

Security Bulletin

Vulnerability in NVIDIA GPU Display Driver

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2024-0149 CVE-2024-0150 CVE-2024-53869

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Vulnerability in NVIDIA GPU Display Driver - CVE-2024-0126 CVE-2024-0131 CVE-2024-0147 CVE-2024-0149 CVE-2024-0150 CVE-2024-53869

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List of changes

Version	Date	Description	
0.1	2024/12/05	Initial Eviden version	
0.2	2024/12/11	Added affected MPI version in table	
0.3	2025/02/18	CVE-2024-0131 CVE-2024-0147 CVE-2024-0149 CVE-2024-0150 CVE-2024-53869	
		added to bulletin. TLP changed for CLEAR	
0.4	2025/04/15	Changes in affected products table	

Executive summary

NVIDIA reported information about NVIDIA GPU Display Driver for Windows and Linux contains a vulnerability which could allow a privileged attacker to escalate permissions. A successful exploit of this vulnerability might lead to code execution, denial of service, escalation of privileges, information disclosure, and data tampering. NVIDIA published table with lists the NVIDIA software products affected, Linux driver versions affected, and the updated version available from nvidia.com that includes this security update.

Vulnerability Info

CVE No.	CVSS Score	Type of Vulnerability
CVE-2024-0126	8.2	CWE-20 Improper Input Validation
CVE-2024-0131	4.4	CWE-805 Buffer Access with Incorrect Length Value
CVE-2024-0147	5.5	CWE-416 Use After Free
CVE-2024-0149	3.3	CWE-125 Information disclosure
CVE-2024-0150	7.1	CWE-787 Information disclosure, denial of service, and data tampering
CVE-2024-53869	5.5	CWE-459 Information disclosure

Eviden is liaising closely with its suppliers and investigating the exact nature of these vulnerabilities to provide validated remediation.



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Affected products

Products		Fixed version	Status	Comments
	Nvidia GPU Driver	R560.35.05	Partially fixed	Fixed CVE-2024-0126 Remaining vulnerabilities: CVE-2024-0131 CVE-2024-0147 CVE-2024-0149 CVE-2024-0150 CVE-2024-53869

Although Eviden tries to provide accurate and complete information, Eviden shall not be liable if the above table is incomplete or erroneous. During its vulnerability analysis process, the information in this document is subject to change without notice to reflect new results of this analysis.

The tables below provide the Technical State to apply to implement the fixes on Eviden products.

Note: The first row provides the currently recommended combination of firmware. The detail per vulnerability is given below.

TS (technical state) with no number indicates that a new technical state fixing the vulnerabilities is scheduled.

TBD (to be defined) indicates that a new technical state fixing the vulnerabilities is under study.

Unpatched means that the vulnerability is presumably present, but there is no plan to provide a fix. This can be investigated on demand.

List of Enterprise and Edge servers

Products	Fixed version	Comment
BullSequanaSA	Unpatched	fix is related to driver update

List of HPC products

Products	Fixed version	Comment
BullSequana X400-A6	Unpatched	fix is related to driver update
BullSequana X400-E7	Unpatched	fix is related to driver update
BullSequana X1125	Unpatched	fix is related to driver update
BullSequana X2135	Unpatched	fix is related to driver update
BullSequana X2415	Unpatched	fix is related to driver update
BullSequana XH3145	Unpatched	fix is related to driver update

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Recommendations

Eviden recommends applying its Technical States upgrade on its servers as soon as they are made available.

Available Vendor Patches

No validated patch is available at the time. Eviden is working with its suppliers to distribute updates as soon as possible.

The following table lists the NVIDIA software products affected, Linux driver versions affected, and the updated version available from nvidia.com that includes this security update. Download the updates from the NVIDIA Driver <u>Downloads</u> page.

Software Product	Operating System	Driver Branch	Affected Driver Versions	Updated Driver Version
		R570	All driver versions prior to 570.86.16	570.86.16
GeForce	Linux	R550	All driver versions prior to 550.144.03	550.144.03
		R535	All driver versions prior to 535.230.02	535.230.02
		R570	All driver versions prior to 570.86.16	570.86.16
NVIDIA RTX, Quadro, NVS	Linux	R550	All driver versions prior to 550.144.03	550.144.03
		R535	All driver versions prior to 535.230.02	535.230.02
		R570	All driver versions prior to 570.86.15	570.86.15
Tesla	Linux	R550	All driver versions prior to 550.144.03	550.144.03
		R535	All driver versions prior to 535.230.02	535.230.02

Affected	NVIDIA Driver	Delivery HPC
OpenMPI4	560.35.03	1261.0.8
OpenMPI5		
OpenMPI4	555.42.06	1251.0.1
OpenMPI5		
OpenMPI4	545.23.08	1232.0.1
OpenMPI4	535.10.4.05	12.1.7

Technical States links for Eviden servers are reminded in the table below.

Product	Technical State link
Bull Sequana S	https://support.bull.com/ols/product/platforms/bullion/bullsequana- s/dl/pkgf/technical-state-dvd-packages
Bull Sequana SA	https://support.bull.com/ols/product/platforms/bullion/bullsequana-sa-servers/dl/pkgf/pkg
Bull Sequana SH	https://support.bull.com/ols/product/platforms/bullion/bullsequana-sh/dl/pkgf/pkg
Bull Sequana E	https://support.bull.com/ols/product/platforms/bullion/bullsequana-edge- servers/dl/pkgf/pkgf
Bull Sequana X1000	https://support.bull.com/ols/product/platforms/hw-
	extremcomp/sequana/x1000/dl/pkgf/pkg



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Bull Sequana XH2000	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/xh2000/dl/pkgf/pkg	
Bull Sequana XH3000	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/xh3000/dl/pkgf/pkg	
Bull Sequana X400-E5	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/x400/dl/pkgf/pkgx400e5	
Bull Sequana X400-E7	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/x400/dl/pkgf/pkgx400e7	
Bull Sequana X400-A5	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/x400/dl/pkgf/pkgx400a5	
Bull Sequana X400-A6	https://support.bull.com/ols/product/platforms/hw-	
	extremcomp/sequana/x400/dl/pkgf/pkgx400a6	
Bull Sequana X550	https://support.bull.com/ols/product/platforms/hw-extremcomp/sequana/x550	
Bull Sequana X800 /	https://support.bull.com/ols/product/platforms/hw-	
QLM	extremcomp/sequana/x800/dl/pkgf/pkg	

Available Workarounds

No workaround is available.

Available Mitigations

No mitigation identified.

Available Exploits/PoC

Eviden is not aware of any exploitation of the reported vulnerabilities.

References

1. https://nvidia.custhelp.com/app/answers/detail/a_id/5586





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Glossary of terms

Term	Description
Mitigation	Refers to a setting, common configuration, or general best-
	practice, existing in a default state that could reduce the
	severity of exploitation of a vulnerability
Neutralization	The neutralization phase is the decision-making process
	during which the risk posed by an incident is evaluated.
PoC	Proof of Concept
Remediation	The remediation phase ends with the delivering of a qualified
	solution/update fixing the vulnerability without regression.
TI	Threat Intelligence
TLP	Traffic Light Protocol (TLP) FIRST Standards Definitions and
	Usage Guidance — Version 2.0. <u>https://www.first.org/tlp/</u>
Workaround	Refers to a setting or configuration change that does not
	correct the underlying vulnerability but would help block
	known attack vectors before you apply the update

About this document

Eviden continuously monitors the security of its products. This Security Bulletin is shared under the constraints of the FIRST Traffic Light Protocol version 2.0 (TLP) to bring the attention of owners of the potentially affected Eviden products. Eviden recommends that all product owners determine whether the described situation is applicable to their individual case and take appropriate action.

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- Neutralization security bulletins are numbered 0.x
- Privately disclosed Remediation security bulletins are numbered 1.x
- Publicly disclosed Remediation security bulletins are numbered 2.x

Updated versions of this document can be found on:

- https://support.bull.com/ols/product/security/psirt



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