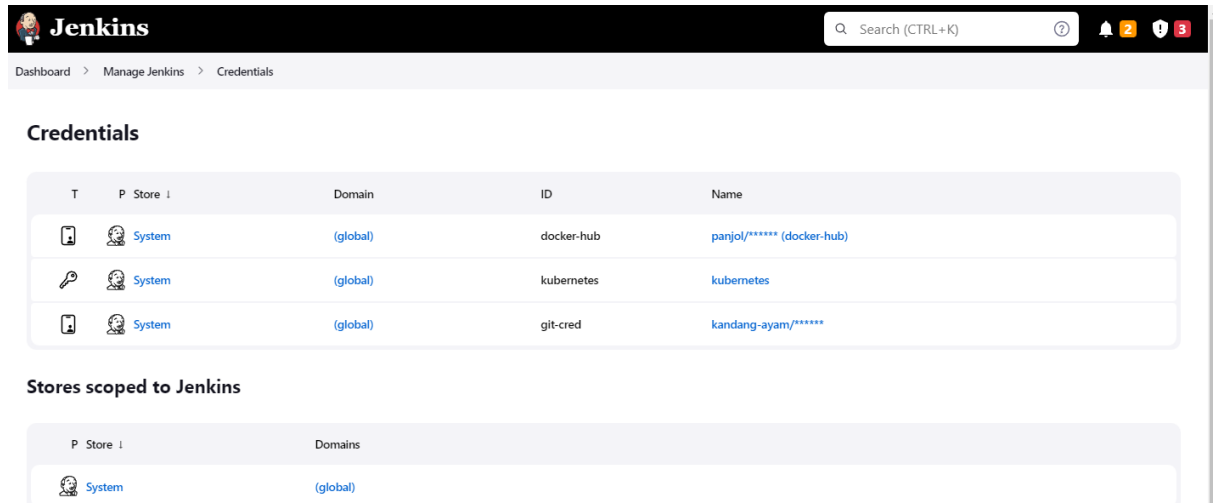


Sebelum melakukan deployment, Jenkins harus memiliki beberapa credential, yang digunakan untuk mengakses gitlab, dockerhub, dan kubernetes cluster



The screenshot shows the Jenkins interface with the following content:

- Header: Jenkins logo, search bar (Search (CTRL+K)), and notification icons.
- Breadcrumbs: Dashboard > Manage Jenkins > Credentials
- Section: **Credentials**
- Table of Credentials:

T	P	Store	Domain	ID	Name
		System	(global)	docker-hub	panjol/***** (docker-hub)
		System	(global)	kubernetes	kubernetes
		System	(global)	git-cred	kandang-ayam/*****

- Section: **Stores scoped to Jenkins**
- Table of Stores:

P	Store	Domains
	System	(global)

## Jenkins pipeline

```
pipeline {
  environment {
    DOCKER_IMAGE_NAME = "node-app"
    dockerImage = ""
    DOCKER_TAG = "$BUILD_NUMBER"
    IMAGE_URL_WITH_TAG =
"panjol/${DOCKER_IMAGE_NAME}:${DOCKER_TAG}"
    DOCKERHUB_CREDENTIALS= credentials('docker-hub')
  }

  agent any

  stages {

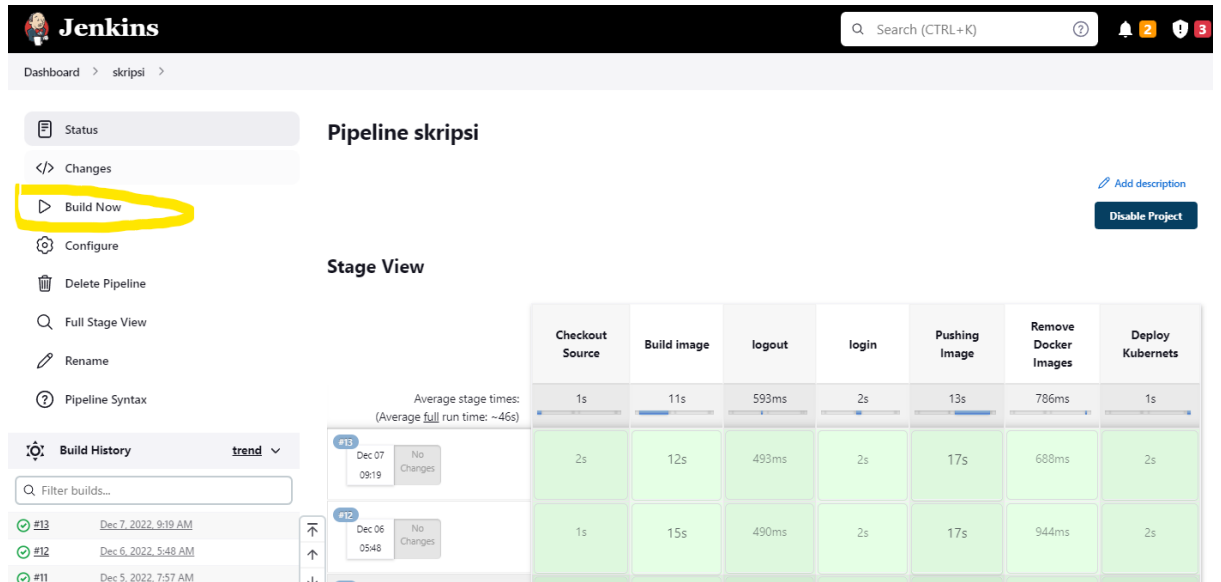
    stage('Checkout Source') {
      steps {
        git credentialsId: 'git-cred', url:
'https://gitlab.com/kandang-ayam/node-app.git'
      }
    }
  }
}
```

```

stage('Build image') {
  steps{
    script {
      sh 'docker build -t
${DOCKER_IMAGE_NAME}:${DOCKER_TAG} .'
    }
  }
}
stage('logout'){
  steps{
    script{
      sh 'docker logout'
    }
  }
}
stage('login'){
  steps{
    sh 'echo $DOCKERHUB_CREDENTIALS_PSW | docker
login -u $DOCKERHUB_CREDENTIALS_USR --password-stdin'
  }
}
stage('Pushing Image') {
  steps{
    script {
      sh 'docker tag
${DOCKER_IMAGE_NAME}:${DOCKER_TAG} ${IMAGE_URL_WITH_TAG}'
      sh 'docker push ${IMAGE_URL_WITH_TAG} '
    }
  }
}
stage('Remove Docker Images'){
  steps{
    sh "docker rmi
${DOCKER_IMAGE_NAME}:${DOCKER_TAG}"
    sh 'docker rmi -f ${IMAGE_URL_WITH_TAG}'
  }
}
stage ('Deploy Kubernetes'){
  steps{
    kubernetesDeploy (configs:
'service.yml', kubeconfigId: 'kubernetes')
  }
}
}
}

```

Melakukan build trigger pada job Jenkins yang berbasis pipeline



The screenshot shows the Jenkins web interface for a pipeline named 'skripsi'. The 'Build Now' button is highlighted with a yellow oval. The 'Stage View' table displays the following data:

	Checkout Source	Build image	logout	login	Pushing Image	Remove Docker Images	Deploy Kubernetes
Average stage times: (Average full run time: ~46s)	1s	11s	593ms	2s	13s	786ms	1s
#13 Dec 07 09:19 No Changes	2s	12s	493ms	2s	17s	688ms	2s
#12 Dec 06 05:48 No Changes	1s	15s	490ms	2s	17s	944ms	2s

Menjalankan aplikasi web secara native

```
$ npm install  
$ node server.js
```