

MyST Plugin

Plugin Information

View `myst-plugin` [on the plugin site](#) for more information.

Plugin Features

- Provides Integration with MyST Agents
- Provides Integration with MyST Web Console
- Enables seamless Agent installation and upgrades in your Jenkins environment
- Provides Actions and Environment discovery at the Job Level

About MyST

Rubicon Red MyST provides an automated process for the installation, configuration, patching and deployment of Oracle Fusion Middleware and Applications.

The automated installation is driven by simple models (or metadata), which defines the environment specific properties, which are captured during the initial platform design.

MyST provides a number of key capabilities, including:

- Ability to define Fusion Middleware environment templates, from which we can provision new environments on demand.
- Easily automates the build and deployment of FMW solutions, and configurations into development, test, and production environments.

Oracle products supported by MyST, include:

- Oracle Weblogic Server
- Oracle SOA Suite
- Oracle Service Bus (OSB)
- Oracle Business Process Manager (BPM)
- Oracle Business Activity Monitoring (BAM)
- Oracle Identity and Access Management
- Oracle Unified Directory (OUD)
- Oracle Policy Automation (OPA)
- Oracle OAM Webgate
- Oracle Enterprise Manager (OEM)
- Oracle HTTP Server (OHS)
- Oracle AIA Foundation Pack
- Oracle AIA Process Integration Pack
- Oracle Data Integrator (ODI)
- Oracle WebCenter Portal and Content

For more information, visit the website: [Rubicon Red - MyST](#)

Plugin Configuration



If you are using Jenkins 2.3+, you must specify the following parameter in the Jenkins startup: `-Dhudson.model.ParametersAction.safeParameters=MYST_HOME`

This is related to: <https://wiki.jenkins-ci.org/display/SECURITY/Jenkins+Security+Advisory+2016-05-11>

System Configuration

a) Configuring the MyST Agent

- Copy the MyST Agent ZIP file under the following directory in Jenkins: `<JENKINS_HOME>/userContent/myst` (make sure the file has the correct file permission)
- In the Jenkins web console, select: "Jenkins" > "Manage Jenkins" > "Configuration"

List of Ant installations on this system

Maven

Maven installations

List of Maven installations on this system

MyST Agent

MyST Agent installations

List of MyST Agent installations on this system

Maven Project Configuration

Global MAVEN_OPTS

- Click on the "Add MyST Agent" button
- Configure the MyST agent:
 - Name this MyST agent installation as the MyST version number. In this example, the version is 2.4.4.0.
 - Select the "Install automatically" checkbox and Select "Add Installer", as follows. Leave the MYST_HOME field empty.
 - Set the Download URL for binary archive, which will point to the MyST ZIP file copied previously. You must configure the following URL: `http://<JENKINS_MASTER_HOST:PORT>/userContent/myst/<MYST_AGENT_ZIP_FILE>`. e.g: <http://ci-server:8084/userContent/myst/myst-impl-2.4.4.0.zip>

MyST Agent

MyST Agent installations

MyST Agent

Name

Install automatically

Extract *.zip/*.tar.gz

Label

Download URL for binary archive

Subdirectory of extracted archive

- Click on the "Save" button

b) Configuring MyST

- In the Jenkins web console, select: "Jenkins" > "Manage Jenkins" > "Configuration"
- Enable the "MyST Console Integration" checkbox, in order to integrate Jenkins jobs with the MyST Web console

MyST

MyST Console Integration

Check to enable the MyST Console Integration

MyST Console URL

MyST Console URL

- Enter the "MyST Console URL". `http://<HOST>:8082/myst-web`
- Click on the "Save" button

Job Configuration

a) Creating a new MyST Job

- On the Jenkins web console, click on the "New Item" link on the left hand side
- For the purpose of this documentation, we are creating a Job called "CI-Provision", which will be responsible for provisioning (install, create a domain and configure) an Oracle Fusion Middleware SOA environment. Select the option "Build a free-style software project", and click on the "OK" button.

Jenkins > All >

Item name CI-Provision

- Build a free-style software project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with
- Build a maven2/3 project**
Build a maven 2/3 project. Jenkins takes advantage of your POM files and drastically reduces
- Build multi-configuration project**
Suitable for projects that need a large number of different configurations, such as testing on
- Monitor an external job**
This type of job allows you to record the execution of a process run outside Jenkins, even of [documentation for more details](#).

- A new screen will be opened with the job configuration details
- It's recommended to run this job on the same machine where the Weblogic Admin Server will be running. To do this, you will have to pre-configure the Jenkins Nodes (slaves), which is not covered by this documentation. In the job configuration, you will have to select the checkbox "Restrict where this job can be run", and type the name of the node label, as follows. In this case, we defined a label called "ci-soa-vm".

Jenkins > CI-Provision > configuration

Project name CI-Provision

Description

[Escaped HTML] [Preview](#)

- Discard Old Builds
- This build is parameterized
- Promote builds when...
- Disable Build (No new builds will be executed until the project is re-enabled.)
- Execute concurrent builds if necessary
- Restrict where this project can be run**

Label Expression ci-soa-vm

Slaves in [label](#): 1

- Select the source control provider and the location where your MyST workspace is located in source control. In the following example, we are checking out the MyST workspace from SVN. Note that you must checkout the MyST workspace, which has an immediate directory child called "conf"

Source Code Management

CVS
 CVS Projectset
 None
 Subversion

Modules
 Repository URL ?
 Local module directory (optional) ?
 Repository depth ?
 Ignore externals ?

[Add more locations...](#)

- Under the "Build" section, select the "Invoke MyST" option, as follows:

Build

[Add build step](#)

- Execute Windows batch command
- Execute shell
- Invoke Ant
- Invoke Maven 3
- Invoke MyST**
- Invoke top-level Maven targets
- StrongAuthSimple for Job
- Trigger/call builds on other projects

- At this point, Jenkins will communicate with the MyST Web Console, and will retrieve the available configurations and available MyST actions. We will select the **provision** action against the environment called "env.ci.soa.platform (CI SOA Environment)", as follows:

Build

Invoke MyST

Action ?

Config

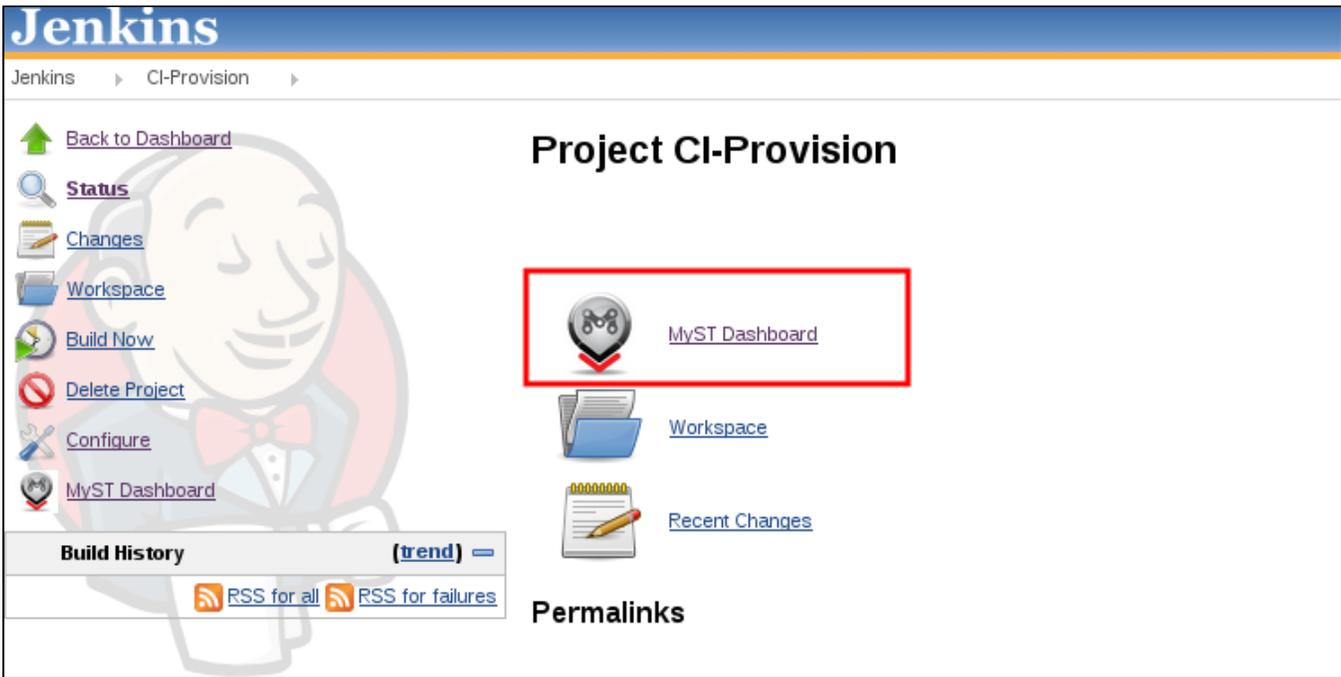
Advanced MyST Options

[Advanced...](#)
[Delete](#)

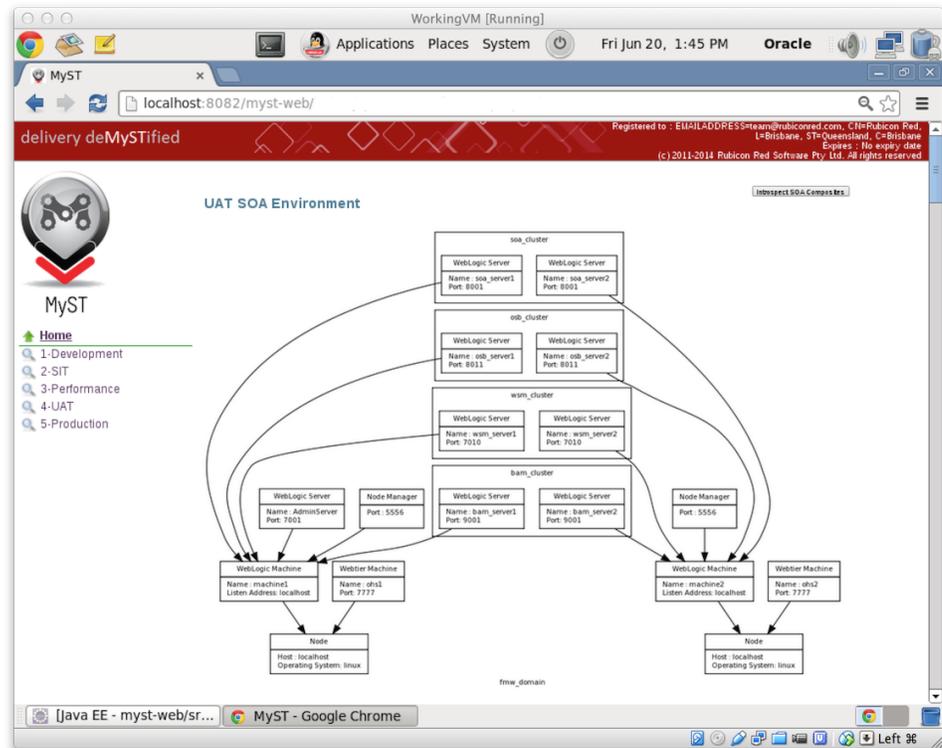
- Click on the "Save" button at the bottom of the page in the Jenkins Web console.

Provisioning an environment

- Select the Jenkins job called "CI-Provision"
- You will notice that the Jenkins job has the MyST logo and a "MyST Dashboard" link, as follows:



- If you click on the MyST Dashboard link, you will be redirected to the MyST Web Console Environment Definition, which has the detailed



environment topology, as follows:

- Going back to Jenkins web console, under the "CI-Provision" Jenkins job, click on the "Build Now" icon, in order to Provision the CI environment.

Requirements

- You have a MyST license
- You have downloaded the MyST installer
- MyST Web Console is installed, and up and running
- Source Control is strongly recommended, which will store the MyST workspace
- Jenkins 1.530+ is installed
- There is a job checking out MyST workspace to the following directory: /u01/app/oracle/admin/myst-workspace
- Jenkins Slaves are configured to connect to the OFMW machines (recommended)

FAQ

This plugin integrates Jenkins with [MyST](#), in order to automate the installation, configuration, patching and deployment of Oracle Fusion Middleware and Applications, such as: Oracle Weblogic Server; Oracle SOA Suite; Oracle Service Bus (OSB); Oracle Business Process Manager (BPM); Oracle Business Activity Monitoring (BAM); Oracle Identity and Access Management; Oracle Unified Directory (OUD); Oracle Policy Automation (OPA); Oracle OAM Webgate; Oracle Enterprise Manager (OEM); Oracle HTTP Server (OHS); Oracle AIA Foundation Pack; Oracle AIA Process Integration Pack; Oracle Data Integrator (ODI); Oracle WebCenter Portal and Content

Note: MyST is a commercial product.