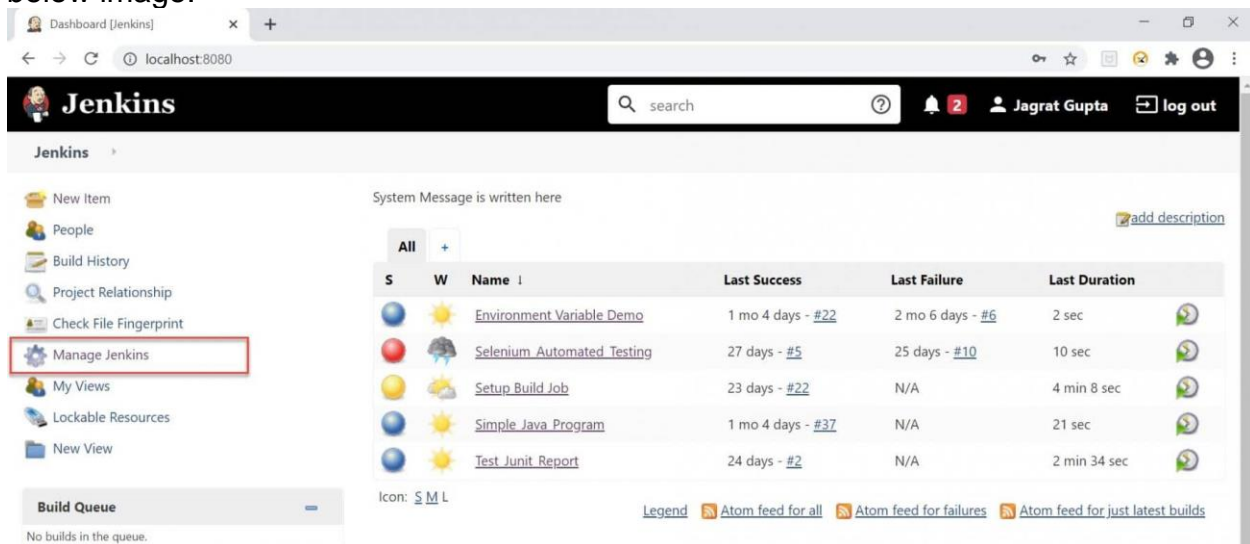# Plugins in Jenkins

We will look at how we manage plugins in Jenkins to use the specific functionality in Jenkins according to our requirements.

Install a Plugin

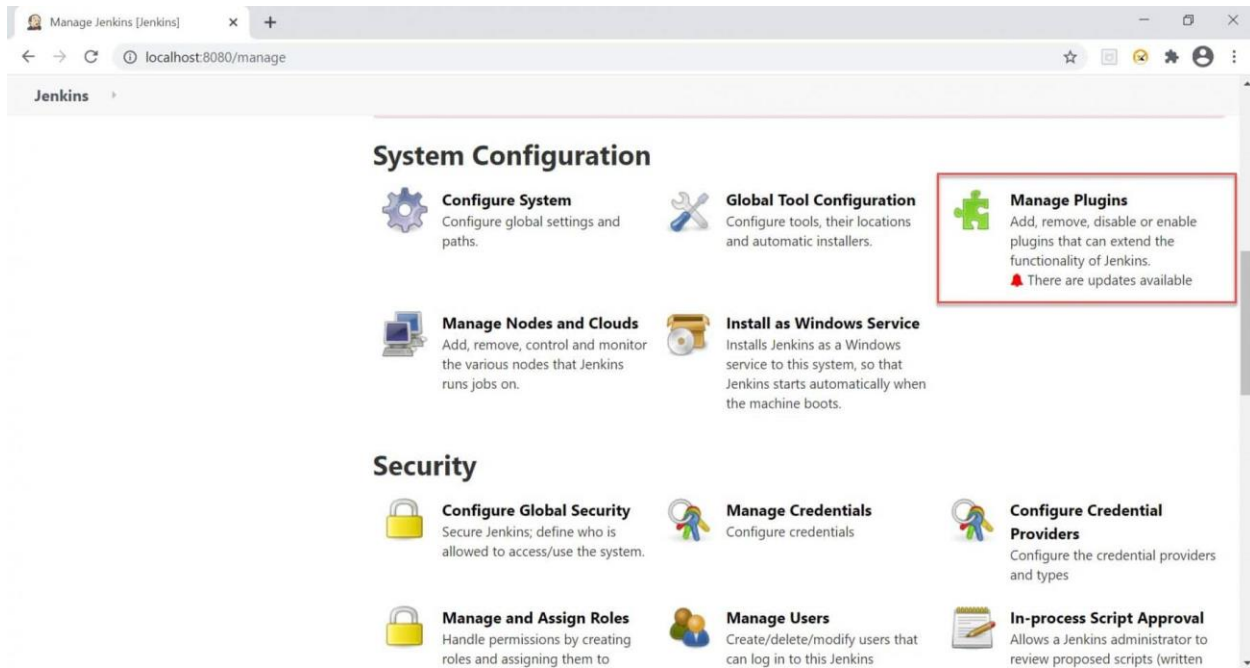Please follow the below steps to install a plugin in Jenkins:

Manage Jenkins

Go to *Jenkins dashboard* and click on the **"Manage Jenkins"** link highlighted in the below image.

Manage Plugins

As soon as we click on the *Manage Jenkins* link, we will redirect towards the manage Jenkins page, and here we need to click on **"Manage Plugins"** under the System Configuration section.

Choose the Plugin to Install

We'll use the GitHub Authentiation plugin in this experiment, but you could use any plugin (hint Perforce)

Now, we are on the page where plugins are available after clicking on the *manage plugins* option. We want to install the "**GitHub Authentication**" plugin in Jenkins. To do it, please follow the below steps:

- *Click on the "**Available**" tab.*
- *Search the plugin you want to install in the search box as we searched "**GitHub Authentication.**"*
- *Check the checkbox against the required plugin.*
- *After that, click on the "**Download now and install after restart**" button. We can also click on the "**Install without restart**" button, but we always recommend choosing to install after the restart to install the plugin effectively.*
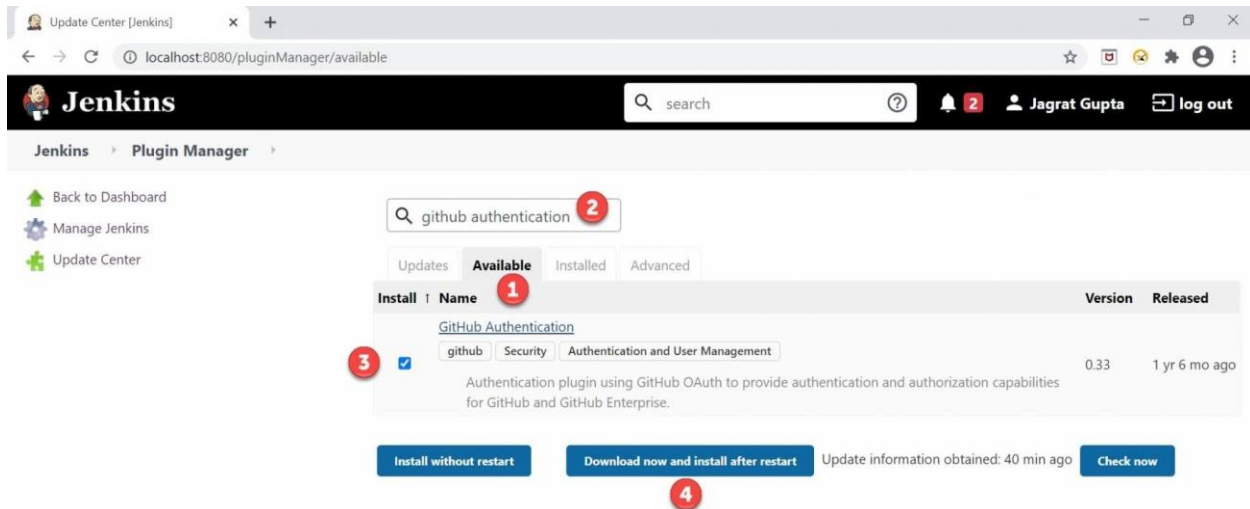
View Plugin installation progress

As soon as the above steps will complete, we will move towards the *Plugin installation progress* page, and after successful installation of the plugin, we can see a successful message. Any dependent plugin will automatically start to install along with the required plugin during installation.
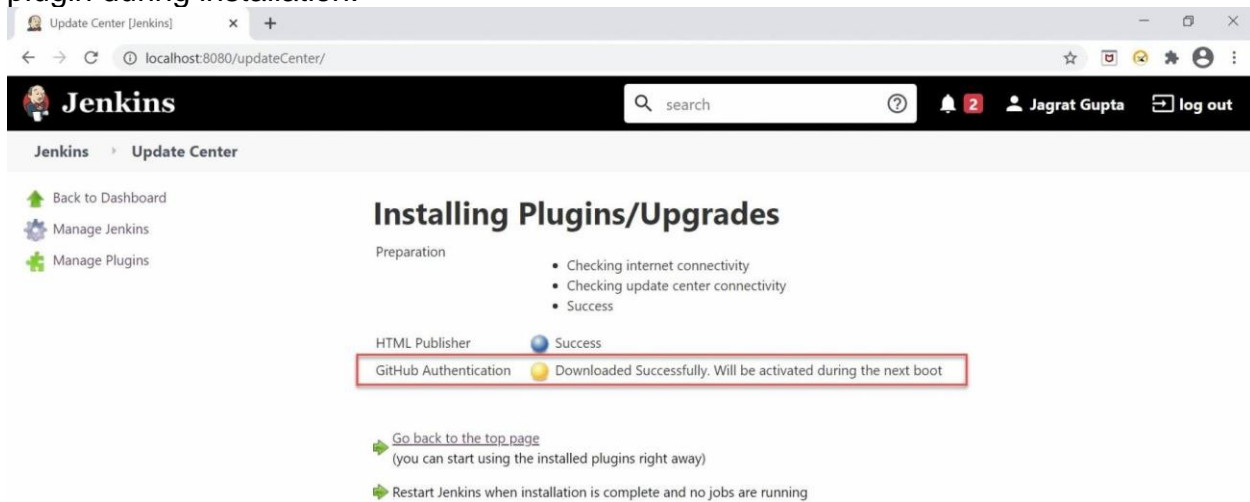
Restart Jenkins

Now restart Jenkins, and after a successful restart, we can verify that if the plugin installation were successful, it would show under the **"Installed"** tab.
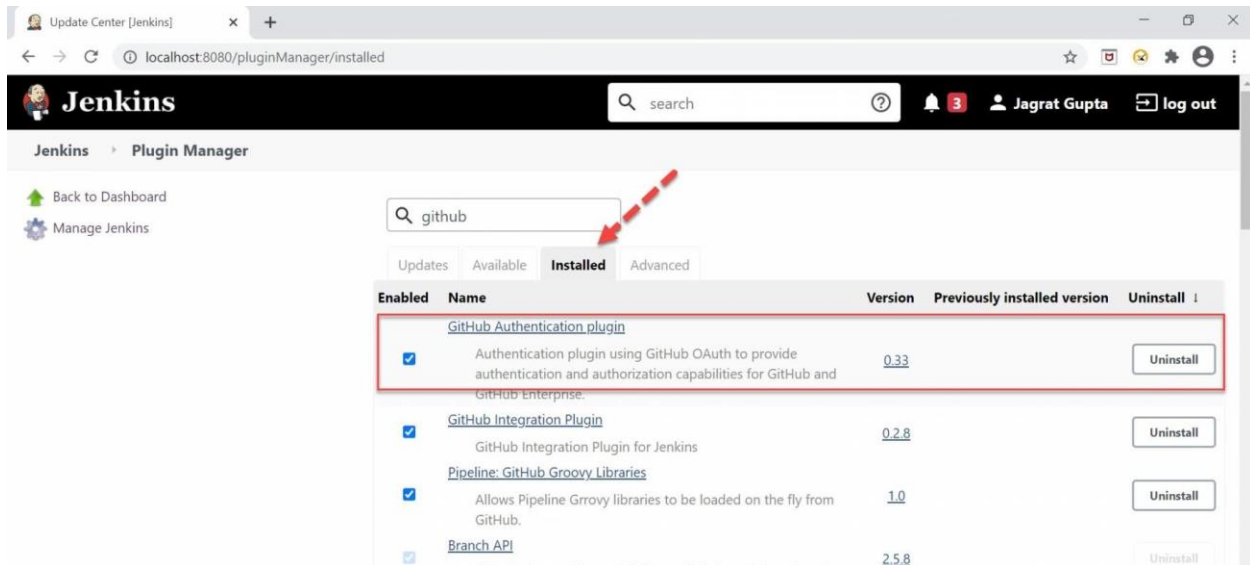
So, in this way, we can install any plugin in Jenkins. Now in the next subsection, let's see how to install any plugin manually in Jenkins.

Manual Installation

We have already seen in the previous section how to install a plugin in Jenkins, but sometimes, we need to install some specific version of the plugin in Jenkins. In this case, we can not install the plugin through the steps mentioned in the previous section. Instead, we need to install the plugin manually in this case. So, let's understand the manual plugin installation process with the help of the below steps:

Step 1: Now we will install the ***"HTML Publisher"*** plugin manually. So, firstly we need to go to the ***Plugins page*** of Jenkins and search for the plugin that we want to install.
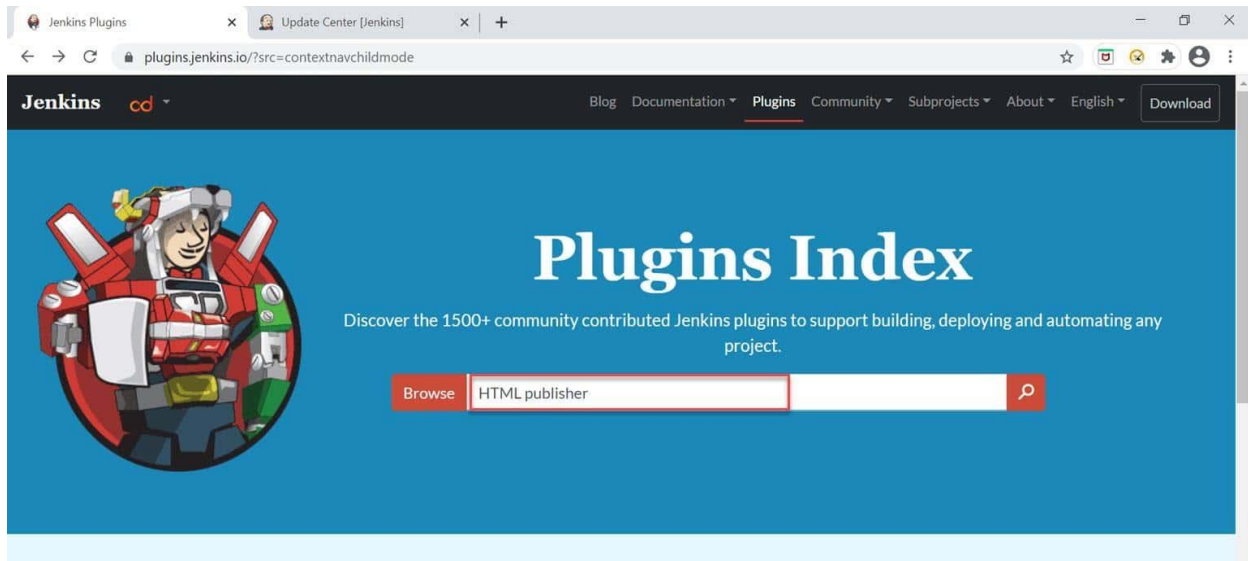
Browse Plugins

As soon as we click, we will see the relevant plugin. Now click on the respected plugin.
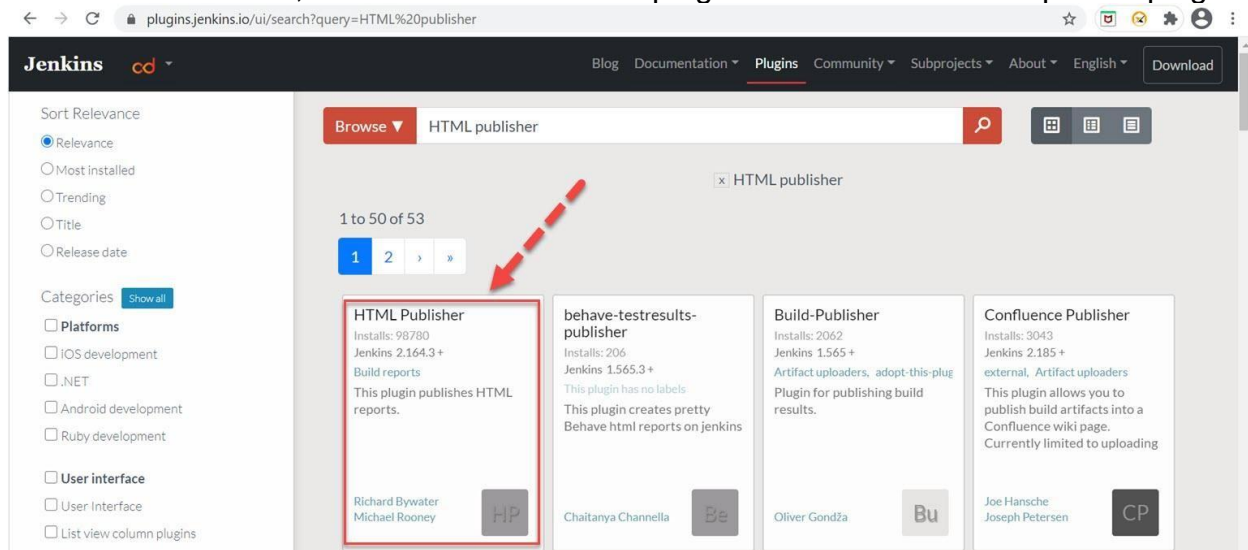
Review Versions

After clicking on the respective plugin, we will move towards the plugin page. Here, as soon as we click on the *"release"* tab, we can see the plugin versions.

Validate dependencies

Here, we can see that the latest version is 1.30 but let us suppose we want to install version 1.24, so we need to scroll down the page and go to that version and click on that link. After clicking, the **hpi** file will download.
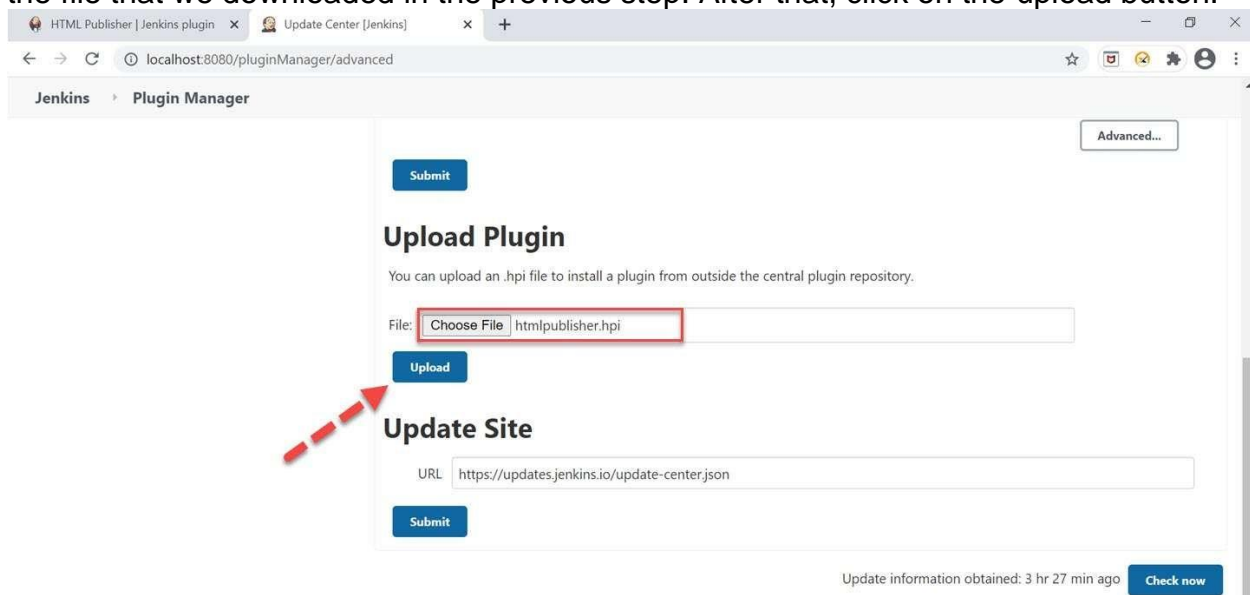
View Advanced Settings

Now, in *Jenkins*, go to *plugin manager* and click on the **"Advanced"** tab. He we will see any advanced options, but we won't need any for our installation.
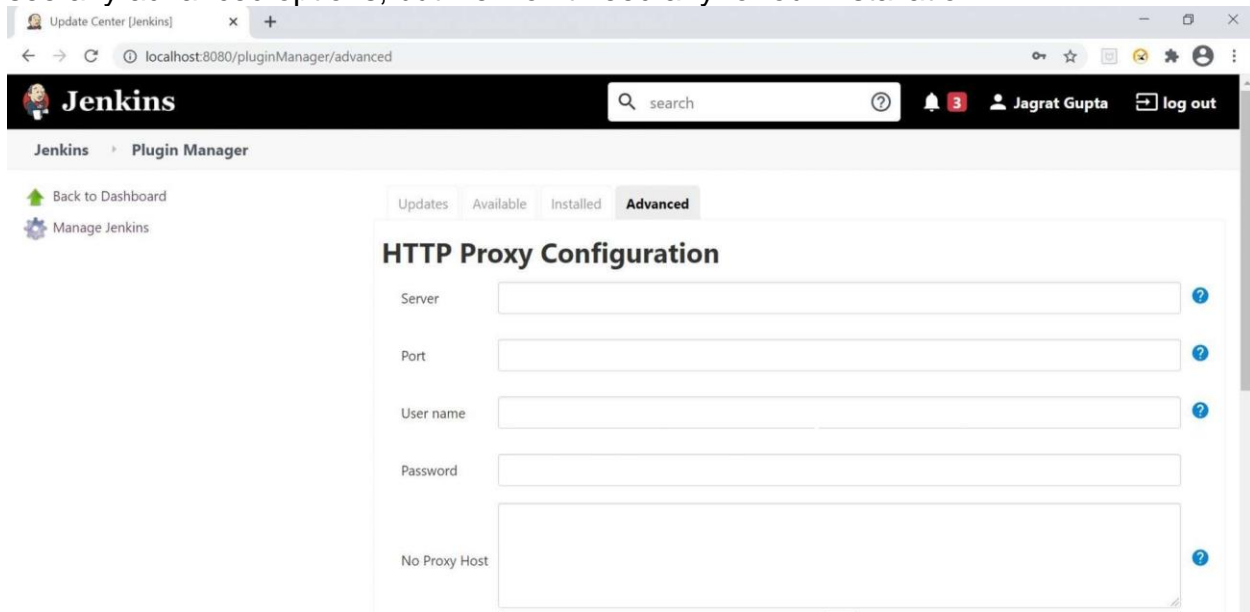

Plugin Upload

Now, scroll down the page, and under the ***upload plugin*** section, we need to choose the file that we downloaded in the previous step. After that, click on the upload button.

Review Progress

As soon as we click on the upload button, we will move towards the *Plugin installation progress* page, and here we can see that the plugin installation started. We will see a success message after installation.
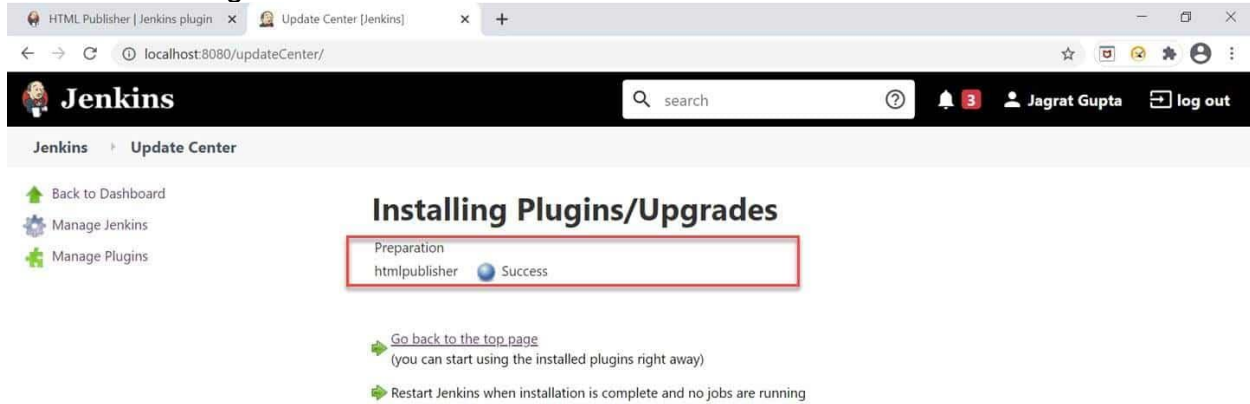
Validate installation

Now, for validation, go to the plugin manager, and under the **"installed"** tab, we can see the *HTML publisher plugin* with the version that we installed.
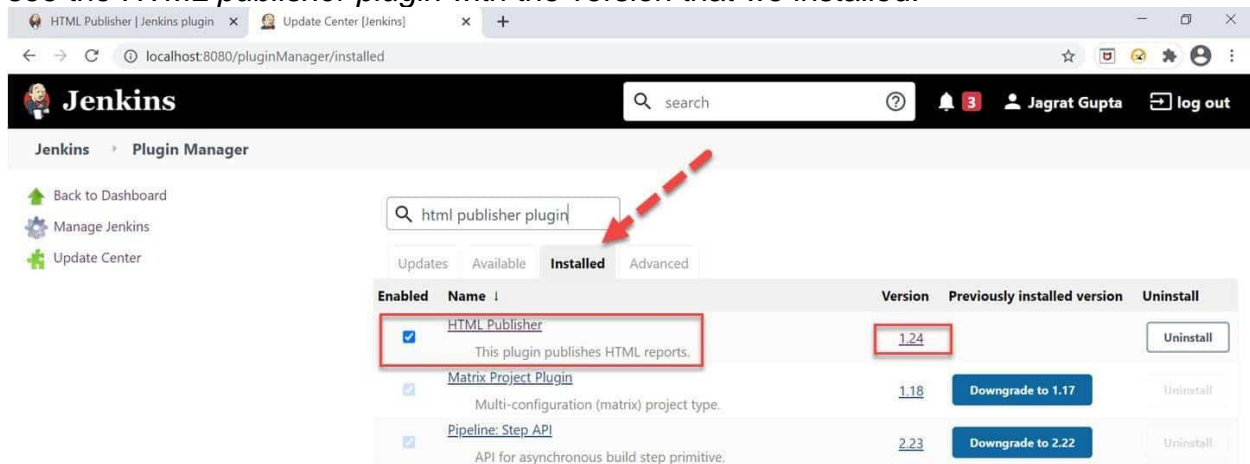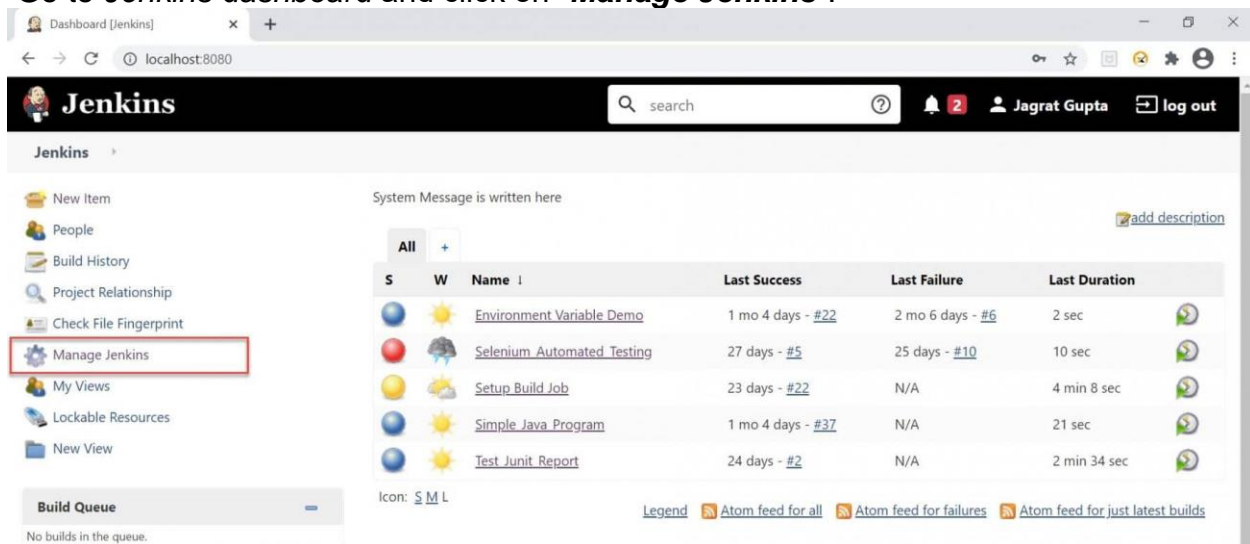

So, in this way, we can install the plugin manually in Jenkins. In the next sub-section, we will see how to upgrade any plugin in Jenkins.

Upgrade Jenkins Plugins

We saw in the previous subsection that how to install a plugin manually in Jenkins, and at that moment, we installed the "*HTML publisher plugin*" with version 1.24. Still, as we saw previously that its latest version is 1.30, so the question is like how can we move to the latest version of any plugin. The answer is that we need to *upgrade the plugin*. So please follow the below steps to upgrade the plugin:

Manage Jenkins

Go to *Jenkins dashboard* and click on "*Manage Jenkins*".

Manage Plugins

As soon as we click on the *manage Jenkins* link, we will redirect towards the *manage Jenkins* page, and here we need to click on *"Manage Plugins"* under the *System Configuration* section.
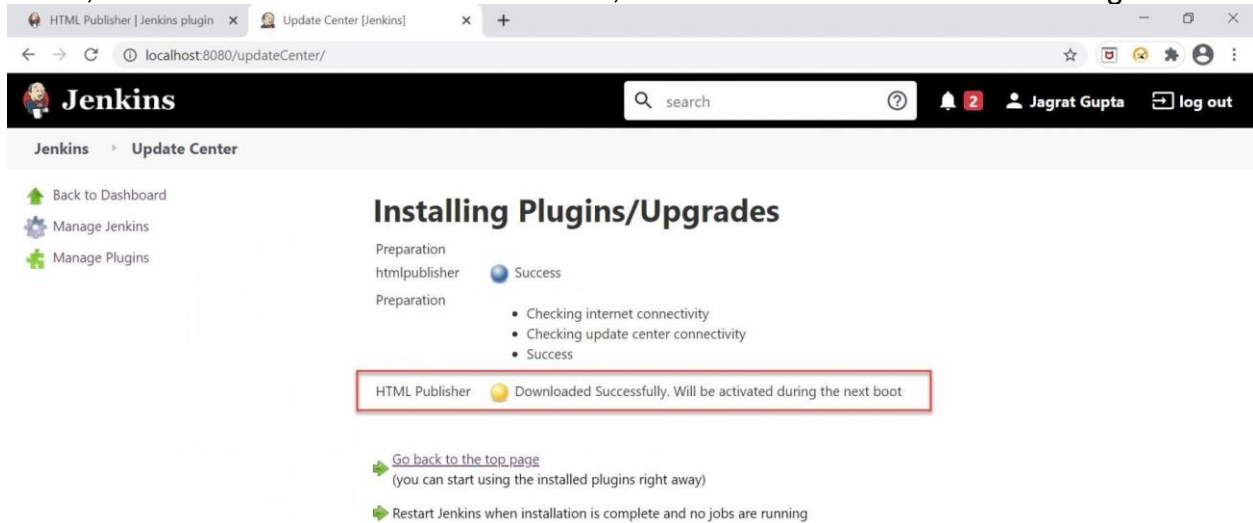
Update plugin

Now, we will move towards the *plugin manager* page. Please do the following steps to upgrade the plugin:

- *Click on the "**Updates**" tab.*
- *Search the plugin that you want to upgrade in the search box as we searched "**HTML publisher plugin.**" Here we can easily see the latest version as well as the currently installed version of the plugin.*
- *Check the checkbox against the required plugin.*
- *After that, click on the "**Download now and install after restart**" button.*
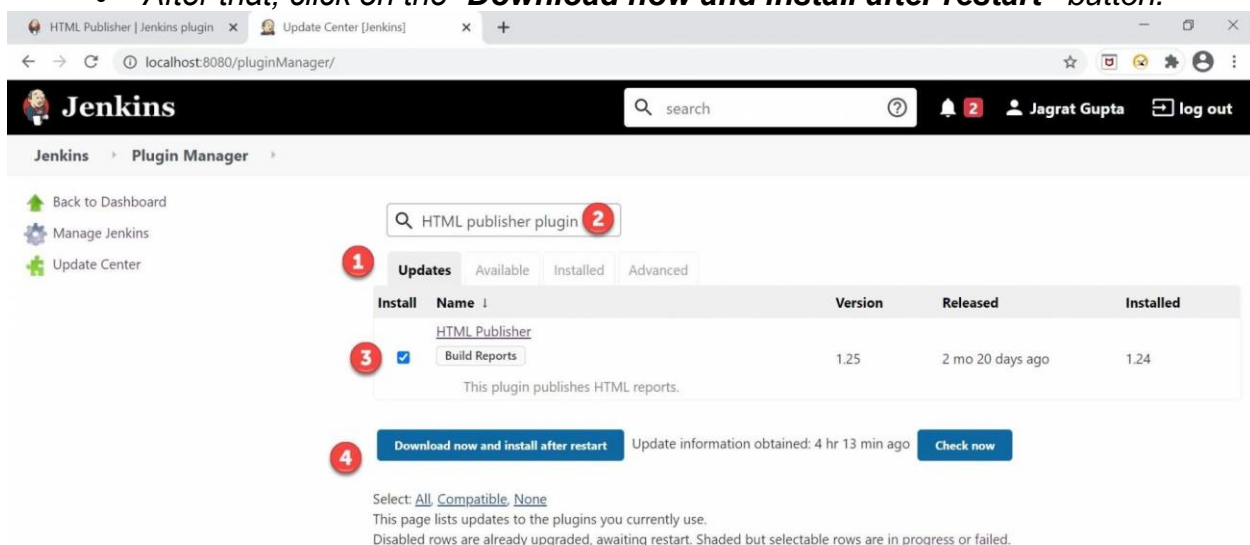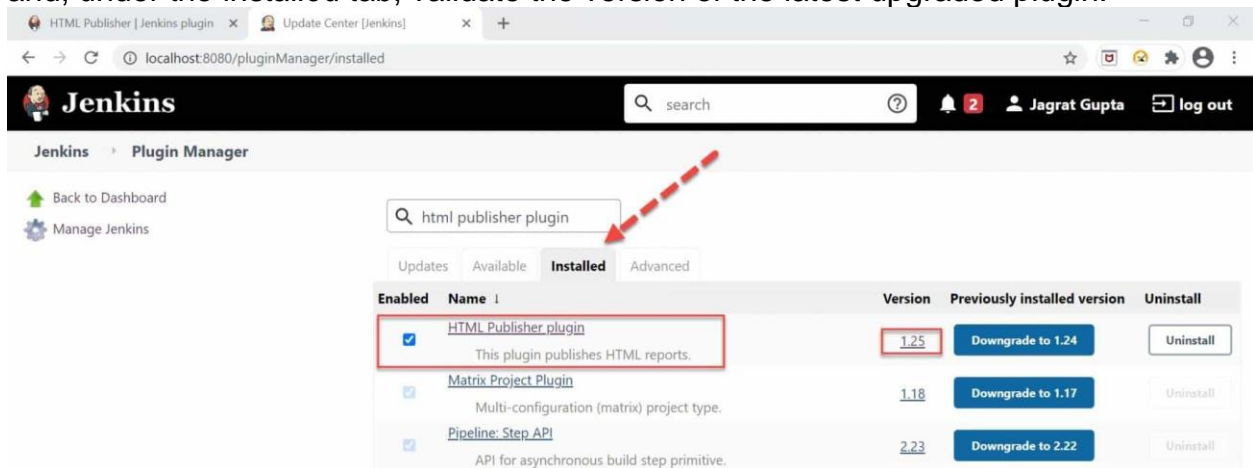
Update progress

 As soon as we completed the above steps, the plugin installation progress page will come, and hereafter successful installation, we can see the successful message.

Jenkins Restart

 Now we need to *restart Jenkins* and, after restarting, go to again *plugin manager* page and, under the *installed* tab, validate the version of the latest upgraded plugin.
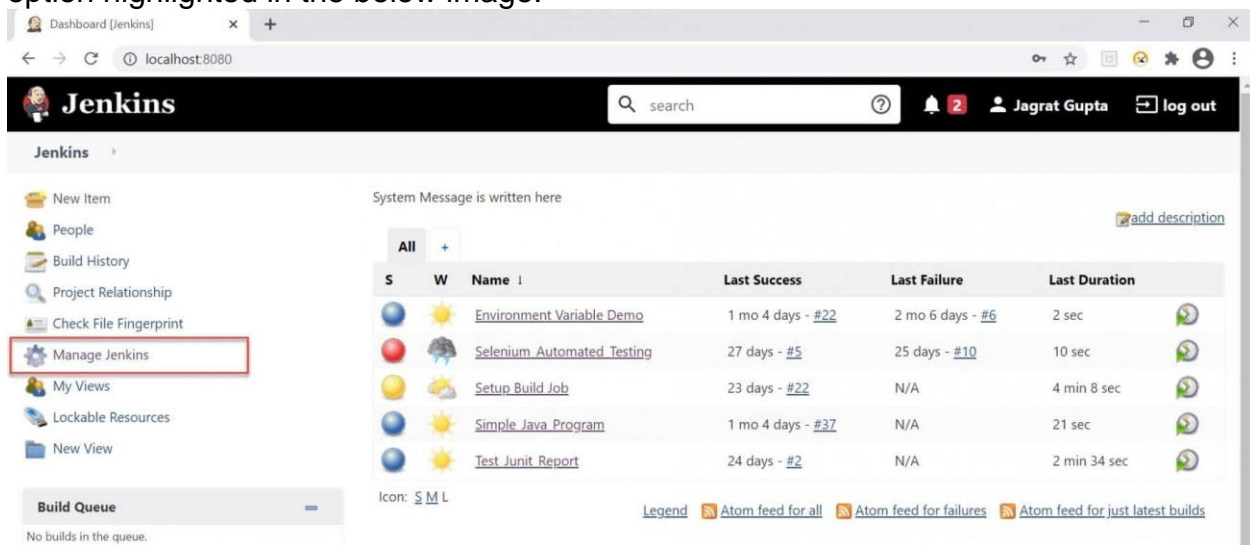

So, in this way, we can upgrade the *plugin in Jenkins*. In the next section, let's see how to uninstall any plugin in Jenkins.

Plugin Uninstall

In the previous section, we saw how to install any plugin in Jenkins and install any plugin in Jenkins manually. So, in this section, let's understand how to uninstall any plugin in Jenkins with the help of the below steps:

Manage Jenkins

Go to *Jenkins dashboard* after successful login and click on the "***Manage Jenkins***" option highlighted in the below image.
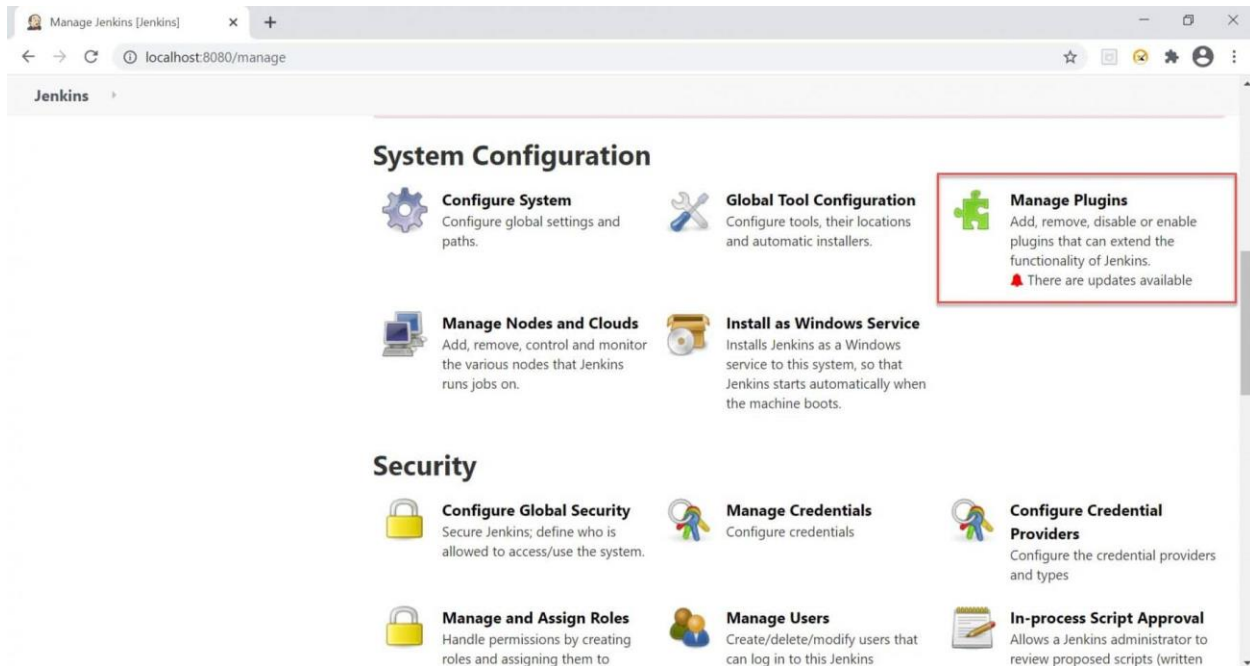

Manage Plugins

As soon as we click on the *manage Jenkins* link, we will redirect towards the *manage Jenkins* page, and here we need to click on ***"Manage Plugins"*** under the *System Configuration* section.

Remove Plugin

Now, for example, if we want to uninstall the *"GitHub authentication"* plugin that we installed in the previous steps the please follow the below steps:

Click on the **"installed"** *tab.*

Search the plugin that you want to uninstall in the search box as we searched the **"GitHub authentication"** *plugin.*

Check the checkbox against the required plugin, if not checked.

Click on **the "Uninstall"** *button.*
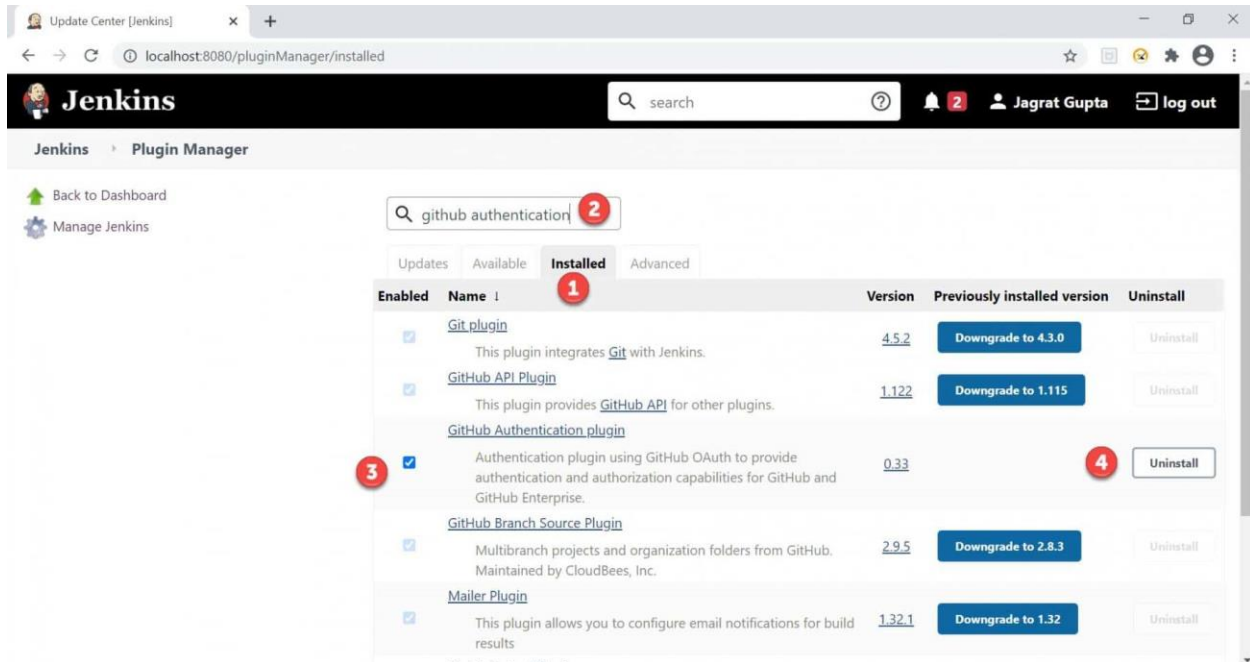
Confirm

As soon as we completed the above steps, the *uninstallation confirmation page* will come, and here we need to click on the **"Yes"** button.
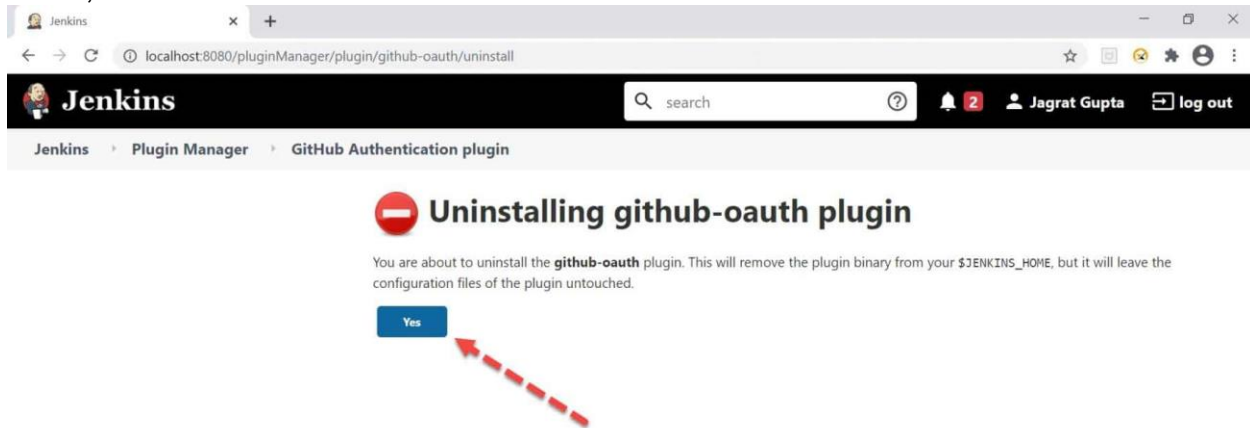
Once we click on the yes button, we will again redirect towards the plugin manager page.

Jenkins Restart

Now restart Jenkins and again go to the plugin manager page. Here we will find the plugin under the available tab again if plugin uninstallation is successful.

So, in this way, we can *uninstall any plugin in Jenkins*.

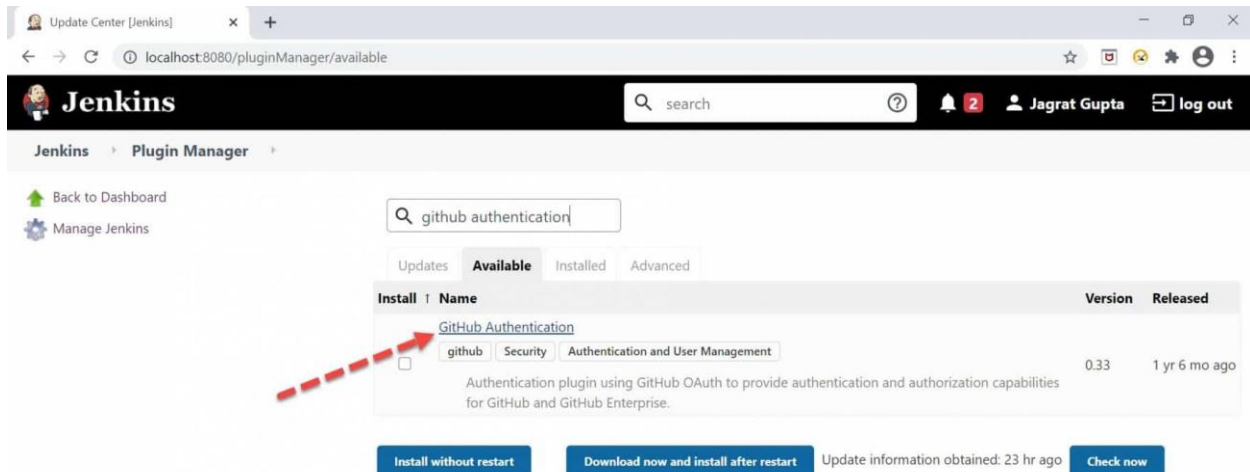So, by using the ways mentioned above, we can install/uninstall and update plugins in *Jenkins* and utilize Jenkins's extended capabilities by using this *Jenkins Manage Plugins* functionalities.

Key Takeaways

- Jenkins plugin is a java-archive format package that basically follows a specific structure during the construction. Each plugin contains *.hpi* extension in Jenkins.
- Jenkins basically defines the set of interfaces that Jenkins community developers implement and extend by some custom code. So, community developers develop plugins according to the required functionality. Then, we can install that plugin to achieve that functionality in Jenkins.
- We can search any plugin under the Jenkins manage plugins option, and from there, we can install it.
- If we want to install the plugin manually or any specific version of the plugin, then we need to upload the plugin. Again, we should do it under the upload plugin section.
- We can also upgrade the plugin version in Jenkins.
- Moreover, we can uninstall the plugin in Jenkins in case of no requirement for that plugin.