

## Side-Channel Analysis Method (Spectre and Meltdown)

Rev. 2.0  
April 24, 2018  
Fujitsu Limited

On January 3, 2018 a team of security researchers revealed new vulnerabilities that take advantage of techniques commonly used in many modern processor architectures. Collectively known as Meltdown and Spectre, these vulnerabilities utilize a new method of side-channel analysis and could allow an unprivileged attacker, in specific circumstances, to read privileged memory belonging to other processes or memory allocated to the operating system kernel. As a result, customers and prospects in different regions may raise concerns or seek advice and support from Fujitsu.

Below are the procedures to protect UNIX Servers.

For other Fujitsu products, please see [CPU hardware vulnerable to side-channel attacks](#).

### How to Protect UNIX Servers

- The UNIX Servers shown below are not affected by Meltdown (CVE-2017-5754) and Spectre Variant 2 (CVE-2017-5715).
- For Spectre Variant 1 (CVE-2017-5753), the minimum revisions of firmware and Oracle Solaris software releases to protect UNIX Servers are shown below. The firmware and Oracle Solaris SRU/patch can be applied in any order. Fujitsu's testing has shown that these fixes do not cause an impact on system performance.

- Firmware for UNIX Servers

Product	Firmware with necessary updates
Fujitsu SPARC M12	XCP3051
Fujitsu M10	XCP2351
SPARC Enterprise M series	Firmware update is not needed

XCP3051 and XCP2351 are available from your authorized service provider.

- Oracle Solaris for UNIX Servers

A specific Oracle Solaris 11 SRU is available from your authorized service provider.

An Oracle Solaris 10 patch will be available at a later date from your authorized service provider.

### Details

For more details, please see the following links.

- US-CERT: [VU#584653: CPU hardware vulnerable to side-channel attacks](#)
- CVE: [CVE-2017-5715](#)
- CVE: [CVE-2017-5753](#)
- CVE: [CVE-2017-5754](#)
- [Intel Analysis of Speculative Execution Side Channels](#)
- [Intel Analysis of Speculative Execution Side Channels White Paper](#)

### Contact

For further information, please contact your authorized service provider.