Lab 8. Managing Jenkins Security with RBAC

Objectives:

- Enable Jenkins Security
- Exploring Authentication methods
- Install Role Strategy Plugin and Enable RBAC
- Working with RBAC

Pre-Requisite

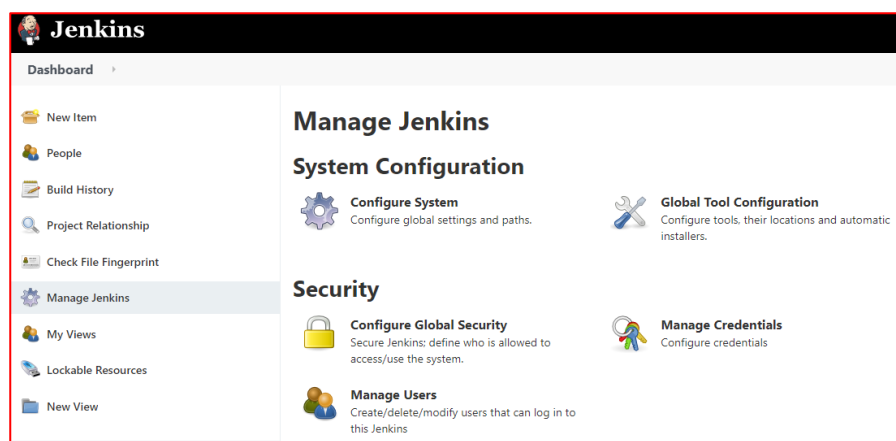- OL 7 with Jenkins installed.
- Access to Jenkins as admin user.

Sequence 1. Enabling and Exploring Jenkins Security

1. Login to your Jenkins dashboard by visiting http://10.10.0.100:8080/

2. Under Manage Jenkins, Click on Configure Global Security.

3. It will open Global Security Configuration page. Explore Authentication and Authorization Options. Do not change any setting now.

Sequence 2. Creating Users in Jenkins

1. Under Manage Jenkins, Click Manage Users.

2. Click Create User from the left side bar.

3. In the screen that open, enter User details like password, name, email etc.

Create User

Username:	sangwan
Password:	••••••••
Confirm password:	•••••••
Full name:	Ram Niwas Sangwan
E-mail address:	ramnsangwan@gmail.com

Create User

4. Click on create user. User will be created and appear in the list

Users

These users can log into Jenkins. This is a sub set of this list, which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

	User ID	Name	
👥	admin	admin	⚙
👥	sangwan	sangwan	⚙ 🚫

Sequence 3. Install Role Strategy Plugin and Enable RBAC

1. Go to Manage Jenkins
2. Click on the Manage Plugins option.
3. In available section, screen Search for "role" as given in the following screen shot.

4. Select Role-based Authorization Strategy plugin.
5. Click on "Install without restart"
6. Once the plugin is installed, a "success" status will be displayed
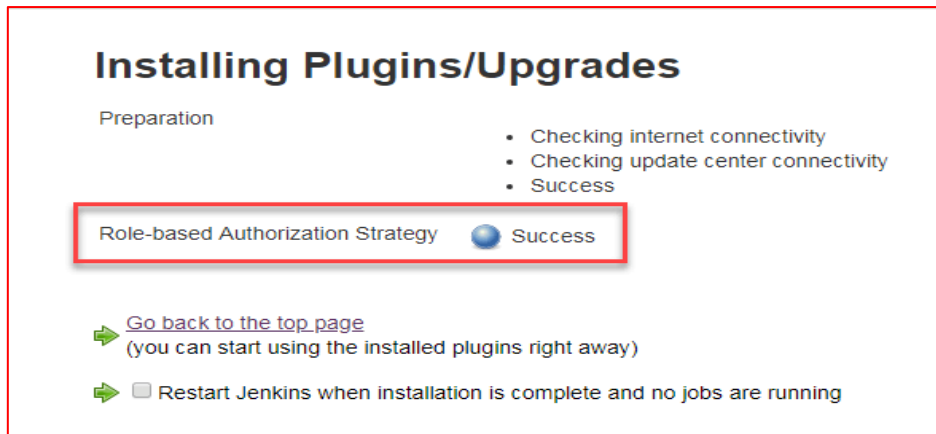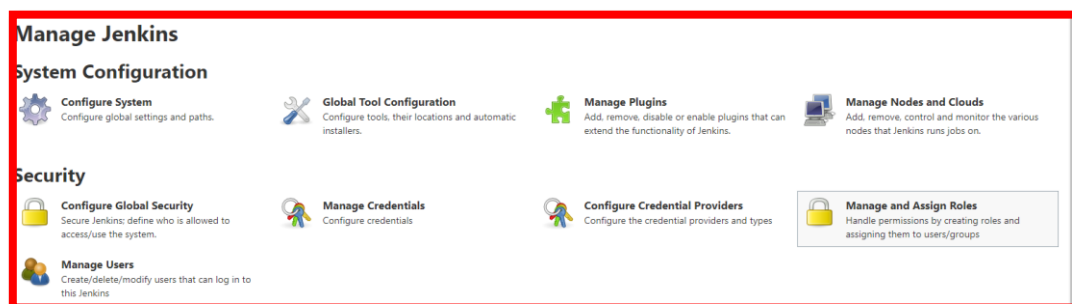
7. Click on Go back to the top page to return
8. Select Role Based Strategy for Authorization. For this, Go to **Manage Jenkins -> Configure Global Security -> Under Authorization**, select Role Based Strategy.
9. Click on Save
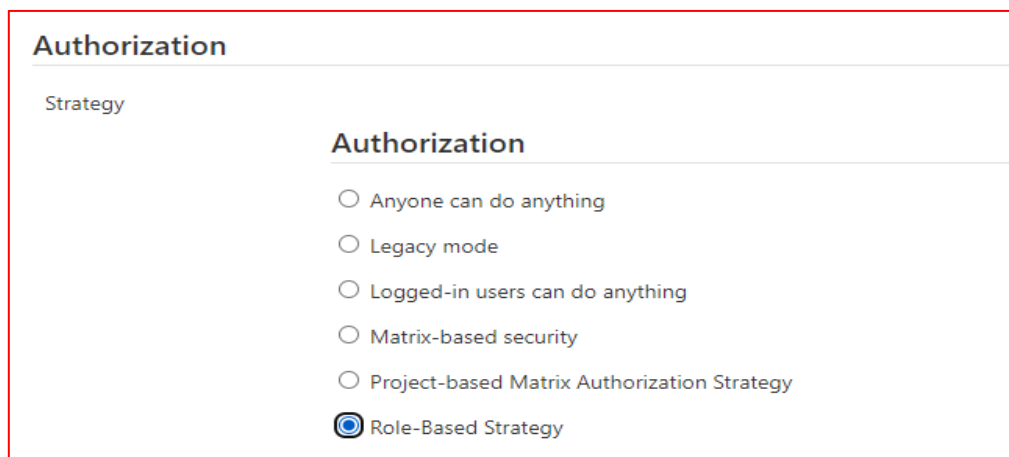
Sequence 4. Assign Role to a User

1. To assign this role to a user, go to Manage Jenkins, select Manage and Assign Roles

The **Manage and Assign Roles** option will only be visible if you've installed the role strategy plugin.

2. Click on Manage Roles to add new roles based on your organization

3. To create a new role called "developer", type "developer" under "role" and click on "Add" to create a new role.
4. Now, select the permissions you want to assign to the "Developer" role and click Save button given at the bottom of the page.
5. Assign this role to user created. Go to Manage Jenkins and select Manage and Assign Roles
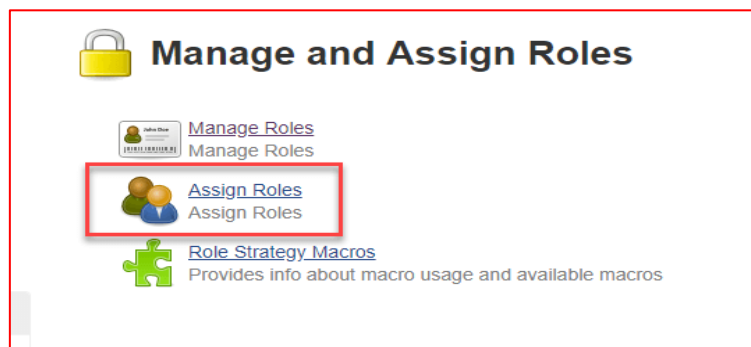
6. We shall add the new role "developer" to user "sangwan".

7. Select the developer role checkbox for the user listed. If the user name does not appear in the list, type the user name in the box and click on add button. But remember, even if the user does not exist, it will show here. That means it is not actually creating user. But just setting the role. It appears, it is not verifying the existence of the user.
8. Click Save.
9. Congratulations. You have successfully completed the Lab.