

Ansible Plugin

Plugin Information

View [Ansible on the plugin site](#) for more information.

Older versions of this plugin may not be safe to use. Please review the following warnings before using an older version:

- [Host key verification disabled by default](#)

This plugin allows to execute [Ansible](#) tasks as a job build step.

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Global Configuration

Ansible needs to be on the PATH for the build job in order to be used. This can be done through either Jenkins Global Tool Configuration or including Ansible on the OS User PATH variable.

Global Tool Configuration

Configuring Ansible through the Global Tool Configuration in Jenkins (Jenkins Manage Jenkins Global Tool Configuration) allows for multiple Ansible installations to be present and used by different Jenkins jobs.

1. Click Add Ansible
2. Configure the name and path

Field name	Description
Name	Symbolic name used to identify a specific Ansible installation when multiple installations are configured
Path to ansible executables directory	Directory containing the <i>ansible</i> , <i>ansible-playbook</i> , and <i>ansible-vault</i> binaries

3. Repeat for any additional desired installations

OS User PATH

Ansible can also be added to the PATH user used by the Jenkins executor instead of configured through Global Tool Configuration. This is done through normal OS tools outside of Jenkins and is not covered by this guide.

Adhoc

[Adhoc commands](#) allow for simple operations to be done without writing a full playbook. This allows for a convenient way of doing quick tasks with Ansible.

Examples

Scripted

Due to [JENKINS-43782](#) and [JENKINS-49056](#), adhoc commands cannot be run with a pipeline job.

Declarative

Arguments

See also [jenkins.io](#) documentation.

Freestyle Name	Pipeline Name	Description
Ansible installation		Ansible installation to use for the playbook invocation
Host pattern		The host pattern to manage. See Ansible Patterns for details.
Module		CLI arg: -m
Module arguments or command to execute		CLI arg: -a
Inventory file or host list		See the Inventory section for additional details. CLI arg: -i
Inventory Inline content		See the Inventory section for additional details. CLI arg: -i
Credentials		The Jenkins credential to use for the SSH connection. See the Authentication section for additional details.
Vault Credentials		The Jenkins credential to use as the vault credential. See the Vault Credentials section for additional details. CLI arg: --vault-password-file
sudo		CLI arg: -s
sudo user		CLI arg: -U
Number of parallel processes		CLI arg: -f
Check host SSH key		Toggle checking of the host key. Sets the environment variable <code>ANSIBLE_HOST_KEY_CHECKING</code> , similar to the recommendations for running with Vagrant .

Unbuffered stdout		Toggle buffering of standard out. Sets the environment variable PYTHONUNBUFFERED, similar to the recommendations for running with Vagrant
Colorized stdout		Toggle color codes in console text. See Colorized Output section for example usage. Sets the environment variable ANSIBLE_FORCE_COLOR, similar to the recommendations for running with Vagrant
Extra Variables		CLI arg: -e
Additional parameters		String passed to the Ansible Command Line invocation as-is

Playbook

[Ansible playbook](#) operations can be run with the plugin. The plugin provides several conveniences such as easily using credentials from the Jenkins credential store, unbuffered color output in the log, etc.

Examples

Scripted

Jenkinsfile

```
ansiblePlaybook credentialsId: 'private_key', inventory: 'inventories/a/hosts', playbook: 'my_playbook.yml'
```

Declarative

Jenkinsfile

```
ansiblePlaybook(credentialsId: 'private_key', inventory: 'inventories/a/hosts', playbook: 'my_playbook.yml')
```

Additional scripted and declarative pipeline examples can be found on the plugin's [GitHub readme](#).

Arguments

[jenkins.io documentation](#)

Freestyle Name	Pipeline Name	Description
Ansible installation	installation	Ansible installation to use for the playbook invocation
Playbook path	playbook	Mandatory. The name of the playbook to run.

Inventory file or host list	inventory	See the Inventory section for additional details. CLI arg: -i
Inventory Inline content	inventoryContent	See the Inventory section for additional details. CLI arg: -i
Credentials	credentialsId	The Jenkins credential to use for the SSH connection. See the Authentication section for additional details.
Vault Credentials	vaultCredentialsId	The Jenkins credential to use as the vault credential. See the Vault Credentials section for additional details. CLI arg: --vault-password-file
sudo	sudo	CLI arg: -s
sudo user	sudoUser	CLI arg: -U
Host subset	limit	CLI arg: -l
Tags to run	tags	CLI arg: -t
Tags to skip	skippedTags	CLI arg: --skip-tags
Task to start at	startAtTask	CLI arg: --start-at-task
Number of parallel processes	forks	CLI arg: -f
Check host SSH key	hostKeyChecking	Toggle checking of the host key. Sets the environment variable <code>ANSIBLE_HOST_KEY_CHECKING</code> , similar to the recommendations for running with Vagrant .
Colorized stdout	colorized	Toggle color codes in console text. See Colorized Output section for example usage. Sets the environment variable <code>ANSIBLE_FORCE_COLOR</code> , similar to the recommendations for running with Vagrant
Additional parameters	extras	String passed to the Ansible Command Line invocation as-is
Extra Variables	extraVars	CLI arg: -e

Refer to the [ansible-playbook](#) manual page for details on how each command line argument is interpreted.

Authentication

SSH Keys

[SSH keys](#) are the recommended authentication method for SSH connections. The plugin supports the credential type "SSH Username with private key" configured in the Jenkins credential store through the [SSH credentials plugin](#).

Password

Even if using SSH keys is recommended authentication method, password authentication may sometimes be required. The plugin has supported password based authentication since 0.3.0. When using password based authentication, the [sshpas](#) binary is expected to be on the PATH. The plugin supports the credential type "Username with password" configured in the Jenkins credential store through the [SSH credentials plugin](#).

Vault Credentials

Vault credentials can be setup in the Jenkins credential store as either a "Secret text" or a "Secret file".

Colorized Output

The `AnsiColor` plugin is needed for colored console output. Once installed, colored output can be enabled with the argument `"colorized: true"`.

Jenkinsfile

```
ansiColor('xterm') {
  ansiblePlaybook(
    playbook: 'path/to/playbook.yml',
    inventory: 'path/to/inventory.ini',
    credentialsId: 'sample-ssh-key',
    colorized: true)
}
```

```
Jenkins > jenkins-deploy-ansible > #11
TASK: [geerlinguy.jenkins | Ensure Jenkins is started and runs on startup.] ***
ok: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Wait for Jenkins to start up before proceeding.] ***
ok: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Get the jenkins-cli jarfile from the Jenkins server.] ***
changed: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Create Jenkins updates folder.] *****
ok: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Update Jenkins plugin data.] *****
skipping: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Permissions for default.json updates info.] *****
changed: [jenkins.chelonix.org]
TASK: [geerlinguy.jenkins | Install Jenkins plugins.] *****
changed: [jenkins.chelonix.org] => (item=git)
changed: [jenkins.chelonix.org] => (item=sonar)
changed: [jenkins.chelonix.org] => (item=ssh)
NOTIFIED: [geerlinguy.jenkins | restart jenkins] *****
changed: [jenkins.chelonix.org]
PLAY RECAP *****
jenkins.chelonix.org : ok=19  changed=4  unreachable=0  failed=0
Finished: SUCCESS
```

Extra Parameters

Extra parameters is a string passed to the Ansible Command Line invocation as-is and can be useful for arguments occasionally added to an invocation at runtime, such as tags and host limits.

Inventory

File

A string path to the inventory file to use with the playbook invocation.

Inline

The provided content is used as the content of the inventory file for the playbook invocation.

Using Jenkins Environment Variables

Jenkins environment variables can be accessed from within an Ansible playbook. The Jenkins variables are injected as environment variables making them available through the Ansible `lookup` plugin.

The following Ansible playbook accesses the Jenkins `BUILD_TAG` variable:

playbook.yml

```
---
- hosts: example
  tasks:
    - debug: msg="{{ lookup('env', 'BUILD_TAG') }}"
```

Vault

Most [Ansible Vault](#) operations can be performed with the plugin. Interactive operations such as create, edit, and view are not supported through the plugin. One use case for this enabling developers to encrypt secret values while keeping the vault password a secret.

Examples

Scripted

Encrypts a File

```
ansibleVault action: 'encrypt', input: 'vars/secrets.yml',  
vaultCredentialsId: 'ansible_vault_credentials'
```

Encrypts a String

```
ansibleVault action: 'encrypt_string', content: 'secret_content',  
vaultCredentialsId: 'ansible_vault_credentials'
```

Declarative

Jenkinsfile

```
ansibleVault(action: 'encrypt', input: 'vars/secrets.yml',  
vaultCredentialsId: 'ansible_vault_credentials')
```

Jenkinsfile

```
ansibleVault(action: 'encrypt_string', content: 'secret_content',  
vaultCredentialsId: 'ansible_vault_password')
```

Arguments

See also [jenkins.io](#) documentation.















Freestyle Name	Pipeline Name	Description
Ansible installation	installation	Ansible installation to use for the vault operation
Action	action	Mandatory. The name of the action to use. Interactive operations such as create, edit, and view are not supported.
Vault Credentials	vaultCredentialsId	The Jenkins credential to use as the vault credential. See the Vault Credentials section for additional details. CLI arg: --vault-password-file






New Vault Credentials	newVaultCredentialsId	The Jenkins credential to use as the vault credential. See the Vault Credentials section for additional details. CLI arg: --new-vault-password-file
Content	content	The content to encrypt with the encrypt_string action
Input	input	The file to encrypt with the encrypt action
Output	output	CLI arg: --output

Vault Credentials

Vault credentials can be setup in the Jenkins credential store as either a "Secret text" or a "Secret file".

Open Issues

T	Key	Summary	Assignee	Reporter	Status	Created
	JENKINS-55706	Capture Play Recap as exit codes	Jean-Christophe Siro	Nuno Costa	Open	Jan 21, 2019
	JENKINS-55590	Jenkins Blue Ocean Pipeline Editor for Ansible Plugin not allowing ExtraVars to be entered	Jean-Christophe Siro	kiran v	Open	Jan 15, 2019
	JENKINS-55058	Show all tasks as separate build stage in Blueocean	Jean-Christophe Siro	Fabian Grutschus	Open	Dec 06, 2018
	JENKINS-54929	Some final output is missing in Jenkins Pipeline when using the Ansible Plugin	Jean-Christophe Siro	Adam Delarosa	Open	Nov 28, 2018
	JENKINS-54557	hudson.AbortException: Ansible playbook execution failed	Jean-Christophe Siro	Josu Rodriguez	Open	Nov 09, 2018
	JENKINS-52920	Ability to specify ansible config file	Jean-Christophe Siro	Sergey Urushkin	Open	Aug 07, 2018
	JENKINS-52292	Support Multiple Vault IDs	Jean-Christophe Siro	Strahinja Kustudic	Open	Jul 01, 2018
	JENKINS-50841	When I check become and save, but it is not reflected.	Jean-Christophe Siro	Chung Kyu Lee	Open	Apr 17, 2018
	JENKINS-49812	Ansible Plugin not working using password authentication	Jean-Christophe Siro	Forest Oden	Open	Feb 28, 2018
	JENKINS-49056	Pipeline Support for Ansible Adhoc Commands	Michael Cresswell	Michael Cresswell	In Progress	Jan 20, 2018
	JENKINS-48413	Hosts unreachable when using a private key with passphrase provided using the Credentials plugin	Jean-Christophe Siro	Noël Bardelot	Open	Dec 06, 2017
	JENKINS-48186	Can Let ansible-plugin support multi-credentials for inventory?	Jean-Christophe Siro	lsb want	Open	Nov 23, 2017
	JENKINS-46912	Jenkins - Ansible ssh credential issue after first run from application	Jean-Christophe Siro	Shea Stewart	Open	Sep 17, 2017
	JENKINS-46567	Ansible plugin not reading additionalParameters from pipeline	Emilio Escobar	Tom Weeks	Open	Aug 31, 2017

	JENKINS-45065	ansible plugin does not use "private" credentials	Michael Cresswell	Sven Hergenbahn	In Progress	Jun 22, 2017
	JENKINS-44246	"Authentication failure" when using ansible plugin	Jean-Christophe Siro	Shane O'Sullivan	Open	May 12, 2017
	JENKINS-42321	Run ansible via durable step infrastructure	Jean-Christophe Siro	Anton Lundin	Open	Feb 25, 2017
	JENKINS-41235	Ansible plugin does not escape single quotes in extra vars	Jean-Christophe Siro	Dave Wittman	Open	Jan 20, 2017
	JENKINS-37548	Ansible plugin is unable to forward ssh key	Jean-Christophe Siro	Steven Bressey	Open	Aug 19, 2016
	JENKINS-37387	Add @Symbol("ansible") to Ansible's ToolDescriptor	Emilio Escobar	Andrew Bayer	Open	Aug 13, 2016

Showing 20 out of 30 issues

[See also All Open Items](#)

Changelog

Version 1.0 (26 March 2018)

- **Fix security issue:** Do not disable host key verification by default. **This may break existing configurations as host key verification will be enabled everywhere by default.**

Version 0.8.0 (16 Jan 2018)

- Add support for Ansible Vault [JENKINS-48499]
- Add hostKeyChecking option to pipeline [JENKINS-42445]

Version 0.6.2 (3 Jan 2017)

- Fix blocker bug when launched from a pipeline [JENKINS-40780]

Version 0.6.1 (1 Jan 2017)

- Use latest parent project definition in order to deploy plugin (thanks to [alecharp](#) for the help and the PR)

Version 0.6 (31 Dec 2016)

WARN: 0.6.x version will be the last one to support Jenkins 1.xxx and Ansible 1.x - The 0.7.x and next releases will require Jenkins 2.32.1 (or higher) and Ansible 2.2 (or higher)

- Add a "do not specify" option for inventory [JENKINS-34627]
- Support inventoryContent in pipeline (thanks to [leewin12](#) for the PR)
- Add support of extra variables in jobdsl (thanks to [pawbur](#) for the PR)
- Support empty forks (number of parallel processes) parameter [JENKINS-39438]
- Escape '%' character in private key path (thanks to [ewollesen](#) for the PR)
- Omit ansible option when expanded environment variable is empty (thanks to [vjestin](#) for the PR)
- Add the --forks parameter configurable in pipeline step (thanks to [anguswilliams](#) for the PR)
- Fix usage of environment variable in ansiblePlaybook pipeline step (thanks to [thomaskalmar](#) and [barthorre](#) for the PR) [JENKINS-38289]

Version 0.5 (5 May 2016)

- Add support for ansible extra variables [JENKINS-29863]
- Improve Pipeline plugin integration [JENKINS-32911]
- Add the possibility to use the default inventory file (thanks to Johann Schmitz for the PR)
- Add colored output in pipeline jobs (thanks to Kirill Merkushev for the PR)
- Make Jenkins build variables available as environment variables for ansible (thanks to Kevin Mooney for the PR) [JENKINS-29284]

Version 0.4 (25 December 2015)

- Support for password protected SSH keys [JENKINS-30656]
- Initial support for the workflow plugin [JENKINS-30398]
- Add support for Job DSL plugin (thanks to Kirill Merkushev for the PR) [JENKINS-31790]

Version 0.3.1 (15 July 2015)

- Fix execution on slave nodes [JENKINS-29294]

Version 0.3 (20 June 2015)

- Add support for password based SSH authentication (with sshpass)
- Environment variables can be used in Module and Module arguments text field in Ad-hoc command builder
- Environment variables can be used in inline inventory text box [JENKINS-28547]

Version 0.2 (11 May 2015)

- Fix NullPointerException when no credentials are selected
- Fix --skippedTags parameter configuration which was ignored
- Fix NullPointerException and print an error message in the build console when the inventory is not set in the job configuration

Version 0.1 (01 May 2015)

- Initial version