1. Slack Notification Plugin

• **Description**: Integrates Jenkins with Slack to send build notifications.

• Features:

- Customizable messages for build success, failure, or other events.
- Supports rich formatting (e.g., links, emojis).
- Configurable notifications for specific channels or users.
- Use Case: Keep teams updated on build statuses in real-time without leaving Slack.

2. Git Plugin

• **Description**: Integrates Jenkins with Git repositories (GitHub, GitLab, Bitbucket, etc.).

• Features:

- Pulls code from Git for builds.
- Supports branch and tag-based builds.
- Triggers builds on Git events (e.g., push, pull request).
- Use Case: Essential for any project using Git for version control.

3. Jira Plugin for Jenkins

• **Description**: Connects Jenkins with Jira for issue tracking and project management.

- o Updates Jira issues with build statuses.
- o Creates Jira issues from failed builds.
- Links Jenkins builds to Jira issues.
- Use Case: Streamline collaboration between development and project management teams.

4. Kubernetes Plugin

• **Description**: Dynamically provisions Jenkins agents on a Kubernetes cluster.

• Features:

- Scales build agents based on workload.
- Runs builds in isolated containers.
- Integrates with cloud-native environments.
- Use Case: Ideal for organizations using Kubernetes for container orchestration.

5. SonarQube Plugin for Jenkins

• **Description**: Integrates Jenkins with SonarQube for static code analysis.

• Features:

- Sends code quality metrics to SonarQube.
- Fails builds based on quality gate thresholds.
- o Displays SonarQube reports in Jenkins.
- Use Case: Ensure code quality and maintainability in your CI/CD pipeline.

6. Docker Plugin

• **Description**: Enables Jenkins to build, test, and deploy Docker containers.

- Builds Docker images from Dockerfiles.
- o Pushes images to Docker registries.
- Runs containers as part of the build process.
- **Use Case**: Essential for containerized application development and deployment.

7. Blue Ocean Plugin

• **Description**: Provides a modern, user-friendly interface for Jenkins pipelines.

• Features:

- Visualizes pipeline stages and statuses.
- Simplifies pipeline creation and debugging.
- Integrates with Git and GitHub for pull request builds.
- Use Case: Improve the developer experience with a sleek and intuitive UI.

8. Stage View Plugin

• **Description**: Displays pipeline stages in a graphical view.

• Features:

- Shows real-time progress of pipeline stages.
- Highlights failed stages for quick debugging.
- o Integrates with Jenkins Pipeline.
- Use Case: Monitor pipeline execution and identify bottlenecks easily.

9. Publish Over SSH Plugin

• **Description**: Transfers files or executes commands on remote servers via SSH.

- Uploads build artifacts to remote servers.
- Runs shell commands on remote machines.
- Supports multiple SSH servers.
- Use Case: Automate deployments to remote servers securely.

10. Publish Over FTP Plugin

• **Description**: Uploads files to remote servers using FTP/SFTP.

• Features:

- Transfers build artifacts to FTP servers.
- Supports secure FTP (SFTP).
- Configurable file paths and permissions.
- Use Case: Deploy files to legacy systems or shared hosting environments.

11. Ansible Plugin for Jenkins

• **Description**: Integrates Jenkins with Ansible for configuration management, application deployment, and orchestration.

- Executes Ansible playbooks directly from Jenkins jobs.
- Supports Ansible vault for secure credential management.
- Provides real-time output of Ansible playbook execution in Jenkins console.
- Allows parameterized builds to pass variables to Ansible playbooks.
- Use Case: Automate infrastructure provisioning, configuration management, and application deployment using Ansible playbooks within Jenkins pipelines.