

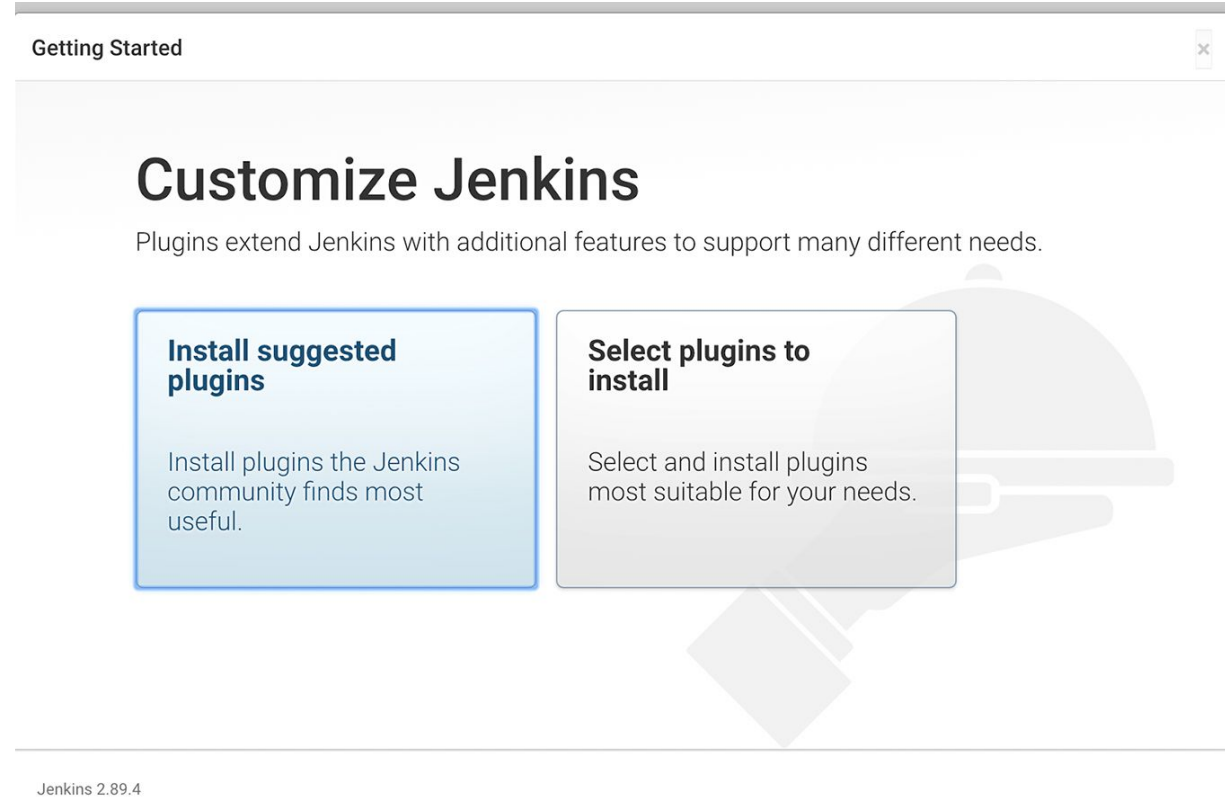
Installing and Setting up Jenkins

Installing Jenkins

- Refer
 - <https://github.com/atingupta2005/Jenkins-5-Days-Training-Material/blob/master/Hands-On/Participants/1-Installing-Jenkins.md>

Setting up Jenkins

- Visit:
 - http://your_ip_or_domain:8080
- Take password:
 - `sudo cat /var/lib/jenkins/secrets/initialAdminPassword`
- Click on the Install suggested plugins box
- Once the plugins are installed, you will be prompted to set up the first admin user
- Fill out all required information and click Save and Continue



Setting up Jenkins

← → ↻ localhost:8080

Apps ★ Bookmarks Back-End Stuff API Design n Dev Project Utils py resources Django resources UI Inspirations Resources Object oriented TDD » Other Bookmarks

Getting Started

Getting Started

<input checked="" type="checkbox"/> Folders Plugin	<input type="checkbox"/> OWASP Markup Formatter Plugin	<input type="checkbox"/> Build Timeout	<input type="checkbox"/> Credentials Binding Plugin	** Command Agent Launcher Folders ** bouncycastle API
<input type="checkbox"/> Timestamper	<input type="checkbox"/> Workspace Cleanup	<input type="checkbox"/> Ant	<input type="checkbox"/> Gradle	
<input type="checkbox"/> Pipeline	<input type="checkbox"/> GitHub Branch Source Plugin	<input type="checkbox"/> Pipeline: GitHub Groovy Libraries	<input type="checkbox"/> Pipeline: Stage View	
<input type="checkbox"/> Git plugin	<input type="checkbox"/> Subversion	<input type="checkbox"/> SSH Slaves	<input checked="" type="checkbox"/> Matrix Authorization Strategy Plugin	
<input type="checkbox"/> PAM Authentication	<input type="checkbox"/> LDAP	<input type="checkbox"/> Email Extension	<input type="checkbox"/> Mailer Plugin	
				** - required dependency

Jenkins 2.89.4

Setting up Jenkins

Getting Started

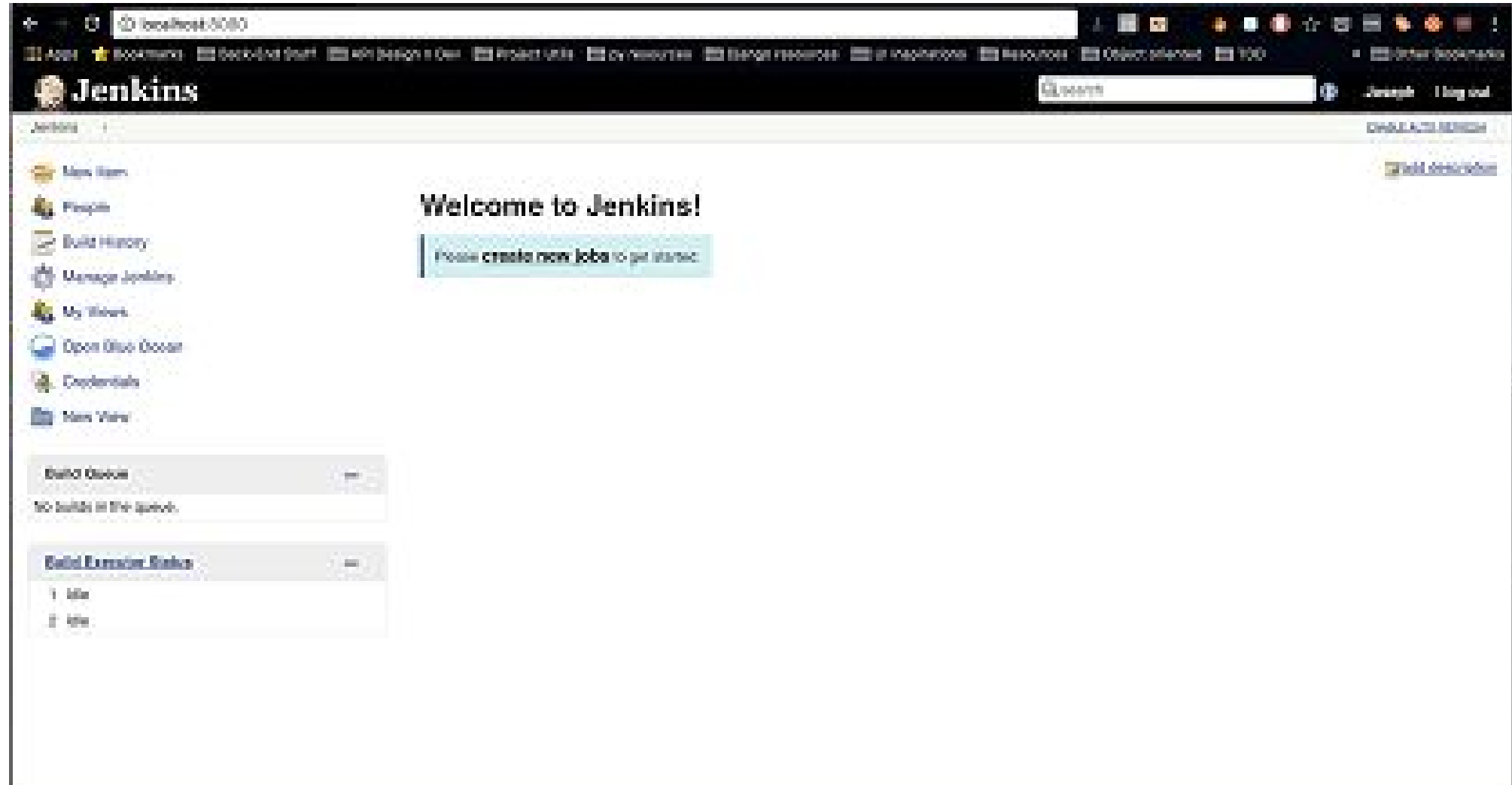
Jenkins is ready!

Your Jenkins setup is complete.

[Start using Jenkins](#)

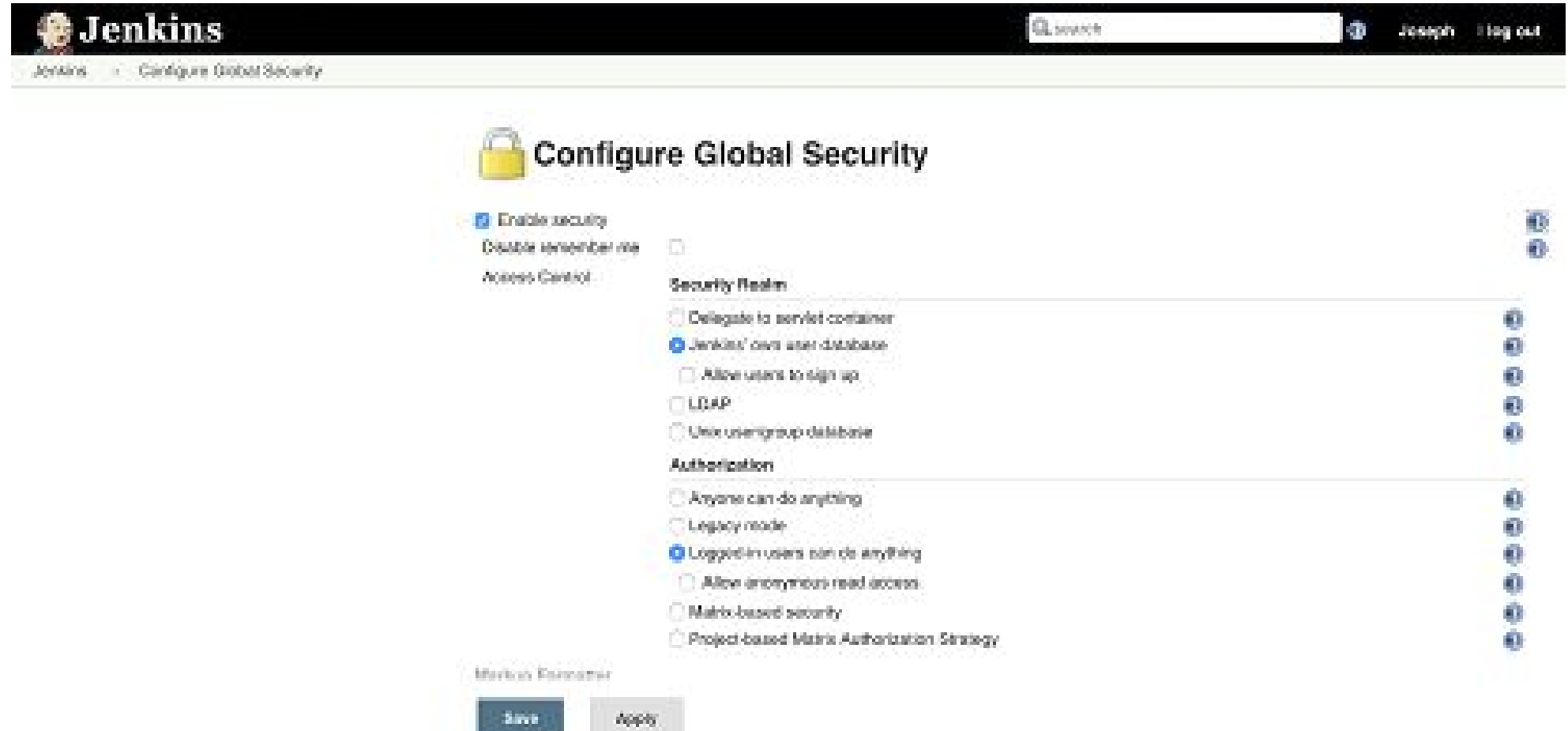
The Jenkins Dashboard

- Central point of all operations in our pipelines and projects.



User Management

- Describes the ability of administrators to control access to resources
- Open Manage Jenkins and then select the **Configure Global Security** settings as follows





The screenshot shows the Jenkins web interface. At the top, there's a header with the Jenkins logo, a search bar, and the user 'Joseph' with a 'log out' link. Below the header, a breadcrumb trail shows 'Jenkins' > 'Configure Global Security'. The main content area is titled 'Configure Global Security' with a lock icon. It contains several sections: 'Enable security' (checked), 'Disable remember me' (unchecked), 'Access Control' (with a sub-section 'Security Realm' containing options like 'Delegate to servlet container', 'Jenkins' own user database' (selected), 'Allow users to sign up', 'LDAP', and 'Use user/group database'), 'Authorization' (with options like 'Anyone can do anything', 'Legacy mode', 'Logged-in users can do anything' (selected), 'Allow anonymous read access', 'Matrix-based security', and 'Project-based Matrix Authorization Strategy'), and 'Markus Formaler' (with 'Save' and 'Apply' buttons). On the right side of the form, there are several blue circular icons for help and documentation.

User Management and Security

Authorization

- ☐ Anyone can do anything
- ☐ Legacy mode
- ☐ Logged-in users can do anything
- ☒ Matrix-based security

User/group	Overall		Credentials					Agent					Job									
	Administer	Read	Create	Delete	Manage	Domains	Update	View	Build	Configure	Connect	Create	Delete	Disconnect	Build	Cancel	Configure	Create	Delete	Discover	Move	Reac
 Anonymous 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"/>
 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"/>

User/group to add:



Add

- ☐ Project-based Matrix Authorization Strategy

- Matrix-based security
 - Allows Admin to grant permissions in groups

User Management and Security

- Click on Add, and user first and last names should appear on the list.
- Select all checkboxes for the administrator, and then select Apply and save the changes

 Anonymous 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"/>
 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"/>
 Joseph muli	<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"/>

User/group to add:

Note: Need to first create a user – Manage Jenkins -> Manage Users

Assignment: User Management and Security






- Scenario: You have been asked to create two user accounts:
 - Ops engineer and a developer account
- Both users should have different access levels from the administrator account
- The Ops engineer will only not be able to do the following
 - Administer
 - Create credentials
 - View credentials
 - Delete credentials
 - Update credentials
- The developer will only be able to have overall Read permissions.

Steps for Completion

- Select the Manage Jenkins option from the configuration panel
- Select the Manage Users option
- Select the Create User option on the left-hand side navigation bar
- Go to the Configure Global Security option
- Under Authorization, select Matrix-based security
- Add the new users.
- Update the users' permissions as shown in the following screenshot:

Steps for Completion

☒ Matrix-based security

User/group	Overall		Credentials								Agent					
	Administer	Read	Create	Delete	Manage	Domains	Update	View	Build	Configure	Connect	Create	Delete	Disconnect		
 Anonymous 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"/>		
 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"/>		
 Joseph muli	<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"/>		
 Ops Engineer	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
 Dev One	<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"/>		

Thanks