

Oracle Linux 9

Installing and Configuring FIPS Mode



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Preface

[Oracle Linux 9: Installing and Configuring FIPS Mode](#) describes how to enable FIPS mode on Oracle Linux 9 systems.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <https://www.oracle.com/corporate/accessibility/>.

For information about the accessibility of the Oracle Help Center, see the Oracle Accessibility Conformance Report at <https://www.oracle.com/corporate/accessibility/templates/t2-11535.html>.

Access to Oracle Support for Accessibility

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <https://www.oracle.com/corporate/accessibility/learning-support.html#support-tab>.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain

compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

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About the Federal Information Processing Standard Publication 140-3

The Federal Information Processing Standard (FIPS) Publication 140-3 is a computer security standard developed by the U.S. Government and industry working group for the protection of sensitive but unclassified data. See the official FIPS publications at [NIST Computer Security Resource Center](#).

The FIPS 140-3 standard identifies security requirements and specifies tests to validate that cryptographic algorithms have been implemented correctly. See the full FIPS 140-3 standard at [FIPS PUB 140-3](#) for further details and other specifications of the FIPS standard.

The instructions in this document show how to enable Oracle Linux 9 in FIPS mode to use FIPS-compliant algorithms and protocols. For more information about the current status of FIPS certifications, see [Oracle Security Evaluations](#).

Installing Oracle Linux 9 in FIPS Mode

Add `fips=1` to the kernel command line during system installation to automatically configure a new Oracle Linux 9 system to run in FIPS mode from the first boot.

Alternatively you can configure a preexisting Oracle Linux 9 installation to run in FIPS mode by using the `fips-mode-setup` utility. For more information, see the `fips-mode-setup(8)` manual pages.



Note:

For more information about enabling FIPS mode in Oracle Linux containers, see the Managing Containers chapter in the [Oracle Linux: Podman User's Guide](#).

Enabling and Disabling FIPS Mode

1. Enable FIPS mode:

```
sudo fips-mode-setup --enable
```

The following output is displayed:

```
Kernel initramdisks are being regenerated. This might take some time.
Setting system policy to FIPS
Note: System-wide crypto policies are applied on application start-up.
It is recommended to restart the system for the change of policies
to fully take place.
FIPS mode will be enabled.
Please reboot the system for the setting to take effect.
```

You must reboot the system for the setting to take effect.

2. Verify that FIPS mode has been enabled correctly:

```
sudo fips-mode-setup --check
```

The following output is displayed:

```
FIPS mode is enabled.
```

3. To disable FIPS mode:

```
sudo fips-mode-setup --disable
```

The following output is displayed:

```
Setting system policy to DEFAULT
Note: System-wide crypto policies are applied on application start-up.
It is recommended to restart the system for the change of policies
to fully take place.
FIPS mode will be disabled.
Please reboot the system for the setting to take effect.
```

You must reboot the system for the setting to take effect.