

Technical Support Bulletin

# Dirty Pipe Security Vulnerability (CVE-2022-0847)



**ALERT!** A pipe buffer initialization flaw in the Linux kernel used by SFA OS allows an attacker to alter file contents in memory or on disk even when in read-only mode.

## Issue Summary

DDN has been made aware of a security vulnerability in the Linux kernel used in Red Hat Enterprise Linux 8 (RHEL 8) and related products that affects SFA OS. Known as the Dirty Pipe vulnerability (CVE-2022-0847), it allows an attacker to modify the contents of a file either in memory or on disk even when in read-only access mode. The severity and impact rating for this issue is “important.”

This issue has been traced to a failure to initialize the “flags” member of the new pipe buffer structure. This flaw can be exploited by creating new pipe buffers with the PIPE\_BUF\_FLAG\_CAN\_MERGE flag incorrectly set. RHEL 8 does not implement the PIPE\_BUF\_FLAG\_CAN\_MERGE flag, so this method of exploitation cannot be used with RHEL 8. However, the pipe buffer initialization flaw does exist in RHEL 8 and alternative methods of exploitation cannot be ruled out.

## Affected Products

This issue affects SFA OS 12.0.x. SFA OS versions 11.9.x and earlier are not affected.

EXAScaler file system products are not affected.

## Resolution

The issue will be resolved in SFA OS 12.1.

## Contacting DDN Technical Support

Please contact DDN Technical Support at any time if you have questions or need assistance. Support can be reached on the web, by email, or by phone as listed below.

### Web

*DDN Community Support Portal*  
*Portal Assistance*

<https://community.ddn.com/login>  
[webportal.support@ddn.com](mailto:webportal.support@ddn.com)

**Email**

*Support Email*

[support@ddn.com](mailto:support@ddn.com)

**Telephone**

*DDN Support Worldwide Directory*

<https://www.ddn.com/support/global-services-overview/>

**Bulletins & Notices**

*Support Bulletins*

<http://www.ddn.com/support/technical-support-bulletins>

*End-of-Life Notices*

<http://www.ddn.com/support/end-of-life-notices>

*Release Notes*

<https://community.ddn.com/login>

*TSB Subscription Requests*

[support-tsb@ddn.com](mailto:support-tsb@ddn.com)