

# Docker Pipeline Plugin

## Plugin Information

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

Allows to build and use Docker containers from [pipelines](#).

## Features

See the [user guide](#) for all details.

## Open JIRA issues

T	Key	Summary	Assignee	Reporter	P	Status	Resolution	Created	Updated	Due
	JENKIN S-31225	docker.build fails with if HOME is not set.	Jesse Glick	James Nord		REOPENED	Unresolved	Oct 28, 2015	Aug 24, 2016	
	JENKIN S-42890	Could not find FROM instruction in Dockerfile when it starts with a BOM	Unassigned	Mateusz Kubaszek		OPEN	Unresolved	Mar 17, 2017	Jun 16, 2017	
	JENKIN S-49365	Resuming of pipelines vs. docker.image(...).inside (...)?	Unassigned	Reinhold Füreder		REOPENED	Unresolved	Feb 05, 2018	Dec 18, 2019	
	JENKIN S-50687	When using docker.withRegistry withEnv repeats indefinitely.	Unassigned	Aaron Haaf		OPEN	Unresolved	Apr 09, 2018	May 18, 2018	
	JENKIN S-52264	Error while running pipeline job in docker	Unassigned	Suvir Pavin		OPEN	Unresolved	Jun 29, 2018	Oct 24, 2019	
	JENKIN S-52991	withDockerRegistry([...]) fails with "Email: EOF" on older docker versions	Unassigned	Matt Evans		OPEN	Unresolved	Aug 10, 2018	Jan 14, 2019	
	JENKIN S-54389	Containers with ENTRYPOINT is not started correctly	Unassigned	Artem V. Navrotsky		OPEN	Unresolved	Nov 01, 2018	May 18, 2019	
	JENKIN S-54681	dir('path') is broken when used within "docker.image().inside()"	Unassigned	Krassimir Valev		OPEN	Unresolved	Nov 16, 2018	Nov 17, 2018	
	JENKIN S-56729	groovy.lang.MissingPropertyException: No such property: frontend for class: groovy.lang.Binding	Unassigned	Noor Ameen		OPEN	Unresolved	Mar 24, 2019	Mar 24, 2019	
	JENKIN S-45236	docker.withServer cannot connect using TLS	magnayn	Devis Calio		OPEN	Unresolved	Jun 30, 2017	May 18, 2018	
	JENKIN S-50857	Docker agent on windows fails with Cannot run program "id"	Unassigned	Jonathan Kuleff		OPEN	Unresolved	Apr 18, 2018	Aug 09, 2018	
	JENKIN S-57168	withDockerRegistry problems in Declarative Pipeline	Unassigned	Junior Junior		OPEN	Unresolved	Apr 24, 2019	Apr 24, 2019	
	JENKIN S-57210	Issue with docker.withRegistry	Unassigned	Michael Knox		OPEN	Unresolved	Apr 29, 2019	Jun 07, 2019	

	JENKIN S-57366	Script injection attack when using docker.image	Unassigned	Changcheng Liu	↑	OPEN	Unresolved	May 08, 2019	May 08, 2019
	JENKIN S-28606	Track down WithContainerStepTest.stop() hang	Tom FENNELLY	Jesse Glick	⬆	OPEN	Unresolved	May 27, 2015	Aug 03, 2015
	JENKIN S-32859	tests hung in docker container due to PID1 not reaping zombies	Unassigned	Edwin Török	⬆	OPEN	Unresolved	Feb 09, 2016	Oct 04, 2017
	JENKIN S-36913	ToolInstaller framework doesn't work with docker-pipeline	Jesse Glick	Cyrille Le Clerc	⬆	REOPENED	Unresolved	Jul 25, 2016	Dec 05, 2017
	JENKIN S-37069	Permission denied on durable task directory when using docker.image inside step on fresh install of jenkins	Unassigned	Vitor Dantas	⬆	OPEN	Unresolved	Jul 29, 2016	Mar 01, 2017
	JENKIN S-38766	withRegistry() duplicates registry name	Unassigned	Richard Lee	⬆	OPEN	Unresolved	Oct 06, 2016	Oct 13, 2016
	JENKIN S-39664	Docker builds do not work with Kubernetes Pipeline plugin	Ioannis Canellos	Markus May	⬆	IN PROGRESS	Unresolved	Nov 11, 2016	May 25, 2018

Showing 20 out of 139 issues

## Version history

### Version 1.19 (August 2, 2019)



As of this release, fingerprints will no longer be automatically generated when using `docker.build` or `image.run` in a Pipeline. If you are using the CloudBees Docker Traceability Plugin, which is the only known consumer of these fingerprints, you will need to explicitly call `dockerFingerprintFrom` and `dockerFingerprintRun` if you want to maintain the previous behavior.

- [JENKINS-44609](#) - Docker inspect failing on named multi-stage builds RESOLVED
- [JENKINS-44789](#) - docker 17.05 multistage Dockerfile breaks dockerFingerprintFrom RESOLVED
- [JENKINS-57369](#) - Docker build-args incorrectly rejected and successful build marked failed RESOLVED Deprecate the `dockerFingerprintFrom` and `dockerFingerprintRun` steps and stop calling them during `docker.build` and `image.run`. Fixes various issues with Dockerfile parsing and parsing arguments to `docker build`.
- [JENKINS-46636](#) - ``dir`` does not change working directory for contained steps RESOLVED Attempt to support the `dir` step when running on a Docker container created by this plugin for older versions of Docker (17.12 and older)


### Version 1.18 (April 2, 2019)

- [JENKINS-48437](#) - Docker Pipeline Plugin withRegistry and Authorize Plugin fails to get credentialsId RESOLVED Allow users with `Credentials/UseItem` permission (implied by `Job/Configure` permission) on a Pipeline Job to use credentials which that job has access to in the `withDockerRegistry` and `withDockerServer` steps even when [Authorize Project Plugin](#) is installed and configured to run builds as a user other than the default Jenkins superuser.
- [JENKINS-46405](#) - Docker 17.05 ARG in FROM breaks docker inspect RESOLVED Extend fix for ARGs in FROM added in version 1.15 to support ARGs with default values.
- [JENKINS-56674](#) - In case of execute withDockerContainer inside withDockerCotainer env variables is not masked RESOLVED Mask environment variables used by steps that use the `Launcher API` inside of a `withDockerContainer` step.
- ([PR 153](#)) Update help related to `image.pull()` to explain what problems might happen if the method is not called.


### Version 1.17 (May 18, 2018)

-  [JENKINS-51395](#) - withDockerRegistry([...]) syntax no longer accepted RESOLVED The withDockerRegistry step now preferentially takes a “flat” argument list, but continues to support older syntaxes, including the one broken in 1.16.
-  [JENKINS-51397](#) - docker login being called without server-related environment variables RESOLVED May solve login issues in certain environments, especially with a custom Docker server endpoint. The non-CLI-based login behavior in 1.15.1 may be restored using the Jenkins startup flag `-Dorg.jenkinsci.plugins.docker.commons.credentials.DockerRegistryToken.USE_CUSTOM_LOGIN=true` but this suffers from a number of known limitations including lack of guaranteed support for parallel builds on one computer, failure to clean up credentials at the end of a build, incompatibility with the JSON format from some versions of the Docker client, etc.



### Version 1.16 (May 11, 2018)

-  [JENKINS-38018](#) - withDockerRegistry fails to authenticate with DockerHub RESOLVED and allied issues: using CLI-based registry login by default

**WARNING:** introduced some known regressions  [JENKINS-51395](#) - withDockerRegistry([...]) syntax no longer accepted RESOLVED &

 [JENKINS-51397](#) - docker login being called without server-related environment variables RESOLVED

### Version 1.15.1 (Feb 13, 2018)

-  [JENKINS-49278](#) - cat command in docker agents not detected correctly REOPENED command in docker agents not detected correctly
-  [JENKINS-42152](#) - Docker Pipeline causes build to fails because of use of `--force=yes` for tagging OPEN do not use (deprecated) `--force` when tagging images
- better error message for [JENKINS-41316](#)

### Version 1.15 (Jan 30, 2018)

- [JENKINS-41316](#) Restore entrypoint support (JENKINS-37987), check the command is well executed by entrypoint
- [JENKINS-48502](#): Added ECS and Kubernetes support in cgroup detection
- [JENKINS-49063](#): fix cgroup detection on Docker CE
- [JENKINS-46105](#): fix support for ARG in FROM command
- [JENKINS-33510](#): add support for exec workdir option
- [JENKINS-47791](#): Making WithContainerStepTest.death not assume the existence of a pid file.

### Version 1.14 (Nov 1, 2017)

- [JENKINS-40484](#) - Stop passing `PATH` from agent to container, fixing problems such as `withMaven` not working within `withContainerStep`.

### Version 1.13 (Sep 11, 2017)

- [JENKINS-44609](#) No longer fails on multi-stage Dockerfile with FROM .. AS syntax
- Added OS detection in JUnits so Windows based runs pass
- Added JenkinsFile for automated CI on the plugin

### Version 1.12 (Jun 16, 2017)

- Label the Docker workspace volume mount shared for SELinux.
- Stray whitespace in `inspect` format could cause errors.
- Empty environment variables in Jenkins settings could cause errors.
- [JENKINS-42322](#) Increased timeout for client operations from 10s to 3m by default (configurable).

### Version 1.11 (May 08, 2017)

- Print diagnostics explaining why `--volumes-from` is or is not being used.
- [JENKINS-43222](#) Fixes to environment used for running `docker` CLI commands when using `inside`.
- [JENKINS-43328](#) Detect container ID when running using `--parent-group`.

### Version 1.10 (Feb 13, 2017)

- Fixed detection of agents running inside containers under further special conditions.
- Detect custom `Dockerfile` when using `--file`.
- [JENKINS-34276](#) Allow `Image.inside` to run with either a local or registry-prefixed name.
- [JENKINS-37719](#) Recover when `dockerd` hangs.

### Version 1.9.1 (Nov 14, 2016)

- Name changed to remove word “CloudBees”.

## Version 1.9 (Oct 05, 2016)

- Failure to pass `--volumes-from` from `Image.inside` when an agent was run in a container using `--volume` but no `VOLUME` declaration.
- [JENKINS-37769](#) As-yet-undiagnosed issue with `stop` meant that cleanup from `Image.inside` was delayed for ten seconds.
- [JENKINS-38018](#) When `withRegistry` succeeds, print a message saying where credentials were stored. When credentials are not found, abort rather than silently continuing.
- [JENKINS-37951](#) `withTool` was not honored by `Image.inside`.

## Version 1.8 (Sep 07, 2016)

- [JENKINS-37987](#) Allow `Image.inside` to work with images like `maven` which specify an `ENTRYPOINT`.
- [JENKINS-36332](#) Allow a `command` argument to be passed to `Image.withRun`.
- Improved detection of containerized Jenkins instances from 1.5.
- Avoid blocking log output when running `docker` commands to compute fingerprints.

## Version 1.7 (Jul 26, 2016)

Requires a newer Jenkins baseline and Pipeline dependencies.

- [JENKINS-36214](#) Use a workspace-specific temporary directory to write `.container` files.
- [JENKINS-34050](#) `Docker.build` may now take arbitrary arguments, not merely an alternate base directory.
- [JENKINS-31225](#) More portable way of determining when commands need to be wrapped in an implicit `node` block.

## Version 1.6 (Jul 01, 2016)

- Fix error in 1.5 when not run on Linux.

## Version 1.5 (Jun 30, 2016)

- Work correctly out of the box when Jenkins itself is running inside a Docker container. Demo also updated to exercise this mode.
- [JENKINS-33510](#) Not solved, but at least print a warning to the build log that `dir` inside `Image.inside` does not work.
- [JENKINS-33063](#) Allow a `command` to be passed to `Image.run`.
- Added a `Container.port` function.

## Version 1.4 (Mar 03, 2016)

- [JENKINS-27152](#) Mount temporary directories now used by several other plugins in addition to the workspace when using `Docker.Image.inside`.
- Handle recent deprecation of `docker tag --force`.

## Version 1.3 (Feb 05, 2016)

- No functional change, just following rename from Workflow to Pipeline.

## Version 1.2 (Aug 04 2015)

- [JENKINS-28611](#) Honor `DOCKER_HOST` and similar environment variables from the slave machine when running `docker exec` for `docker.inside`.

## Version 1.1 (Jul 28 2015)

- [JENKINS-28612](#) Date parsing issue with some Docker clients.

## Version 1.0 (Jun 03 2015)

-  First release