

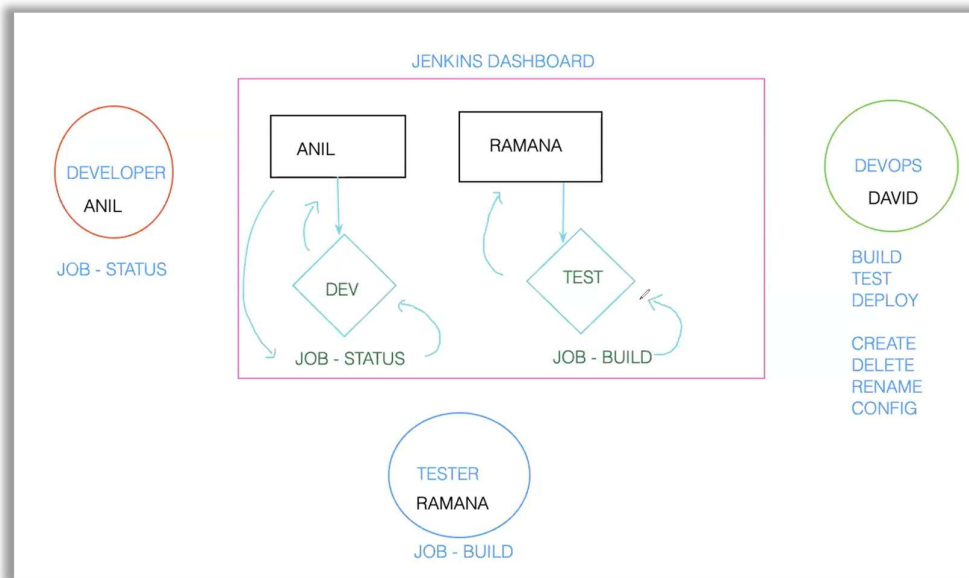
Jenkins Class – 7

In this class we have to discuss about how to add the user and config the user permissions as well.

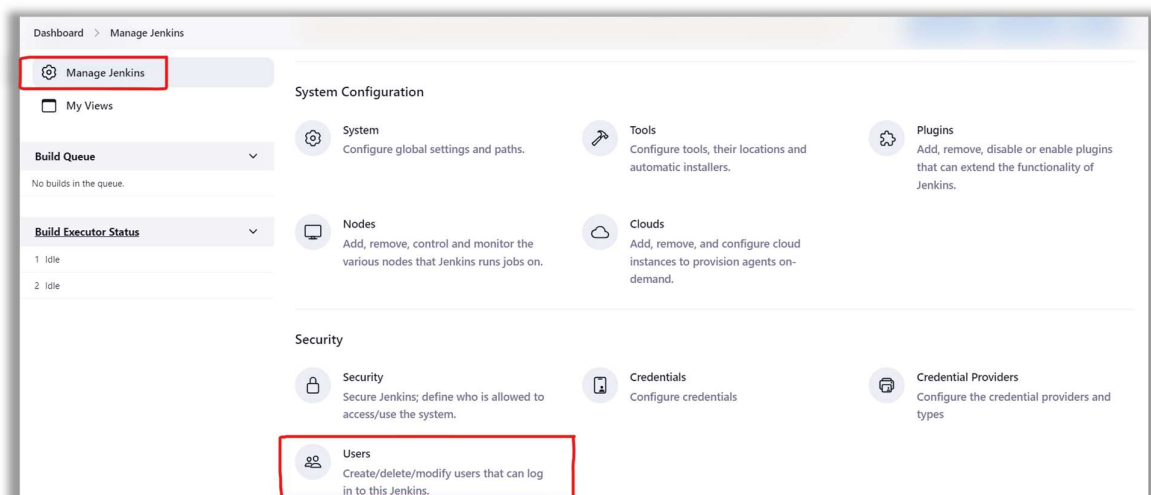
For example,

We have 3 different users in our project, each user should have different limitations of access to perform their activity. So we should give the certain access to the specific users.

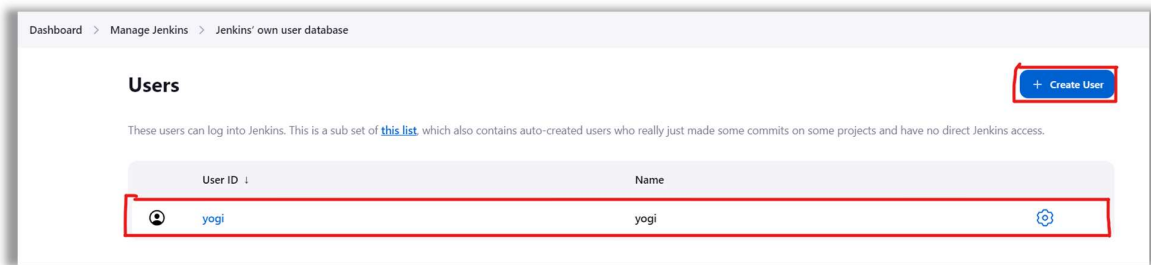
We need to set the permission to the role then attach it to the user. So the user have access of certain permission. Because the user attached with role as mentioned the below layout.



To set the user permission go to the manage **Jenkins->users**.

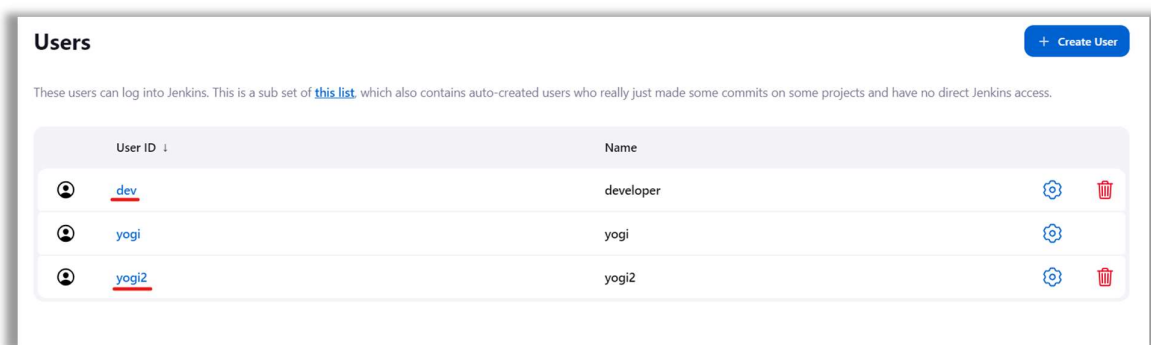


You can see the default user is there, to create user click on **create user**.

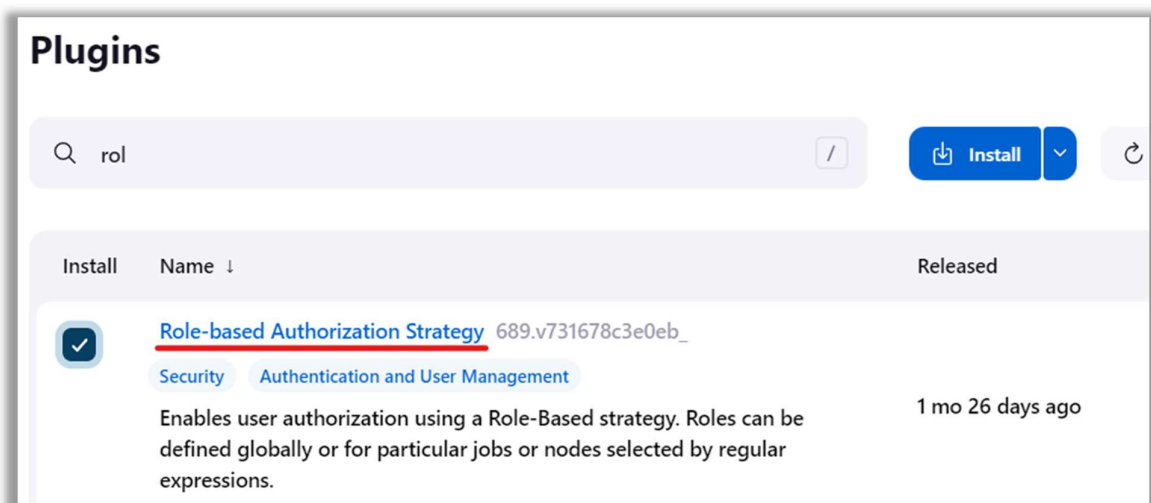


After click on create user, you will get the credential page of the new user. Now you have to fill the new user credentials to create the new user.

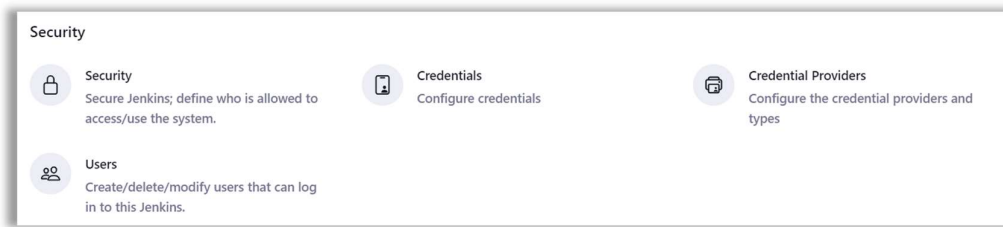
Now you can see the new user has been added in the user dashboard.



Now we need to install **Role-based Authorization Strategy** plugin to make you access permission more flexible.

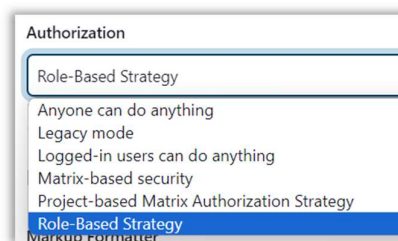


Before change the security settings we can see the 4 categories only as shown in below snap.

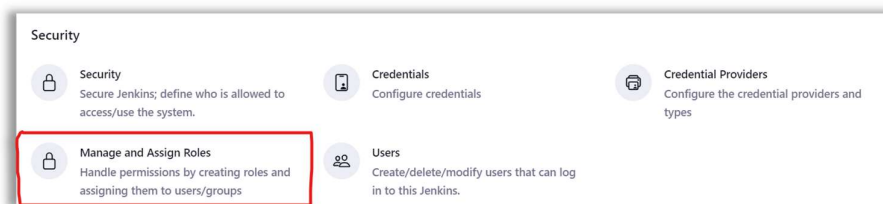


Now go to security and change the **Authorization** option. The default option will be **logged-in users can do anything**. So we should change it to **Role-based Authorization Strategy** plugin and save it.

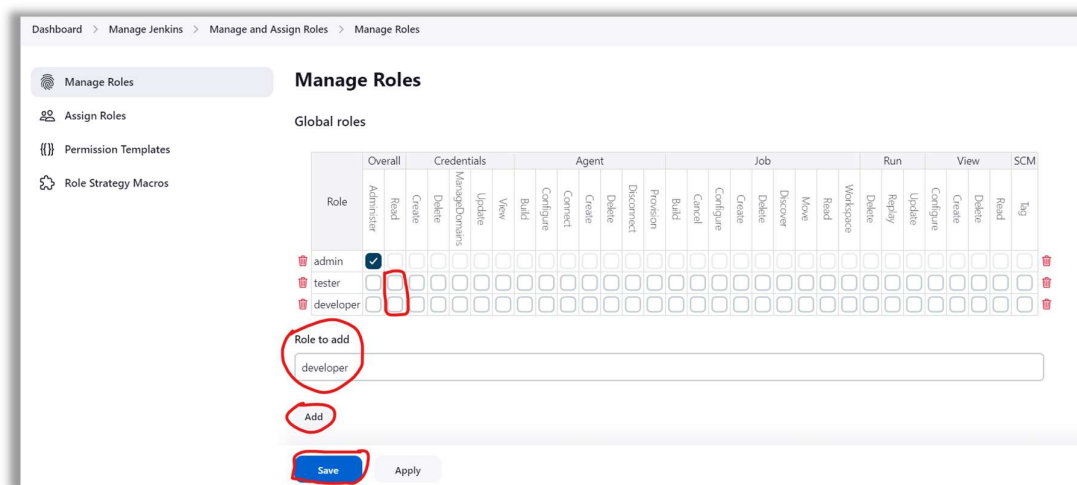
Note: If you not installed Role-based Authorization Strategy plugin, the option will not visible in Authorization.



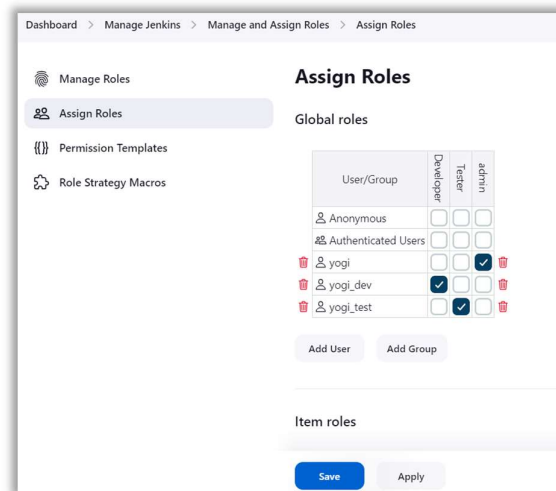
Now you can see the one extra option which is **Manage and Assign Roles**. Click on it.



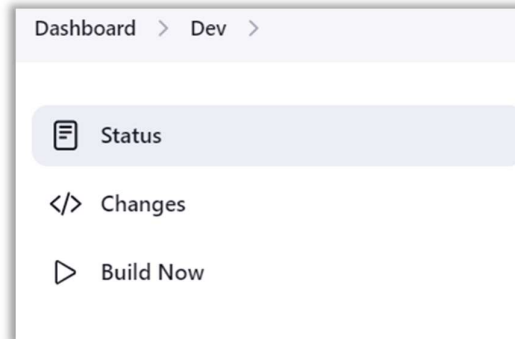
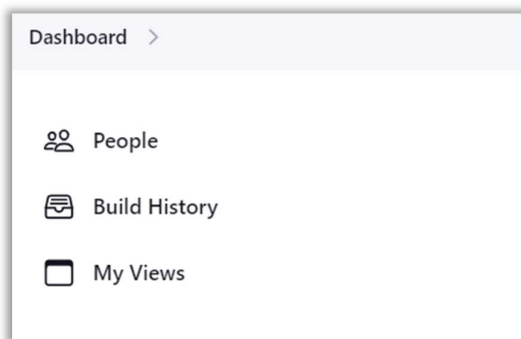
Now we have to set the permission to the role as mentioned below. Initially add the roles like developer, tester and devops then set the permission on it and save it.



Now we should assign the role to the user as mentioned in the below snap. Then save it.



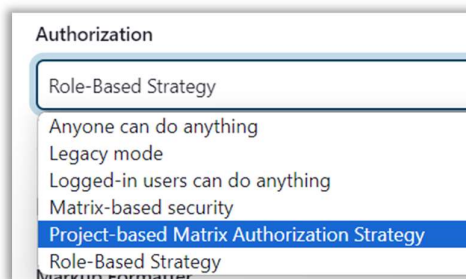
After set the permission to the roles and attached it to the user you can login as a tester, the tester dashboard will look like the below snap. Because we set the read-only permission to the tester and developer. Once you opened the any job you can see the Build Now option as a tester. But you can't see the Build Now option in the developer user. If we want to give the more permission you can edit the role permission.



Set permission to specific jobs.

We can set the permission to the specific jobs as well by following below septs.

Go to the **Manage Jenkins->security**. Now change the **Authorization** as **Project-based Matrix Authorization Strategy** and save it.



Now set the **administer** permission to the **admin** and set the **read** permission to the **test** and **dev** user.

Authorization

Project-based Matrix Authorization Strategy

User/group	Overall	Credentials			Agent			Job				Run		View		SCM								
	Administer	Read	Create	Delete	ManageDomains	Update	View	Build	Cancel	Configure	Create	Delete	Discover	Move	Read	Workspace	Delete	Replay	Update	Configure	Create	Delete	Read	Tag
Anonymous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Authenticated Users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yogi	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yogi_test	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yogi_dev	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Add user... Add group... ?

Now go to the job which one you have to set the permission. Now add the users and set the required permissions here. Then save it. Like this we can set the permission to the specific jobs as well. Now the users have been restricted by the applied permission to the specific jobs.

☒ Enable project-based security

Inheritance Strategy

Inherit permissions from parent ACL

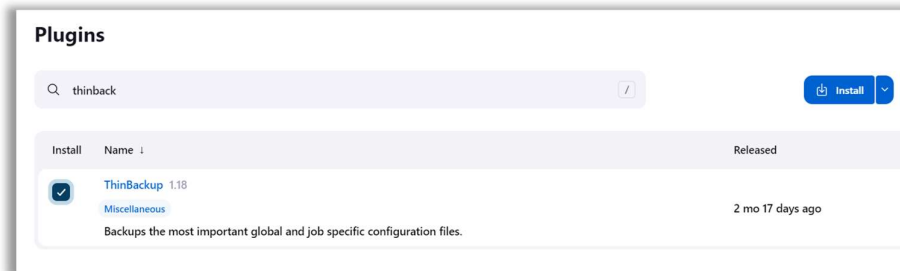
This item will inherit its parent item's permissions (in addition to any permissions granted here). If this item is at the top of the hierarchy, it will inherit the [global security settings](#).

User/group	Credentials			Job				Run		SCM							
	Create	Delete	ManageDomains	Update	View	Build	Cancel	Configure	Delete	Discover	Move	Read	Workspace	Delete	Replay	Update	Tag
Anonymous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Authenticated Users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yogi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
yogi_test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yogi_dev	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Add user... Add group... ?

Backup files

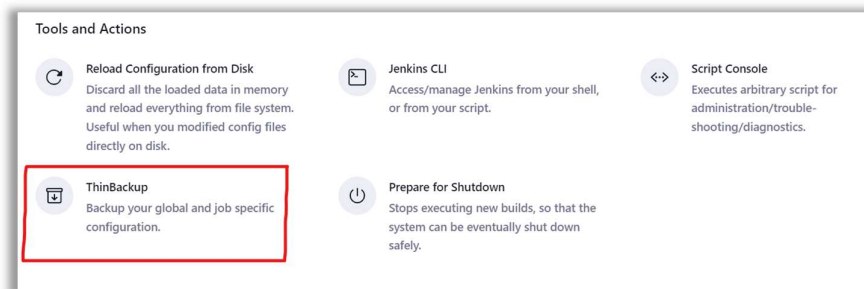
If we mistakenly delete the file, we can restore it from backup files. To backup the files we need to install a plugin which is called **Thinbackup**. go to the **Manage Jenkins->plugins->Available plugins->search “Thinbackup”** and install it.



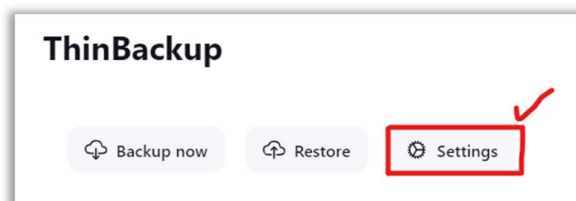
After install it we need to create the path in `/` directory where ever it is as you wish for example `/opt/mybackup/`. The mybackup folder doesn't exist we need to create it by executing the command `mkdir mybackup`. Then we need to change the owner permission. Because the folder's default owner is root. But the Jenkins files owner is Jenkins. So we can't share the files from one user to another user. So we need to change the folder permission as Jenkins.

Go to the `/opt/` path then execute the command `chown Jenkins:Jenkins mybackup/` and need to give the full permissions by execute the command `chmod 777 mybackup/`

Now open the Jenkins and go to the manage Jenkins we can see the thinbackup in the last option under the **Tools and Actions**.



Click on it and need to change the setting by click on settings.

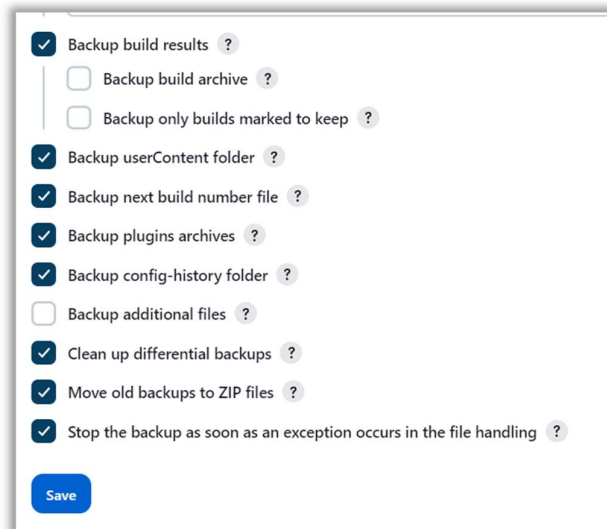


Enter the path which folder you had created for backup. If you want to backup every hour/minute, you can use the cron syntax(* * * * *).



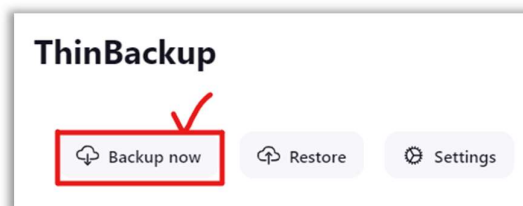
The image shows the 'ThinBackup Configuration' window. It has a title bar 'ThinBackup Configuration' and a subtitle 'Thin Backup settings'. Below the subtitle, there are several input fields with labels and help icons (question marks):
1. 'Backup directory' with a text input field containing '/opt/mybackup/'.
2. 'Backup schedule for full backups' with a text input field.
3. 'Backup schedule for differential backups' with a text input field.
4. 'Max number of backup sets' with a text input field containing '-1'.
5. 'Files excluded from backup (regular expression)' with a text input field.

Now select the below option for backup files. **Move old backups to ZIP files** - This option is used to compress the file size. Then click on save.



The image shows the 'ThinBackup' settings window. It has a title bar 'ThinBackup' and a subtitle 'Thin Backup settings'. Below the subtitle, there are several checkboxes with labels and help icons (question marks):
1. ☒ 'Backup build results'
2. ☐ 'Backup build archive'
3. ☐ 'Backup only builds marked to keep'
4. ☒ 'Backup userContent folder'
5. ☒ 'Backup next build number file'
6. ☒ 'Backup plugins archives'
7. ☒ 'Backup config-history folder'
8. ☐ 'Backup additional files'
9. ☒ 'Clean up differential backups'
10. ☒ 'Move old backups to ZIP files'
11. ☒ 'Stop the backup as soon as an exception occurs in the file handling'
At the bottom, there is a blue 'Save' button.

Now click on backup, you can see the **Backup now** in mybackup folder. If you mistakenly delete any file you can restore it from here.



The image shows the 'ThinBackup' main window. It has a title bar 'ThinBackup'. Below the title bar, there are three buttons: 'Backup now', 'Restore', and 'Settings'. The 'Backup now' button is highlighted with a red box and a red checkmark above it.