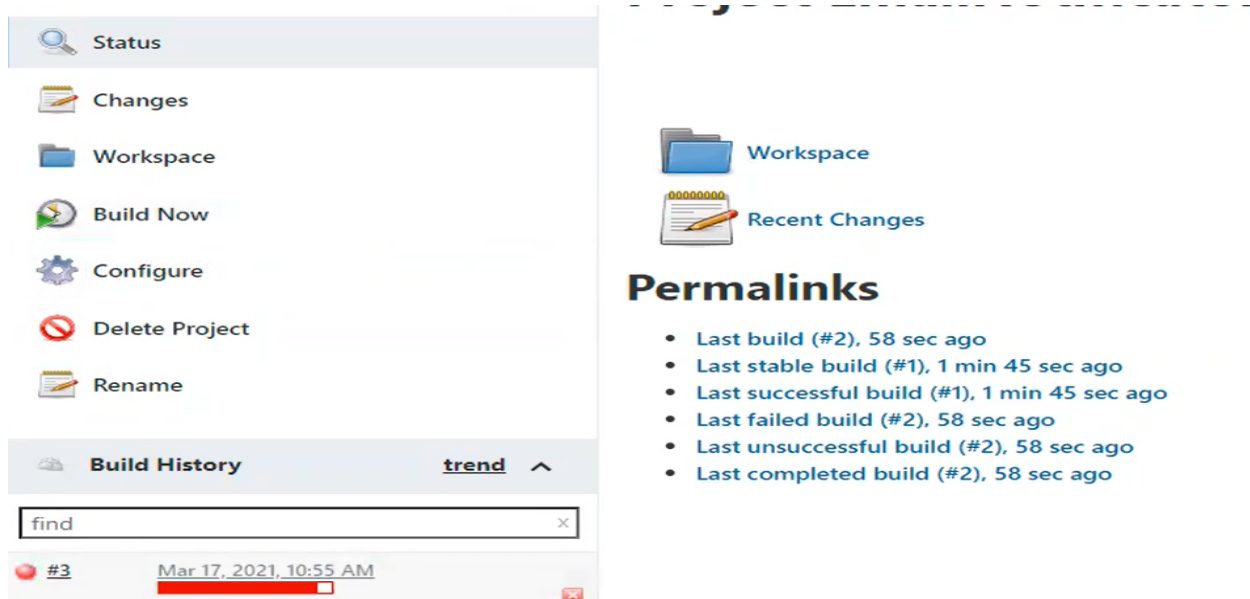
20. Go to your Gmail account, and there you will find the email notification from **Jenkins Master**.

Build failed in Jenkins: EmailNotificatoin #3 ➤ Inbox ×

Jenkins-Master <drbalat.raju@gmail.com>
to me ▾

See <http://52.90.191.169:8080/job/EmailNotificatoin/3/display/redirect>

Changes:

Started by user admin
Running as SYSTEM
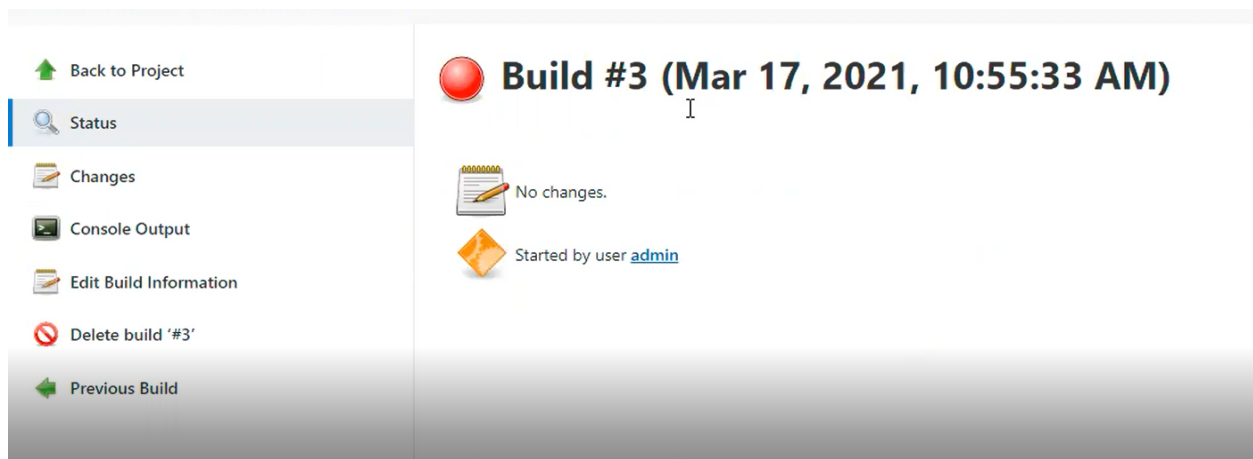Building in workspace <http://52.90.191.169:8080/job/EmailNotificatoin/ws/>
[EmailNotificatoin] $ /bin/sh -xe /tmp/jenkins10765328410667615703.sh
+ lscpuu
/tmp/jenkins10765328410667615703.sh: 2: /tmp/jenkins10765328410667615703.sh: lscpuu: not found
Build step 'Execute shell' marked build as failure

21. To check the issue, click on the email **redirect link**, as highlighted in the image above, and you will be redirected to the console.

22. To view the output, go to the dashboard and click on **Console Output**.

🔴 Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/EmailNotificatoin
[EmailNotificatoin] $ /bin/sh -xe /tmp/jenkins10765328410667615703.sh
+ lscpuu
/tmp/jenkins10765328410667615703.sh: 2: /tmp/jenkins10765328410667615703.sh: lscpuu: not found
Build step 'Execute shell' marked build as failure
Sending e-mails to: drbthangaraju@gmail.com
Finished: FAILURE
```