

## Lesson 07 Demo 02

### Setting up Slack Channel for Configuring Build Notifications

**Objective:** To set up Slack channel for configuring build notifications for receiving updates about the build process

**Tools required:** Jenkins

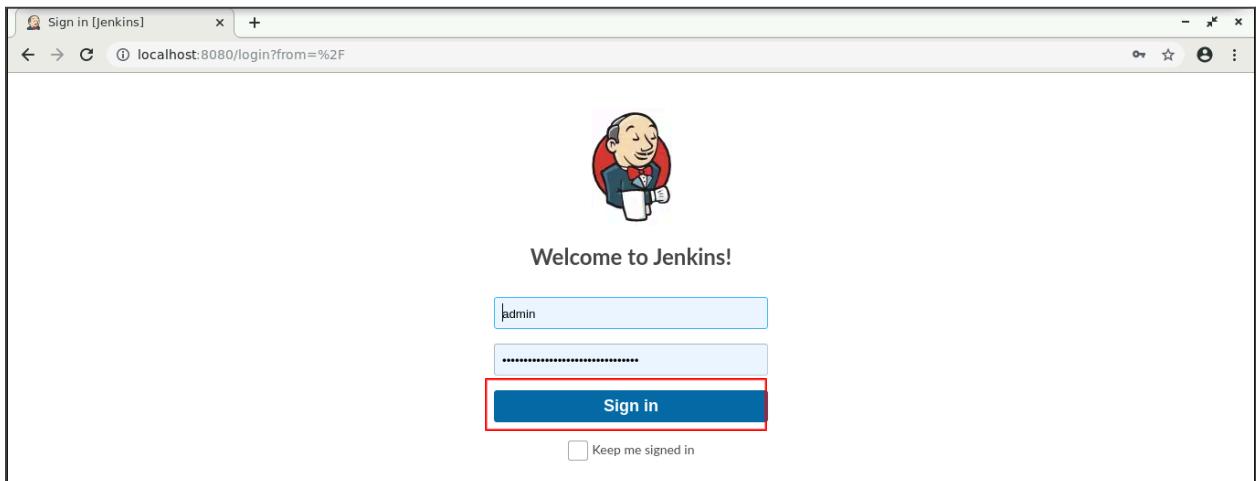
**Prerequisites:** Slack account

Steps to be followed:

1. Log in to the Jenkins CI tool and create a freestyle job
2. Set up Slack channel
3. Configure Slack in Jenkins

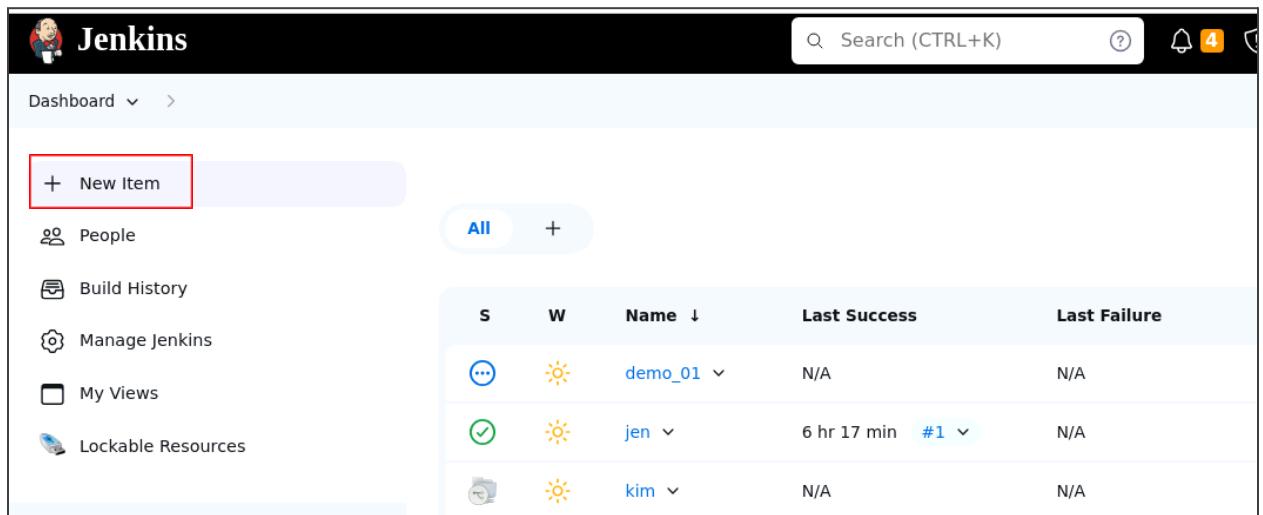
#### Step 1: Log in to the Jenkins CI tool and create a freestyle job

- 1.1 Open the browser, go to the Jenkins **Dashboard** by typing **localhost:8080** in your browser, provide the credentials, and click the **Sign in** button



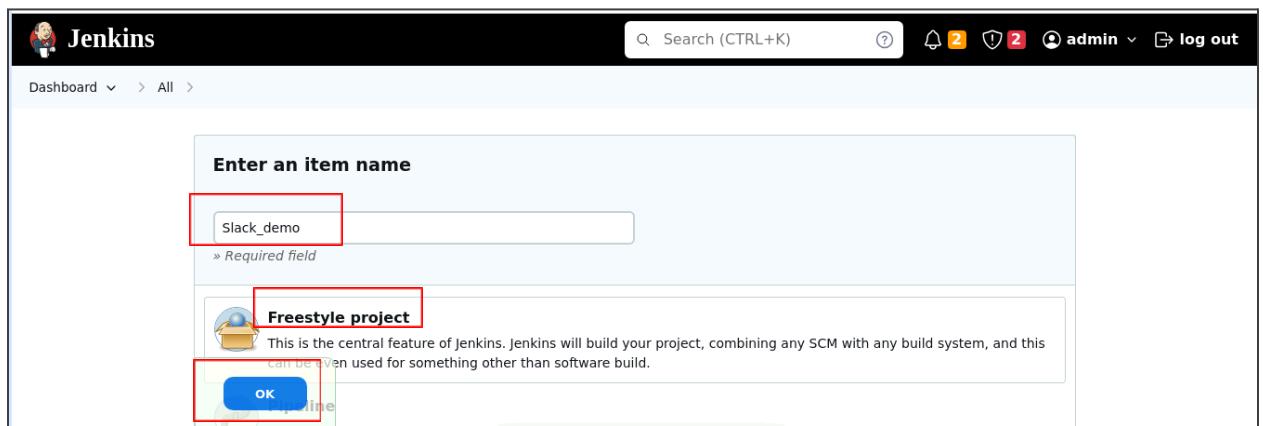
**Note:** The credentials for accessing Jenkins in the lab are Username: **admin** and Password: **admin**.

1.2 Click on the **New Item** option as shown in the screenshot below:



The screenshot shows the Jenkins dashboard. On the left, there's a sidebar with links like 'Dashboard', 'Build History', 'Manage Jenkins', 'My Views', and 'Lockable Resources'. A prominent red box highlights the '+ New Item' button at the top of the sidebar. On the right, there's a table showing project status: demo\_01 (N/A), jen (6 hr 17 min #1), and kim (N/A). The top right corner shows a search bar, a help icon, a notifications icon with 4 notifications, and a user icon.

1.3 Enter a desired name for the project, select **Freestyle project**, and then click on **OK** as shown in the screenshot below:



The screenshot shows the 'Enter an item name' dialog box. The input field contains 'Slack\_demo'. Below it, a red box highlights the 'Freestyle project' option, which is described as the central feature of Jenkins for building projects. At the bottom, a red box highlights the 'OK' button. The background shows the Jenkins dashboard with a 'Dashboard' link and a user icon.

1.4 Click on **Save** button as shown in the screenshot below:

The screenshot shows the Jenkins configuration interface for a job named "Slack\_demo". The "General" tab is selected. On the left, there's a sidebar with options like "General", "Source Code Management", "Build Triggers", "Build Environment", "Build Steps", and "Post-build Actions". The main area has a "Description" field which is empty. Below it is a "Plain text" preview section. At the bottom right, there are "Save" and "Apply" buttons, with the "Save" button being highlighted with a red box.

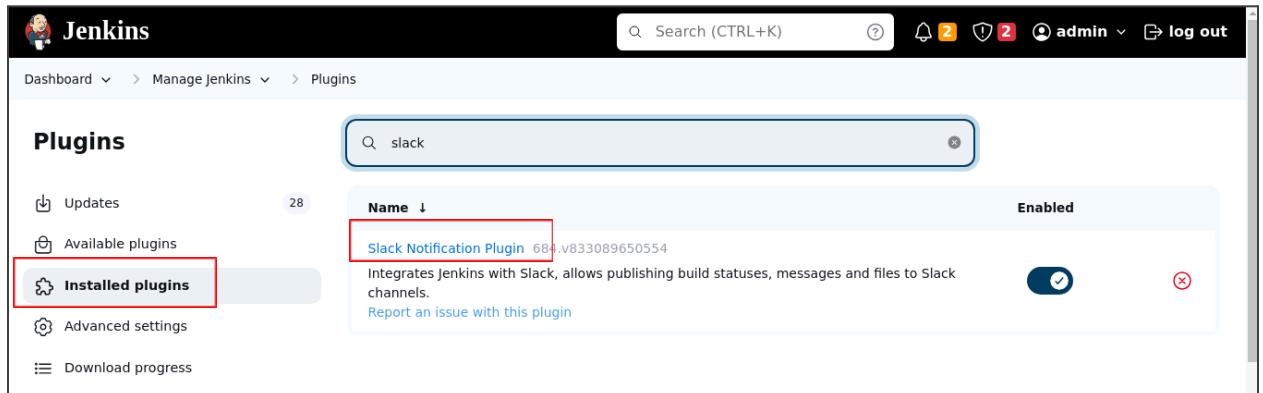
1.5 Click on **Manage Jenkins** as shown in the screenshot below:

The screenshot shows the Jenkins dashboard. On the left, there's a sidebar with links like "+ New Item", "People", "Build History", "Manage Jenkins" (which is highlighted with a red box), "My Views", "Open Blue Ocean", and "Lockable Resources". The main area displays a table of build history. The table columns are S, W, Name (sorted by name), Last Success, Last Failure, Last Duration, and F. Two builds are listed: "new\_demo" and "Slack\_demo".

1.6 Click on **Plugins** as shown in the screenshot below:

The screenshot shows the "Manage Jenkins" page. It features several sections: "System" (Configure global settings and paths), "Tools" (Configure tools, their locations and automatic installers), "Nodes" (Add, remove, control and monitor the various nodes that Jenkins runs jobs on), "Clouds" (Add, remove, and configure cloud instances to provision agents on-demand), and "Plugins" (Add, remove, disable or enable plugins that can extend the functionality of Jenkins). The "Plugins" section is highlighted with a red box.

1.7 Click on **Installed plugins** to verify whether the **Slack Notification Plugin** has been installed

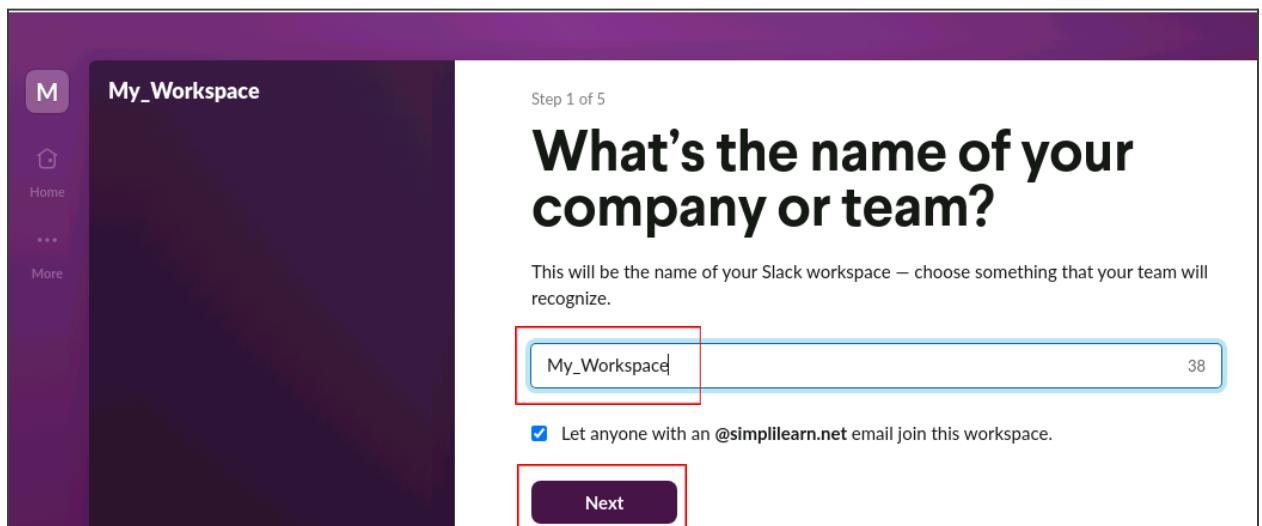


The screenshot shows the Jenkins 'Plugins' page. In the top navigation bar, there are links for 'Dashboard', 'Manage Jenkins', and 'Plugins'. The 'Plugins' link is highlighted. On the left, there's a sidebar with options: 'Updates' (28), 'Available plugins', 'Installed plugins' (which is selected and highlighted with a red box), 'Advanced settings', and 'Download progress'. A search bar at the top right contains the text 'slack'. Below the search bar, a table lists the 'Slack Notification Plugin' (version 684.v833089650554). The plugin is described as integrating Jenkins with Slack. To the right of the plugin details is an 'Enabled' toggle switch, which is turned on (blue), and a red 'X' button.

**Note:** Slack Notification Plugin is already installed in your practice lab environment. If not, click on **Available plugins** and search for **Slack Notification Plugin** and install it.

## Step 2: Set up Slack channel

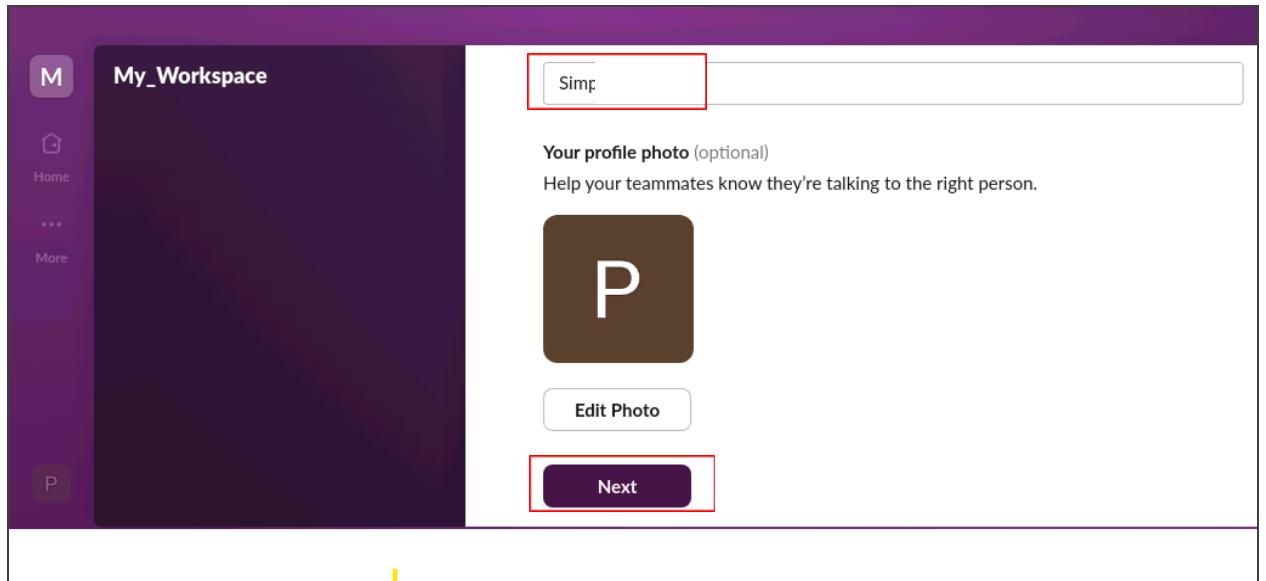
2.1 Open the browser, go to Slack, enter a desired name of your company or team, and then click on **Next** as shown in the screenshot below:



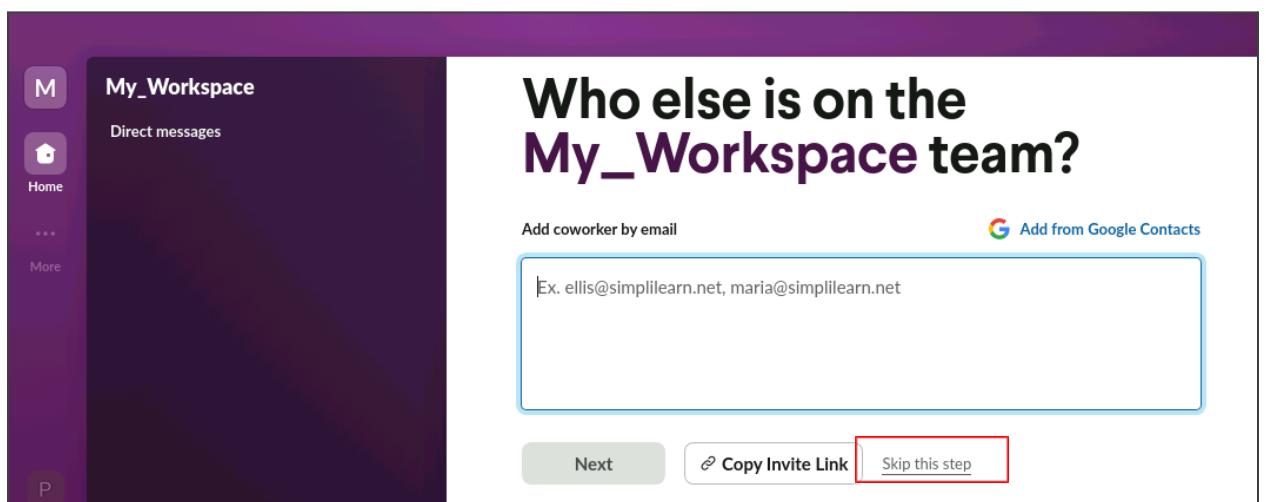
The screenshot shows the first step of creating a new Slack workspace. On the left, there's a sidebar with a 'Home' button and a 'More' button. The main area is titled 'My\_Workspace'. On the right, the text 'Step 1 of 5' is displayed above the question 'What's the name of your company or team?'. Below the question, a note says 'This will be the name of your Slack workspace — choose something that your team will recognize.' A text input field contains 'My\_Workspace'. To the right of the input field is a checkbox labeled 'Let anyone with an @simplilearn.net email join this workspace.', which is checked. At the bottom right is a large blue 'Next' button.

**Note:** Ensure that you create a personal Slack account using your personal email address to proceed

- 2.2 Enter a desired name for your profile and then click on **Next** as shown in the screenshot below:

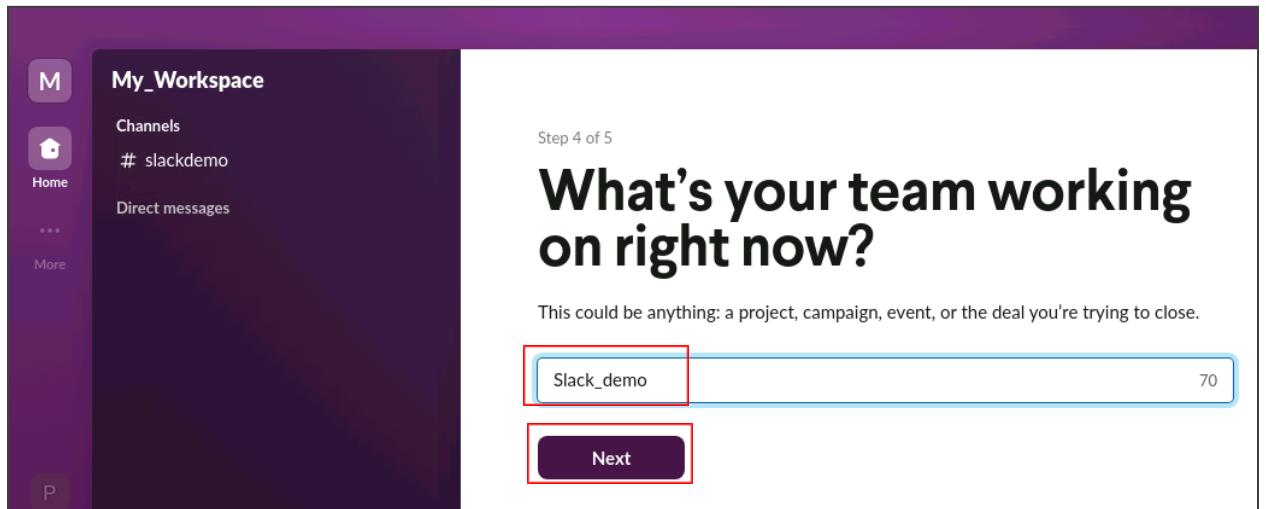


- 2.3 Click on **Skip this step** as shown in the screenshot below:

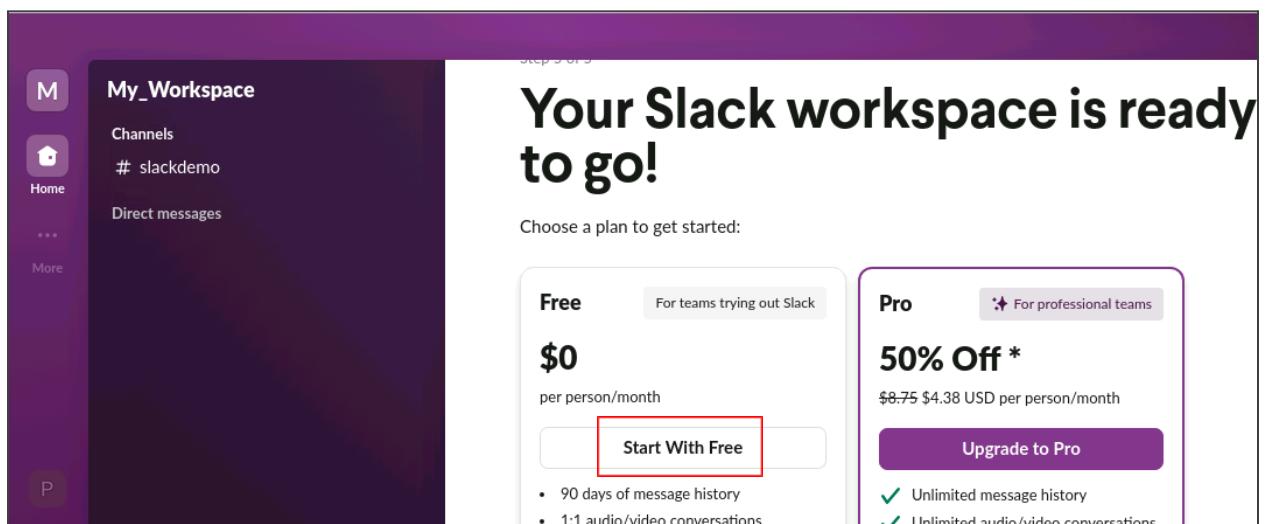


**Note:** You can skip this step, as it is not necessary to add any coworker email in here.

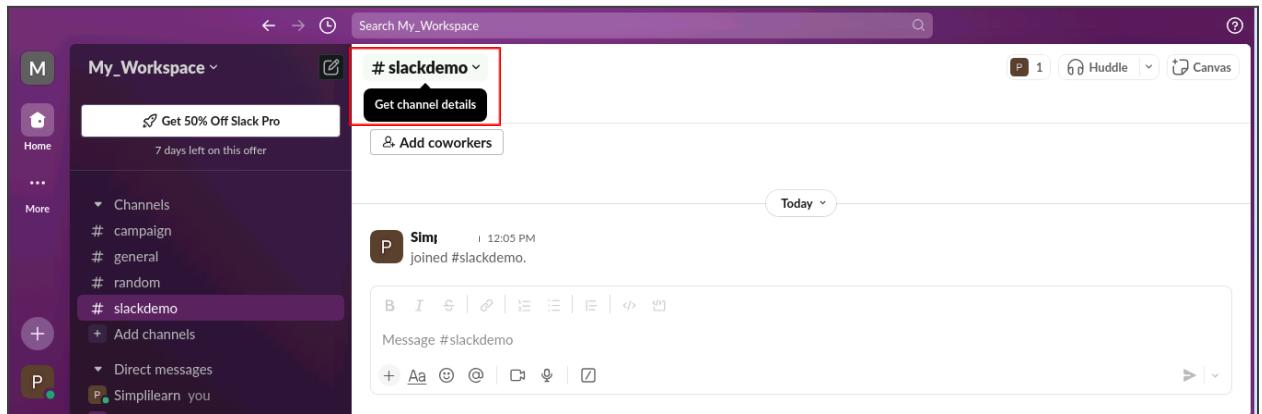
- 2.4 Enter a desired channel name and then click on **Next** as shown in the screenshot below:



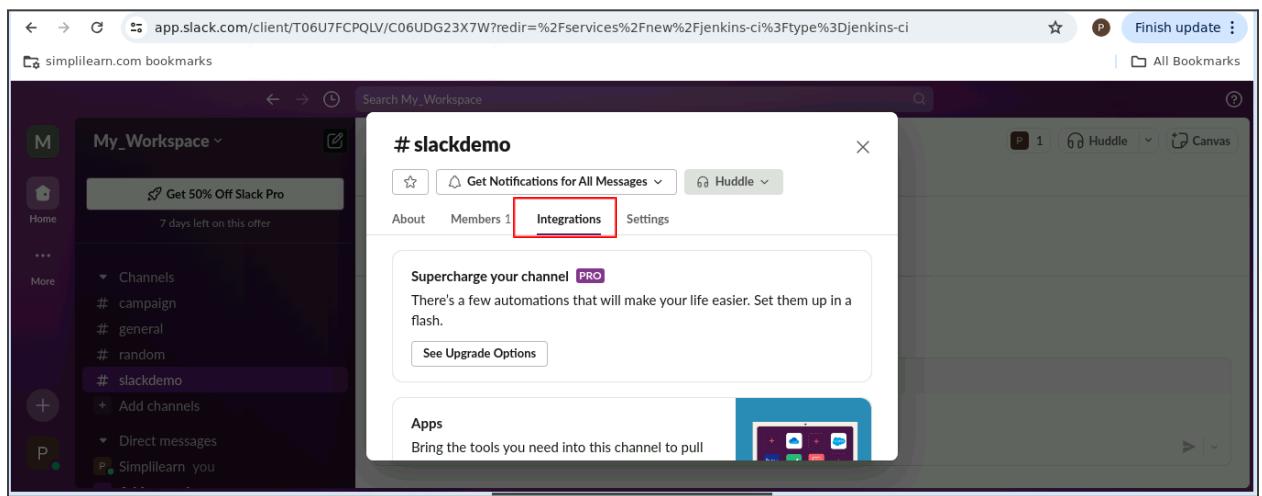
- 2.5 Click on **Start with Free** as shown in the screenshot below:



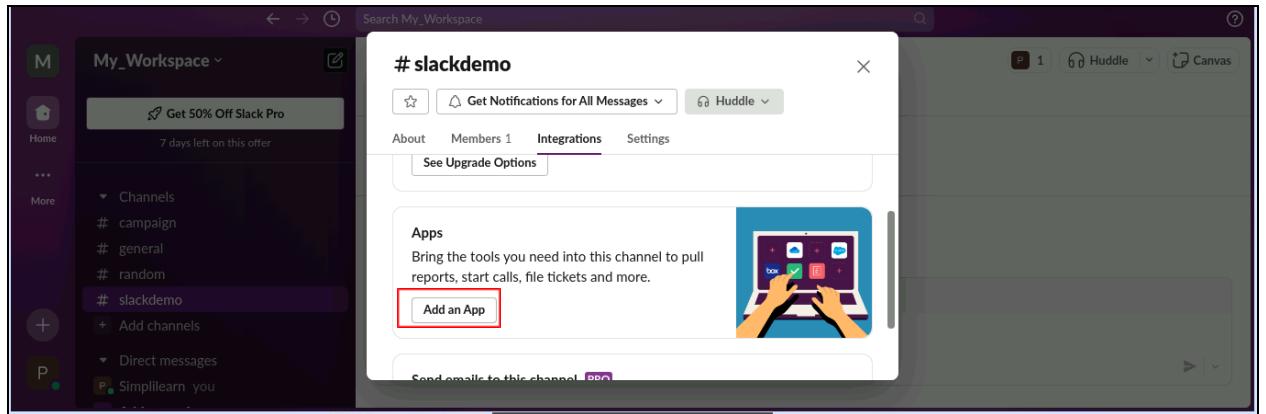
2.6 Click on the channel name that you have created as shown in the screenshot below:



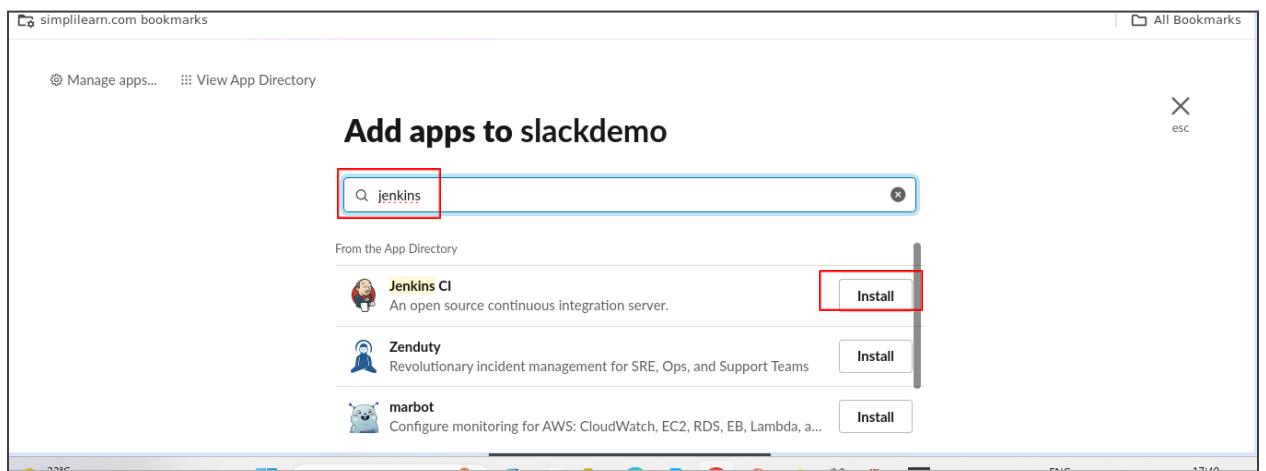
2.7 Click on **Integrations** as shown in the screenshot below:



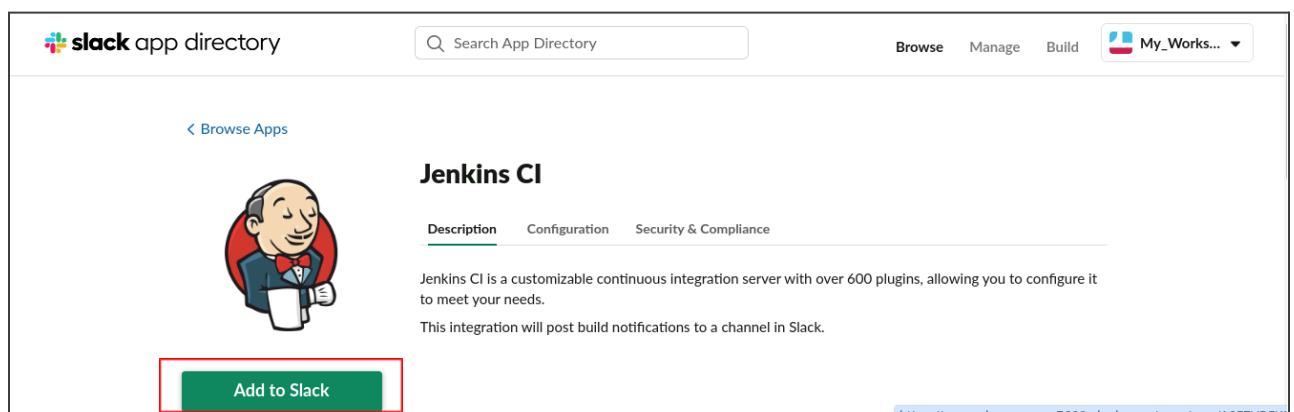
2.8 Click on **Add an App** as shown in the screenshot below:



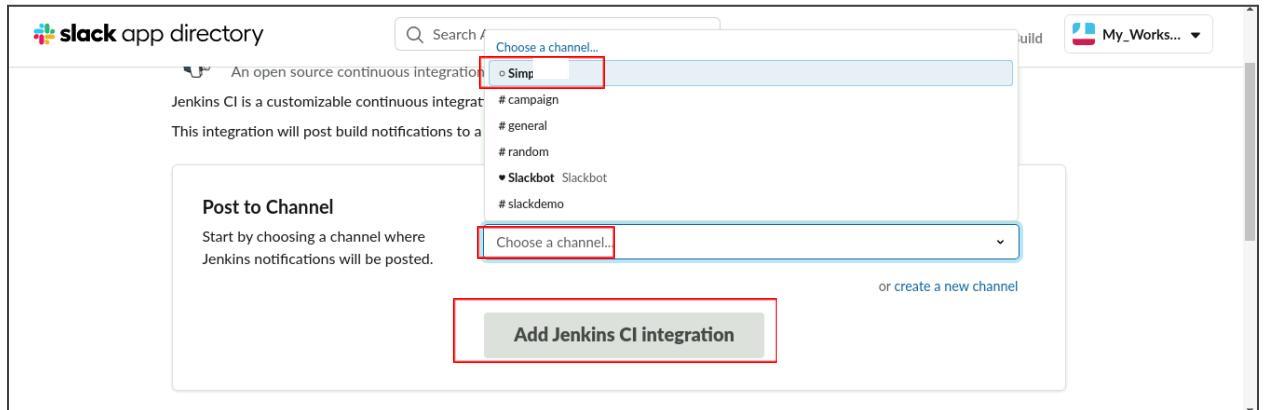
2.9 Search for Jenkins and then click on **Install** as shown in the screenshot below:



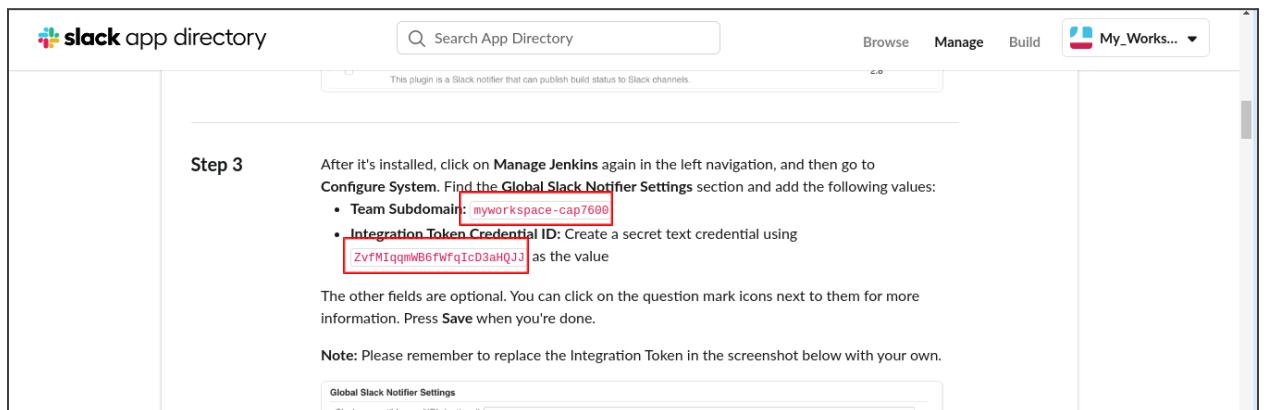
2.10 Click on **Add to Slack** as shown in the screenshot below



- 2.11 Click on the **Choose a channel...** drop-down, select the channel that you have created, and then click on **Add Jenkins CI integration** as shown in the screenshot below:



- 2.12 Scroll down to **Step 3** in the notifier page; you will see subdomain name and secret text credential as shown in the screenshot below:



**Step 3** After 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: `myworkspace-cap7600`
- Integration Token Credential ID: Create a secret text credential using `ZvFM1qqmWBfWfqIcD3aIQQJ` as the value

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

**Note:** Please remember to replace the Integration Token in the screenshot below with your own.

**Note:** Note down the subdomain and token credential for further steps

### Step 3: Configure Slack in Jenkins

- 3.1 Navigate into your Jenkins **Dashboard** and click on the Freestyle job that you have created as shown in the screenshot below:

The screenshot shows the Jenkins dashboard. On the left, there is a sidebar with links: People, Build History, Manage Jenkins, My Views, Open Blue Ocean, and Lockable Resources. The main area displays a table of projects. The columns are labeled S, W, Name (with a dropdown arrow), Last Success, Last Failure, Last Duration, and F. There are two rows in the table:

S	W	Name	Last Success	Last Failure	Last Duration	F
✓	☀️	new_demo	1 day 9 hr #1	N/A	0.47 sec	↗️ ⭐
...	☀️	Slack_demo	N/A	N/A	N/A	↗️ ⭐

At the bottom, there are icons for S, M, L, an icon legend, and three Atom feed options: 'Atom feed for all', 'Atom feed for failures', and 'Atom feed for just latest builds'.

3.2 Click on **Configure** as shown in the screenshot below:

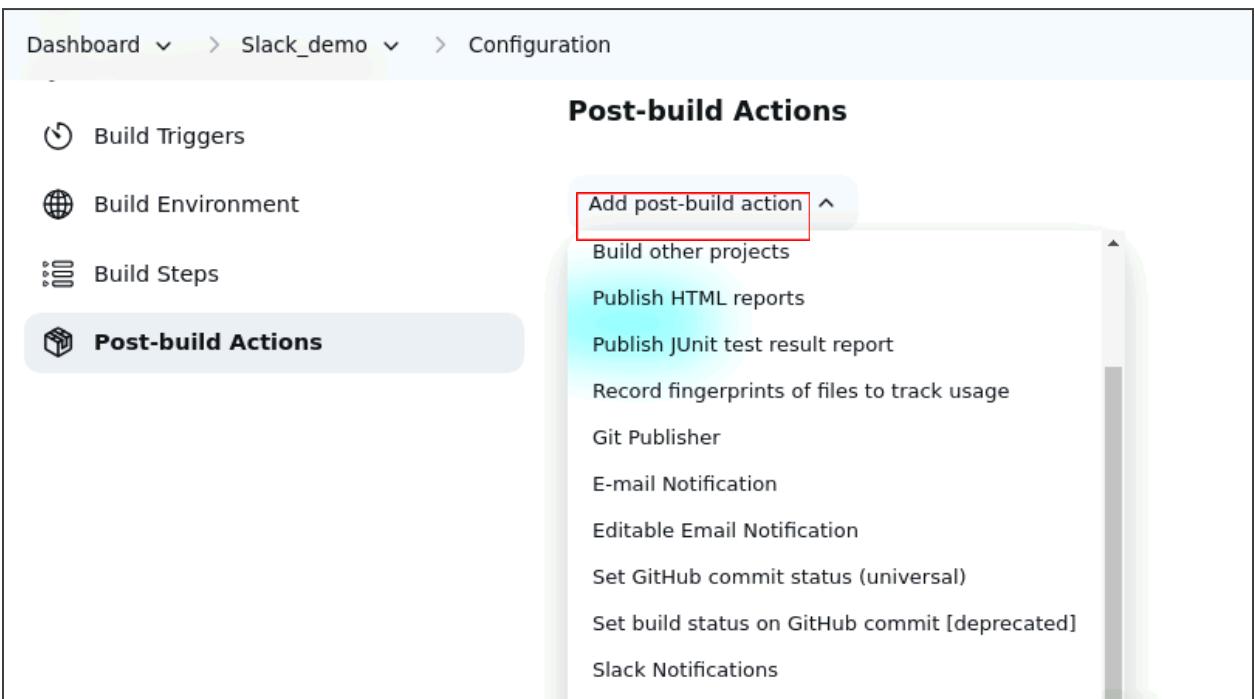
The screenshot shows the Jenkins project page for 'Slack\_demo'. The top navigation bar includes a Jenkins logo, a search bar, and user information (admin). The main content area has a 'Status' section on the left with links: Changes, Workspace, Build Now (with a red box around it), Configure (with a red box around it), Delete Project, and Favorite. To the right, the project name 'Slack\_demo' is displayed, along with a 'Permalinks' section and buttons for 'Add description' and 'Disable Project'.

3.3 Click on **Post-build Actions** as shown in the screenshot below:

The screenshot shows the Jenkins configuration interface for a project named "Slack\_demo". The top navigation bar includes "Dashboard", "Slack\_demo", and "Configuration". Below this, the "Configure" section is visible. On the left, there's a sidebar with tabs: "General" (selected), "Source Code Management", "Build Triggers", "Build Environment", "Build Steps", and "Post-build Actions". The "Post-build Actions" tab is highlighted with a red border. The main area is titled "General" and contains fields for "Description" (empty) and "Plain text Preview" (also empty). A checkbox labeled "Discard old builds" is present. At the bottom are "Save" and "Apply" buttons.

3.4 Click on **Add post-build action** drop-down and select **Slack Notifications** as shown in the screenshot below:

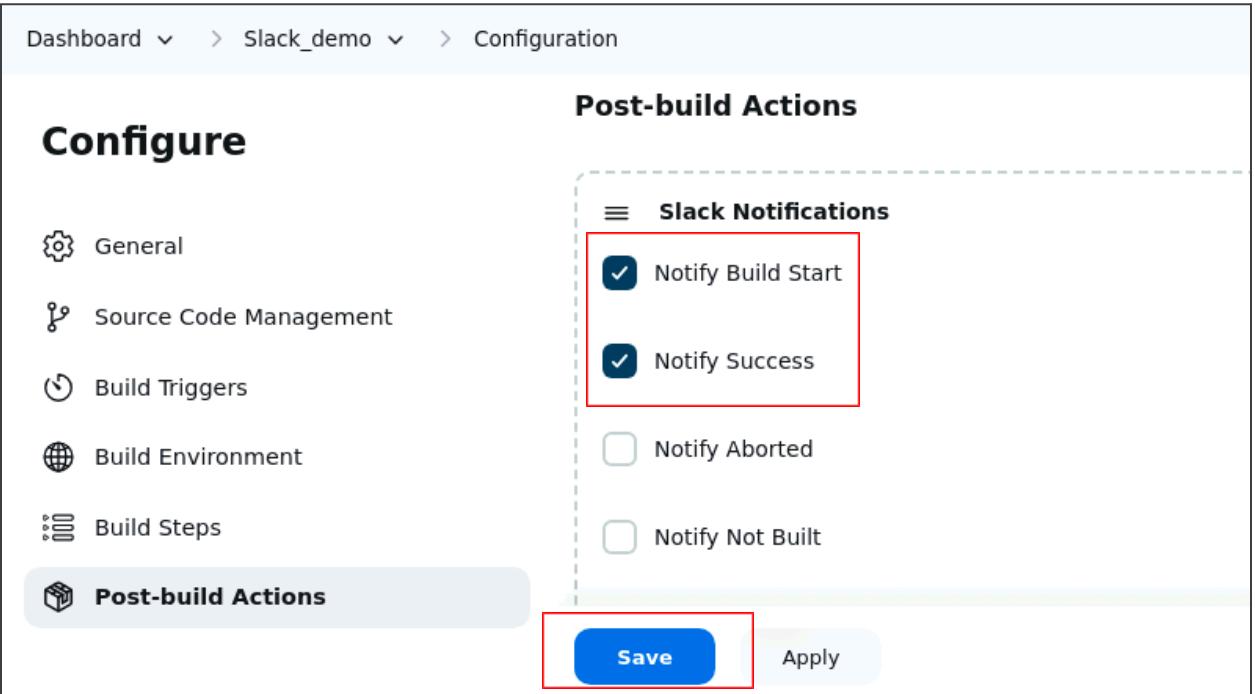




The screenshot shows the Jenkins configuration interface for a project named "Slack\_demo". The left sidebar lists "Build Triggers", "Build Environment", "Build Steps", and "Post-build Actions". The "Post-build Actions" section is highlighted with a red box. A dropdown menu titled "Add post-build action" is open, listing various actions. The "Slack Notifications" option is also highlighted with a red box.

- Add post-build action ^
- Build other projects
- Publish HTML reports
- Publish JUnit test result report
- Record fingerprints of files to track usage
- Git Publisher
- E-mail Notification
- Editable Email Notification
- Set GitHub commit status (universal)
- Set build status on GitHub commit [deprecated]
- Slack Notifications

3.5 Select the desired notifications and then click on **Save** as shown in the screenshot below:



The screenshot shows the Jenkins configuration interface for the "Slack\_demo" project. The "Post-build Actions" section is highlighted with a red box. Under "Slack Notifications", "Notify Build Start" and "Notify Success" are checked with a red box around them. The "Save" button at the bottom is also highlighted with a red box.

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps

Post-build Actions

Slack Notifications

- Notify Build Start
- Notify Success
- Notify Aborted
- Notify Not Built

Save      Apply

3.6 Click on **Manage Jenkins** as shown in the screenshot below:

The screenshot shows the Jenkins Dashboard. On the left, there is a sidebar with links: People, Build History (which has 'Manage Jenkins' highlighted with a red box), My Views, Open Blue Ocean, and Lockable Resources. The main area is a table titled 'All' showing build status for two items: 'new\_demo' and 'Slack\_demo'. The table columns are: S (Status), W (Last Result), Name (with a dropdown arrow), Last Success, Last Failure, Last Duration, and F (Failure count). Below the table, there are icons for S, M, L, and an 'Icon legend'. At the bottom, there are three links: 'Atom feed for all', 'Atom feed for failures', and 'Atom feed for just latest builds'.

3.7 Click on **System** as shown in the screenshot below:

The screenshot shows the 'System Configuration' page. It features five main sections: 'System' (highlighted with a red box), 'Tools', 'Plugins', 'Nodes', and 'Clouds'. Each section has an icon and a brief description. A red box highlights the 'System' section, which includes the text 'Configure global settings and paths.' To the right of the 'System' section, a small red circle with the number '28' indicates new plugin activity.

Section	Description
System	Configure global settings and paths.
Tools	Configure tools, their locations and automatic installers.
Plugins	Add, remove, disable or enable plugins that can extend the functionality of Jenkins. (28 new)
Nodes	Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
Clouds	Add, remove, and configure cloud instances to provision agents on-demand.

- 3.8 Scroll down to the bottom of the screen; under the **Slack** section, enter your workspace name, which is the Subdomain name, as shown in the screenshot below:

The screenshot shows the Jenkins System configuration page. Under the **Slack** section, the **Workspace** field contains "myworkspace-cap7600", which is highlighted with a red box. Below it, the **Credential** dropdown is set to "- none -". There is also a "+ Add" button. At the bottom are **Save** and **Apply** buttons.

**Note:** Refer to the step 2.12 for Subdomain name

- 3.9 Click on **Add** as shown in the screenshot below:

The screenshot shows the Jenkins System configuration page. Under the **Slack** section, the **Workspace** field contains "myworkspace-cap7600". The **Credential** dropdown is set to "- none -". The **+ Add** button is highlighted with a red box. Below it, the **Default channel / member id** field contains "random". At the bottom are **Save** and **Apply** buttons.

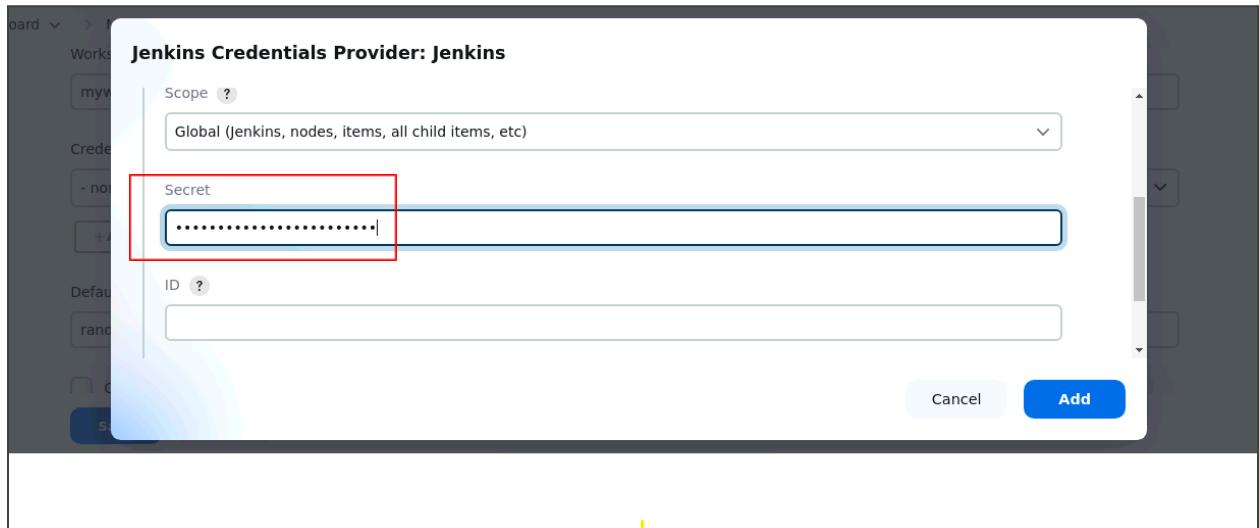
3.10 Click on **Jenkins** as shown in the screenshot below:

The screenshot shows the Jenkins System configuration page under the Manage Jenkins > System path. The workspace is set to "myworkspace-cap7600". Under the Jenkins Credentials Provider section, the "Jenkins" provider is selected, highlighted with a red box. The "Kind" dropdown shows "Secret text" selected, also highlighted with a red box. The "Save" button is visible at the bottom left.

3.11 Choose **Secret text** under **Kind** section as shown in the screenshot below:

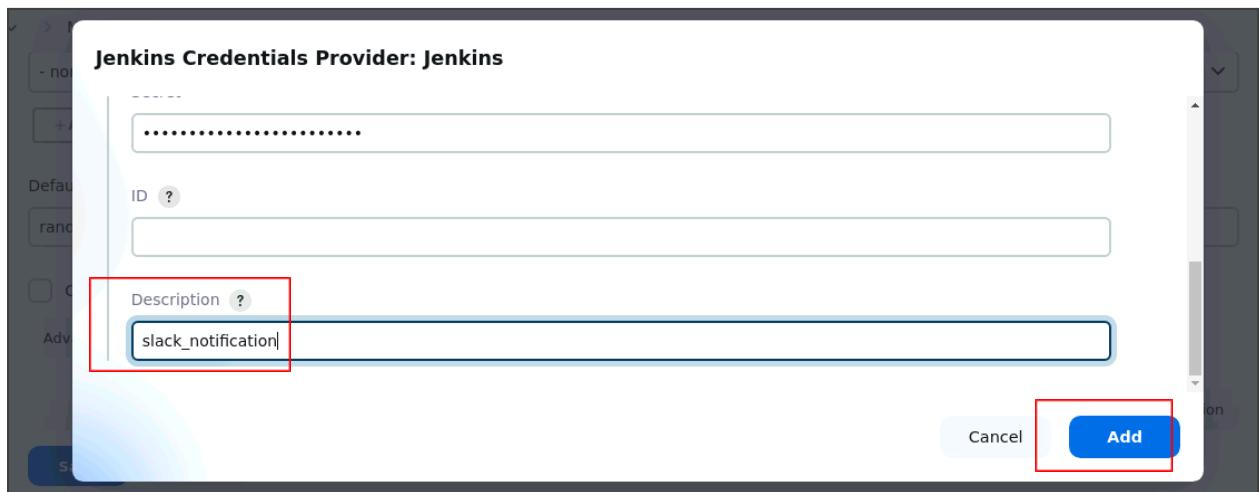
The screenshot shows the Jenkins Credentials Provider dialog. The "Domain" is set to "Global credentials (unrestricted)". The "Kind" dropdown menu is open, showing several options: "Username with password", "GitHub App", "SSH Username with private key", "Secret file", and "Secret text". The "Secret text" option is highlighted with a red box. The "Add" button is visible at the bottom right.

- 3.12 Enter the token credential under **Secret** section as shown in the screenshot below:



**Note:** Refer to step 2.12 for token

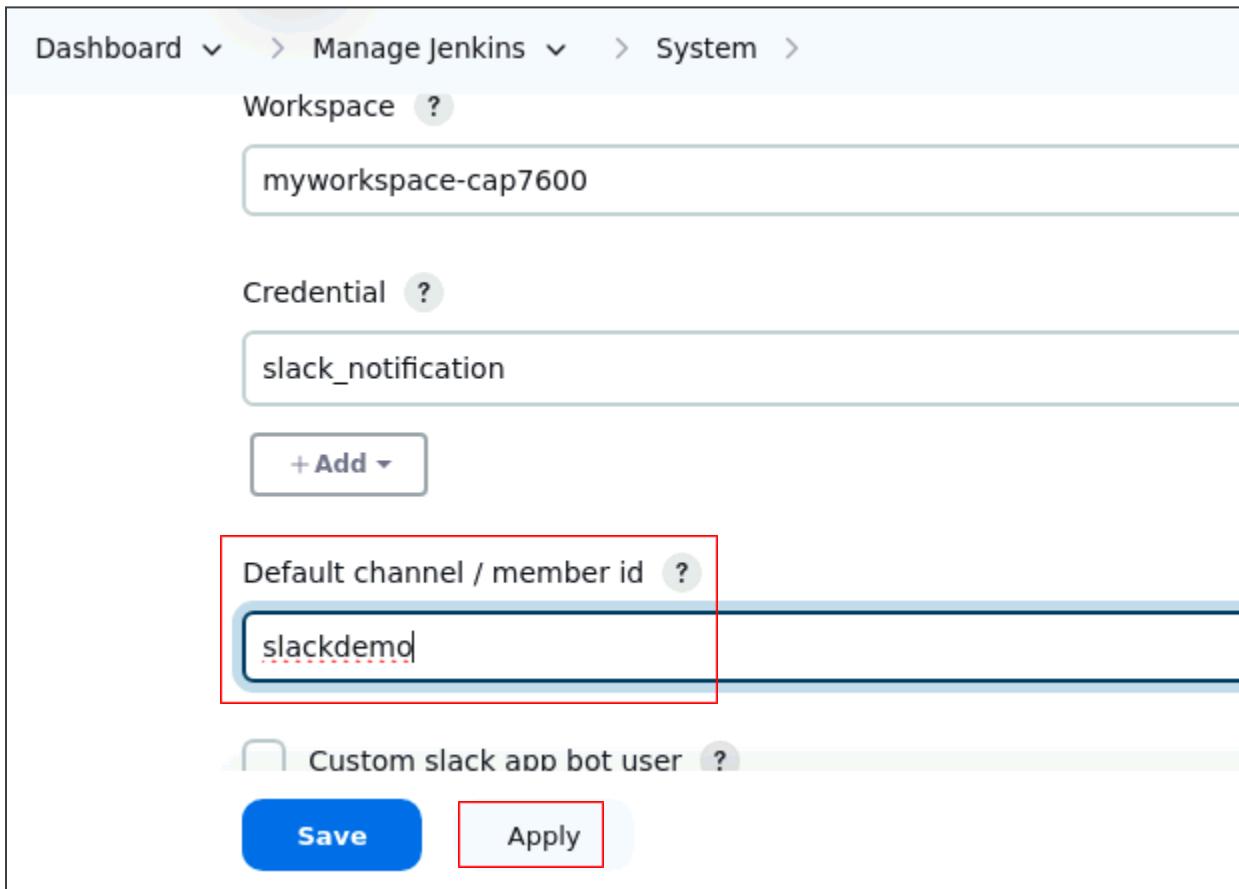
- 3.13 Enter a desired name for **Description** and then click on **Add** as shown in the screenshot below:



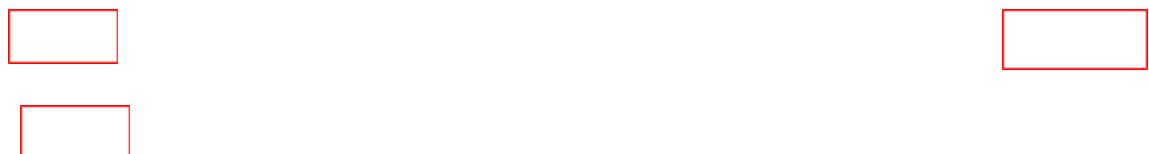
- 3.14 Choose the credential name from the list that you have created as shown in the screenshot below:

The screenshot shows the Jenkins System configuration page under Manage Jenkins > System. The 'Workspace' field is set to 'myworkspace-cap7600'. The 'Credential' dropdown is expanded, showing a list of available credentials: '- none -', 'admin', 'sla', 'slack', and 'slack\_notification'. The 'slack\_notification' option is selected and highlighted with a red box. Below the dropdown, there is a checkbox for 'Custom slack app bot user' which is unchecked. At the bottom are 'Save' and 'Apply' buttons.

- 3.15 Enter the name of the channel that you have created and then click on **Apply** as shown in the screenshot below:

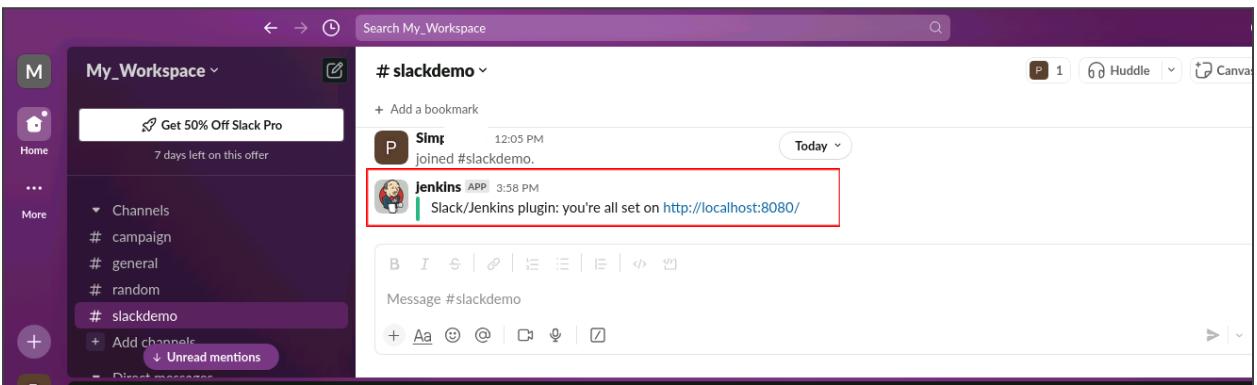


- 3.16 Click on **Test Connection** to verify that the status shows **Success**, and then click on **Save** as shown in the screenshot below:





- 3.17 Navigate to the slack channel that you have created and check the notification of Jenkins as shown in the screenshot below:



- 3.18 Check your mail inbox for the notification as shown in the screenshot below:

[Slack] Notifications from the My\_Workspace workspace for April 15th, 2024

External    Inbox x

Slack <notification@slack.com>  
to me ▾

5:26 PM (4 hours ago)    ☆    ←    ⋮

 slack

**You have new messages  
in My\_Workspace  
(myworkspace-  
cap7600.slack.com)**

By following these steps, you have successfully set up Slack channel for configuring build notifications for receiving updates about the build process.