



Bug 2302259 (CVE-2024-7387) - CVE-2024-7387 openshift/builder: Path traversal allows command injection in privileged BuildContainer using docker build strategy

Keywords: Security

Reported: 2024-08-01 15:25 UTC by Michal Findra

Status: NEW

Modified: 2026-04-30 04:30 UTC (History)

Alias: CVE-2024-7387

CC List: 19 users (show)

Deadline: 2024-09-16

Fixed In Version:

Product: Security Response

Clone Of:

Component: vulnerability

Environment:

Version: unspecified

Last Closed:

Embargoed:

Hardware: All

OS: Linux

Priority: high

Severity: high

Target Milestone: ---

Assignee: Product Security DevOps Team

QA Contact:

Docs Contact:

URL:

Whiteboard:

Depends On:

Blocks:

TreeView+ [depends on](#) / [blocked](#)

Attachments [\(Terms of Use\)](#)

Links

System	ID	Private	Priority	Status	Summary	Last Updated
Red Hat Product Errata	RHSA-2024:6685	0	None	None	None	2024-09-19 09:30:52 UTC
Red Hat Product Errata	RHSA-2024:6687	0	None	None	None	2024-09-19 05:39:01 UTC
Red Hat	RHSA-2024:6689	0	None	None	None	2024-09-19

Product Errata						05:30:46 UTC
Red Hat Product Errata	RHSA-2024:6691	0	None	None	None	2024-09-19 00:12:40 UTC
Red Hat Product Errata	RHSA-2024:6705	0	None	None	None	2024-09-19 13:25:45 UTC

Michal Findra 2024-08-01 15:25:12 UTC

[Description](#)

``OpenShift`` allows a user to create his own images with the help of the build component. This component has three primary build strategies available ([Docu - Understanding image builds](<https://docs.openshift.com/container-platform/4.16/cicd/builds/understanding-image-builds.html>)):

- * Docker build
- * Source-to-Image (S2I) build
- * Custom build

As the builds are running in a privileged container, a vulnerability in this process allows an attacker to escalate their permissions on the cluster and host nodes.

The ``custom build`` is not safe, because they can execute any code within a privileged container and are disabled by default.

The other two strategies are considered as safe and are enabled for all users that can create builds.

But there is a note about the ``docker strategy``:

> Grant docker build permissions with caution, because a vulnerability in the Dockerfile processing logic could result in a privileges being granted on the host node.

See: <https://docs.openshift.com/container-platform/4.16/cicd/builds/securing-builds-by-strategy.html>

The ``docker strategy`` / the image used during the build has a vulnerability, which allows an attacker to override files inside the privileged build container with the help of the ``spec.source.secrets.secret.destinationDir`` attribute of the ``BuildConfig`` definition. After overriding the binary, execution of this overridden file can be triggered with another secret and the malicious code is executed in the privileged container.

As stated above, running code in a privileged container allows an attacker to escalate their permissions on the cluster and host nodes. As an example the host filesystem of the worker node can be mounted and a new ``SSH`` key can be added to user ``core`` of the ``Red Hat Enterprise Linux CoreOS (RHCOS)``.

errata-xmlrpc 2024-09-19 00:12:38 UTC

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This issue has been addressed in the following products:

Red Hat OpenShift Container Platform 4.13

Via RHSA-2024:6691 <https://access.redhat.com/errata/RHSA-2024:6691>

errata-xmlrpc 2024-09-19 05:30:44 UTC

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This issue has been addressed in the following products:

Red Hat OpenShift Container Platform 4.14

Via RHSA-2024:6689 <https://access.redhat.com/errata/RHSA-2024:6689>

errata-xmlrpc 2024-09-19 05:39:00 UTC

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This issue has been addressed in the following products:

Red Hat OpenShift Container Platform 4.16

Via RHSA-2024:6687 <https://access.redhat.com/errata/RHSA-2024:6687>

errata-xmlrpc 2024-09-19 09:30:51 UTC

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This issue has been addressed in the following products:

Red Hat OpenShift Container Platform 4.15

Via RHSA-2024:6685 <https://access.redhat.com/errata/RHSA-2024:6685>

errata-xmlrpc 2024-09-19 13:25:43 UTC

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This issue has been addressed in the following products:

Red Hat OpenShift Container Platform 4.12

Via RHSA-2024:6705 <https://access.redhat.com/errata/RHSA-2024:6705>

2024:6705

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