Complete Jenkins-Slack Integration via Webhook

PART 1: Create Slack App and Webhook URL

- **Step 1: Create Slack App**

1. Go to 👉 https://api.slack.com/apps
2. Click **"Create New App"**
3. Choose **"From scratch"**
4. Enter:
    - **App Name**: jenkins
    - **Workspace**: Aditya
5. Click **Create App**

- **Step 2: Enable Webhooks**

1. In left sidebar → Click **"Incoming Webhooks"**
2. Toggle **"Activate Incoming Webhooks"** ✅

- **Step 3: Add Webhook to a Channel**

1. Scroll to the bottom → Click **"Add New Webhook to Workspace"**
2. Select Channel: #general (or any public channel)
3. Click **Allow**
4. Copy the generated **Webhook URL**
   Example:

https://hooks.slack.com/services/T0XXXX/B0YYYY/ZZZZZ

---

xoxb-9243249570999-9253925254595-WomhXuMlqC2bbCLTpnIUeziu

https://hooks.slack.com/services/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

PART 2: OAuth Scopes Required (⚠️ MANDATORY)

If you're **NOT using incoming webhook** and want bot integration via token in the future, **you must add these scopes**:

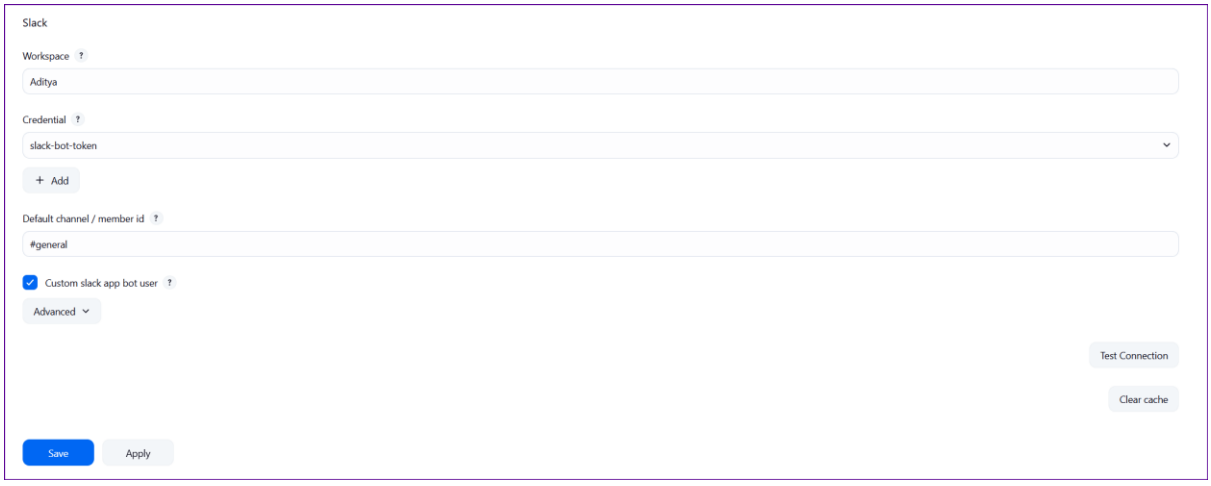
OAuth Scope	Description
chat:write	Send messages as the bot
chat:write.public	Send messages to public channels not joined
channels:read	Read public channels
groups:read	Read private channels
users:read	Read user info (optional for mentions)

Not all are needed for webhook-only method, but **critical if using token-based plugin** (plugin failed in your case, so webhook is best).

To add:

- Go to **OAuth & Permissions** → Scroll to **Scopes**
- Click **Add an OAuth Scope** → Add all above
- Then go back to top and **click "Reinstall to Workspace"**

PART 3: Add Webhook into Jenkinsfile



🔹 **Step 4: Jenkinsfile (Working Example)**

```
pipeline {
  agent any

  environment {
    PROJECT_NAME = '🧰 My-App'
    ENVIRONMENT = '🚀 Production'
  }

  stages {
    stage('Compile') {
      steps {
        echo "📐 Compiling..."
      }
    }
    stage('Test') {
      steps {
        echo "🧪 Running tests..."
      }
    }

stage('Build') {
      steps {
        echo "🧪 Building..."
      }
    }

stage('Security') {
      steps {
        echo "🧪 Security..."
      }
    }

stage('Deploy') {
      steps {
        echo "🧪 Deploy..."
      }
    }

  }

  post {
    success {
      withCredentials([string(credentialsId: 'slack-webhook', variable: 'SLACK_URL')]) {
        script {
          def message = """{
            "text": "* ✅ ${PROJECT_NAME} Build Successful!*",
            "attachments": [
              {
                "color": "#36a64f",
```

```
                    "fields": [
                      { "title": "Job", "value": "${env.JOB_NAME}", "short": true },
                      { "title": "Build", "value": "#${env.BUILD_NUMBER}", "short": true },
                      { "title": "Environment", "value": "${ENVIRONMENT}", "short": true }
                    ],
                    "footer": "Jenkins CI",
                    "footer_icon": "https://www.jenkins.io/images/logos/jenkins/jenkins.png",
                    "ts": ${System.currentTimeMillis() / 1000},
                    "actions": [
                      {
                        "type": "button",
                        "text": "View Build",
                        "url": "${env.BUILD_URL}",
                        "style": "primary"
                      }
                    ]
                  }
                ]
              }"""
              sh """curl -X POST -H 'Content-type: application/json' --data '${message}' $SLACK_URL"""
            }
          }
        }

        failure {
          withCredentials([string(credentialsId: 'slack-webhook', variable: 'SLACK_URL')]) {
            script {
              def message = """{
                "text": "<!here> * ❌ ${PROJECT_NAME} Build Failed!*",
                "attachments": [
                  {
                    "color": "#FF0000",
                    "fields": [
                      { "title": "Job", "value": "${env.JOB_NAME}", "short": true },
                      { "title": "Build", "value": "#${env.BUILD_NUMBER}", "short": true },
                      { "title": "Environment", "value": "${ENVIRONMENT}", "short": true }
                    ],
                    "footer": "Jenkins CI",
                    "footer_icon": "https://www.jenkins.io/images/logos/jenkins/jenkins.png",
                    "ts": ${System.currentTimeMillis() / 1000},
                    "actions": [
                      {
                        "type": "button",
                        "text": "View Build Logs",
                        "url": "${env.BUILD_URL}",
                        "style": "danger"
                      }
                    ]
                  }
                ]
              }"""
```

```
                sh """curl -X POST -H 'Content-type: application/json' --data '${message}' $SLACK_URL"""
            }
        }
    }

    always {
        echo " 🎯 Post-build notification sent"
    }
  }
}
```

🧪 **PART 4: Run and Verify**

🔹 **Step 5: Trigger Build**

- Trigger build in Jenkins
- Slack channel will show:
  - ✅ Build Passed
  - ❌ Build Failed