



**MONTHLY VULNERABILITY INSIGHTS**  
*Based on Data from Secunia Research*

**DECEMBER 2023**

**flexera**<sup>TM</sup>

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## Introduction

Welcome to our Monthly Vulnerability Insights by Flexera. This comprehensive, monthly review is based upon data from the Secunia Research team at Flexera who produces valuable advisories leveraged by users of Flexera’s [Software Vulnerability Research](#) and [Software Vulnerability Manager](#) solutions.

The Secunia Research team is comprised of several security specialists who methodically test, verify and validate disclosed vulnerabilities from hundreds of sources. Since the founding of the Secunia Research team in 2002, it has been our goal to provide the most accurate and reliable source of vulnerability intelligence.

## Secunia Research software vulnerability tracking process

A vulnerability is an error in software which can be exploited with a security impact and gain. Secunia Research validates, verifies and tests vulnerability information to author security advisories which provide valuable details by following consistent and standard processes which have been refined over the years.

Whenever a new vulnerability is reported, it’s verified and a Secunia Advisory is published. A Secunia Advisory provides details, including description of the vulnerability, risk rating, impact, attack vector, recommended mitigation, credits, references and more, including additional details discovered during verification and testing, thus providing the information required to make appropriate decisions about how to protect systems. Click here to learn more about [Secunia Advisories and their contents](#).

## The anatomy of a Security Advisory

A security advisory is a summary of the work that Secunia Research performs to communicate standardized, validated and enriched vulnerability research on a specific software product version.

We issue Secunia Research criticality ratings and common vulnerability scoring system (CVSS) metrics after a distinct analysis in the advisories. This dual rating method allows for a much-improved means of prioritizing by criticality—delivering a review that includes product context and related security best practices.

A *rejection advisory* issued by the research team issues means we’ve determined it’s not worthy of your attention. This advisory comes if a vendor issues an advisory acknowledging vulnerability that we don’t believe to be valid—and would have a product solution we aren’t recommending or exceeding already. We send that out to save you considerable time.

If someone other than the vendor issues an advisory and we don’t believe to be valid, we discard it. We take that action so you don’t waste your time processing inconsequential vulnerability information.

[check out this infographic.](#)



## Summary

Total advisories: **637** ↓ (last month: **996**)

This month had the second lowest number of advisories (**637**) recorded in a month since 2002.

2022 was already the record-breaking year with the highest number of Secunia Advisories reported, however 2023 has exceeded 2022 by **32.5%**.

Important **conclusions** from this month report are:

- Almost **53.38%** of all vulnerabilities reported in this month have a "**Remote Attack Vector**" (last month 54.22%)
- The Secunia Research Team reported **3 Extremely** critical advisories this month. (Last month: **8**)
- Only **3 Zero-Day** Advisories reported. (last month :7) for Google Chrome , MS Edge and Apple IOS
- Over **1,518 unique** CVE's (last month: **1,708**) were covered in the **637** Advisories.
- Threat Intelligence indicates again that **Moderately Critical Vulnerabilities** are targeted by hackers.
- More than **half** of all advisories are disclosed by these 4 usual suspect vendors (**Suse, Red Hat, Amazon** and **IBM**)
- Interestingly among these vendors are also the ones with the most **rejected advisories**:
  - **Amazon**: 17 out of 94 advisories were rejected by the Secunia Research Team.
  - **SUSE**: 11 out of 94
  - **Ubuntu**: 10 out of 94
  - **IBM**: 5 out of 94
- **QNAP and Cisco** contributed to half of all Networking related Advisories this month.

**Last month** we reported that 72.99% of all Secunia Advisories had a **Threat** (exploits, malware, ransomware, etc.) associated with them, **this month** the number has been a **little higher** to **73.94%**

Using Threat Intelligence is going to help you with prioritizing what needs to be **patched** immediately.

Software Vulnerability – and Patch Management is becoming more and more important.

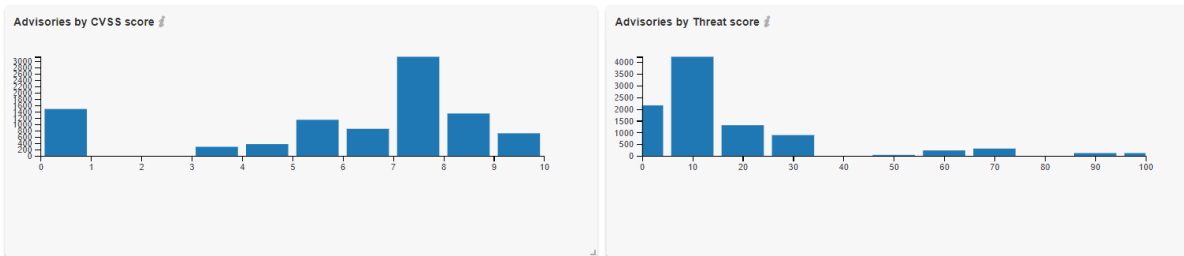
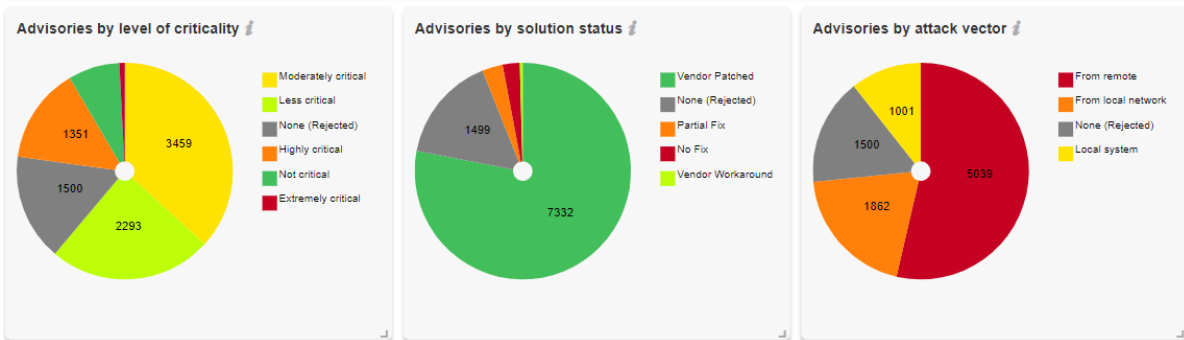
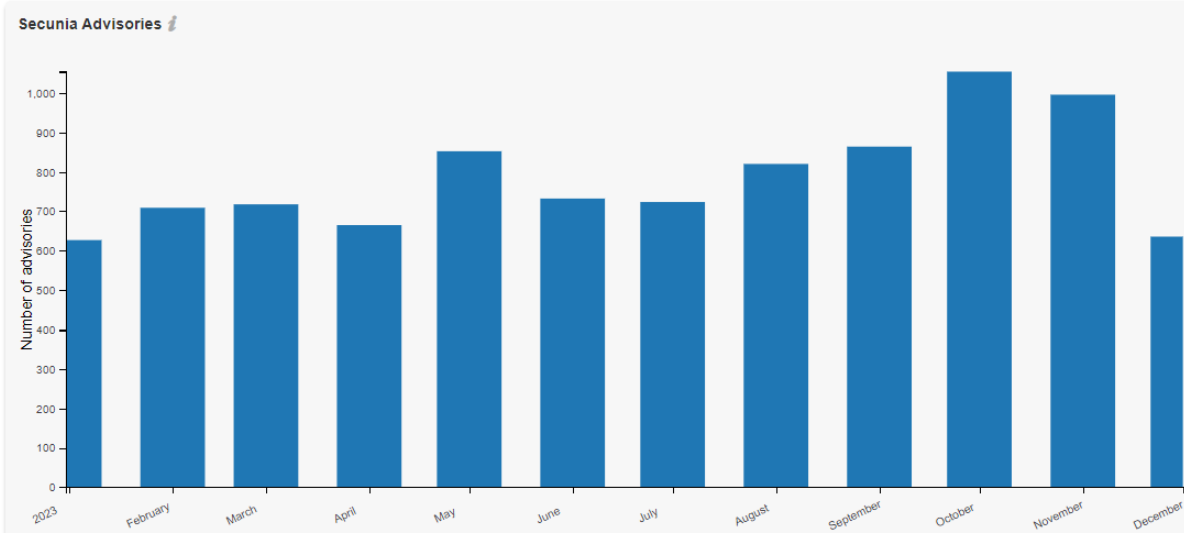
Due to the ongoing global threats, attacks on critical infrastructures in many countries are increasing.

Back in 2019 (just before Covid) patching was recommended within 30 days (or 14 days for CVSS score 7 or higher)

Right now, hackers can deploy exploits **within 1 week** and even within **24 hours**. This means that organizations need to prioritize even better to quickly patch vulnerabilities (especially the ones with threats associated with them)

# Year-to-date overview

As of **December 31, 2023**, the year-to-date total is at **9,402** Advisories ↑ which is higher than 2022: **7,097** YTD Advisories)



## Monthly data

This month, a total of **637** ↓ (last month: **1,055**) advisories were reported by the Secunia Research Team.

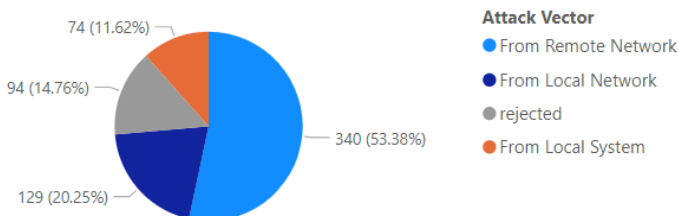
This month:	#	Change (last month):
Total # of advisories	<b>637</b>	↓ ( <b>996</b> )
Unique Vendors	<b>84</b>	↓ ( <b>104</b> )
Unique Products	<b>271</b>	↓ ( <b>344</b> )
Unique Versions	<b>329</b>	↓ ( <b>408</b> )
Rejected Advisories *	<b>94</b>	↓ ( <b>142</b> )
Total Unique CVE ID's reported	<b>1,518</b>	↓ ( <b>1,708</b> )

↑ increased ↓ lower ↔ same

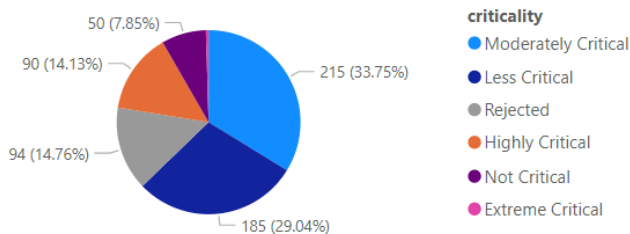
\* **94** advisories have received the "rejected" status which means in general that leveraging it would require one or more violations of security best practices (e.g., product not securely configured or not used securely) or that it was "too weak of a gain" (e.g., administrative, local users already being too privileged so that additional gain becomes neglectable). More information about rejections can be found in the rejection section.

## Vulnerability information

### Advisories by attack vector



### Advisories by criticality

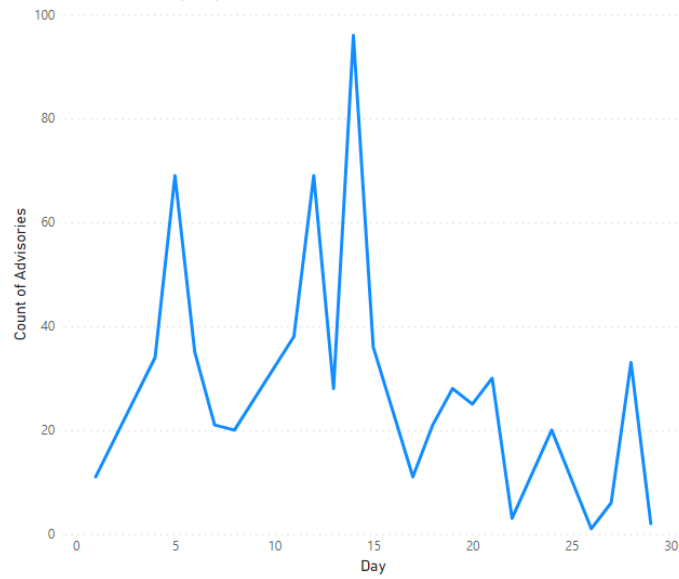


### Advisories per day

Below an overview of the daily advisory count.

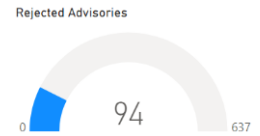
Year	Month	Day	# of Advisories
2023	December	1	11
2023	December	4	34
2023	December	5	69
2023	December	6	35
2023	December	7	21
2023	December	8	20
2023	December	11	38
2023	December	12	69
2023	December	13	28
2023	December	14	96
2023	December	15	36
2023	December	17	11
2023	December	18	21
2023	December	19	28
2023	December	20	25
2023	December	21	30
2023	December	22	3
2023	December	24	20
2023	December	26	1
2023	December	27	6
2023	December	28	33
2023	December	29	2
<b>Total</b>			<b>637</b>

Count of Advisories by Day



## Rejected advisories.

There are many vulnerabilities posted to the National Vulnerability Database (NVD) by a lot of people and companies. They are not always valid, assigned a proper criticality, and in some cases, a vulnerability may be legitimate but not afford the attacker any benefit.

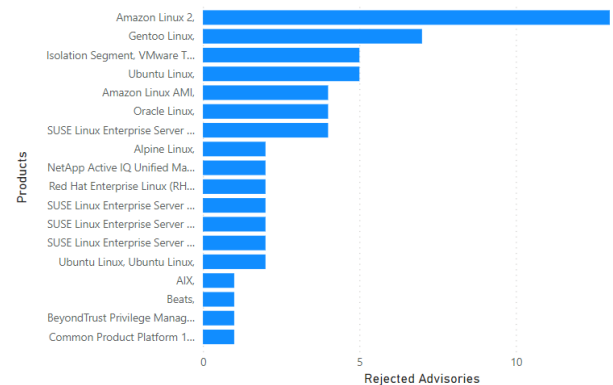


The Secunia Research team at Flexera evaluates vulnerabilities from hundreds of sources, rescors them when necessary and even rejects vulnerabilities not worth your attention. Rejection Advisories help you to reduce the volume of vulnerabilities to be mitigated by helping you focus only on those that present a reasonable risk to your environment.

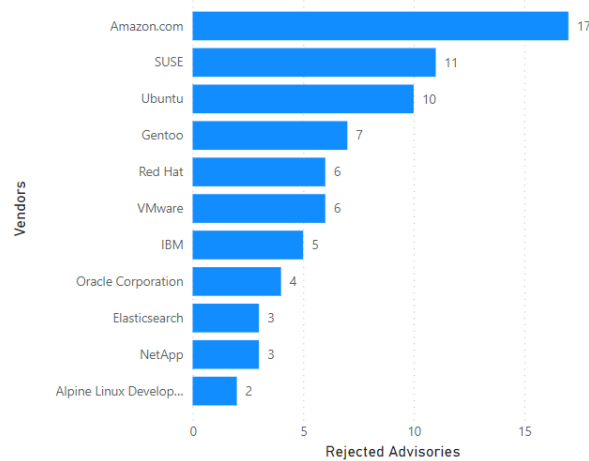
An advisory may be rejected many reasons. The most common are:

- No reachability**  
 The vulnerability cannot be exploited because the affected systems cannot be reached by an attacker.
- No gain**  
 The vulnerability may be reached, but without any gain for the attacker.
- No exploitability**  
 The vulnerability cannot be exploited because, for example, policy forbids installation of the affected software.
- Dependent on other**  
 The vulnerability cannot be exploited by itself but depends on another vulnerability being present.

Rejected Advisories by Products



Rejected Advisories by Vendors





# Addressing awareness with vulnerability insights

**Prevalence:**

- How many systems would benefit from any given security update?
- Does it pose a risk? It's on all systems? **Patch.**

**Asset Sensitivity:**

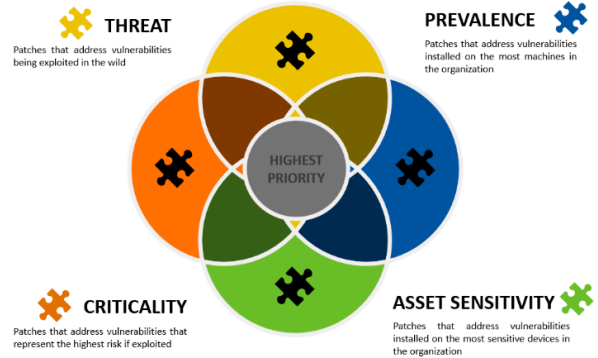
- What systems would result in the most risk if compromised?
- Is it a high-risk device? **Patch.**

**Criticality:**

- The most popular method of thoughtful prioritization.
- If exploited, how bad could it affect your security? Is it designated to be of a high criticality? **Patch.**

**Threat Intelligence:**

- The newest and most impactful method focuses on the likelihood of exploitation.
- Is it likely to be exploited? **Patch.**



**How do we know that more insights/data is needed?**

Focusing on vulnerabilities with CVSS 7 or higher would address about 50 percent of exploits. Most exploits are CVSS scored between 4 and 7. Focusing on vulnerabilities for the top 20 vendors would address only about 20 percent.

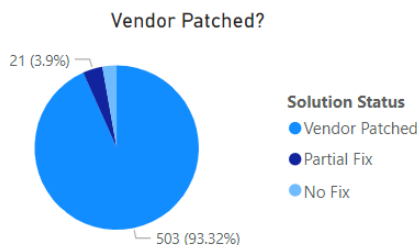
criticality	avg threat score x # of advisories
Moderately Critical	3,626.00
Highly Critical	2,295.00
Less Critical	2,125.00
Not Critical	481.00
Extreme Critical	264.00
<b>Total</b>	<b>8,791.00</b>

**Take away 1:**

Critical vulnerabilities do not necessarily present the most risk. Leverage threat intelligence to better prioritize what demands your most urgent attention. Organizations who do not have Threat Intelligence data should consider implementing this to ensure they have the complete picture.

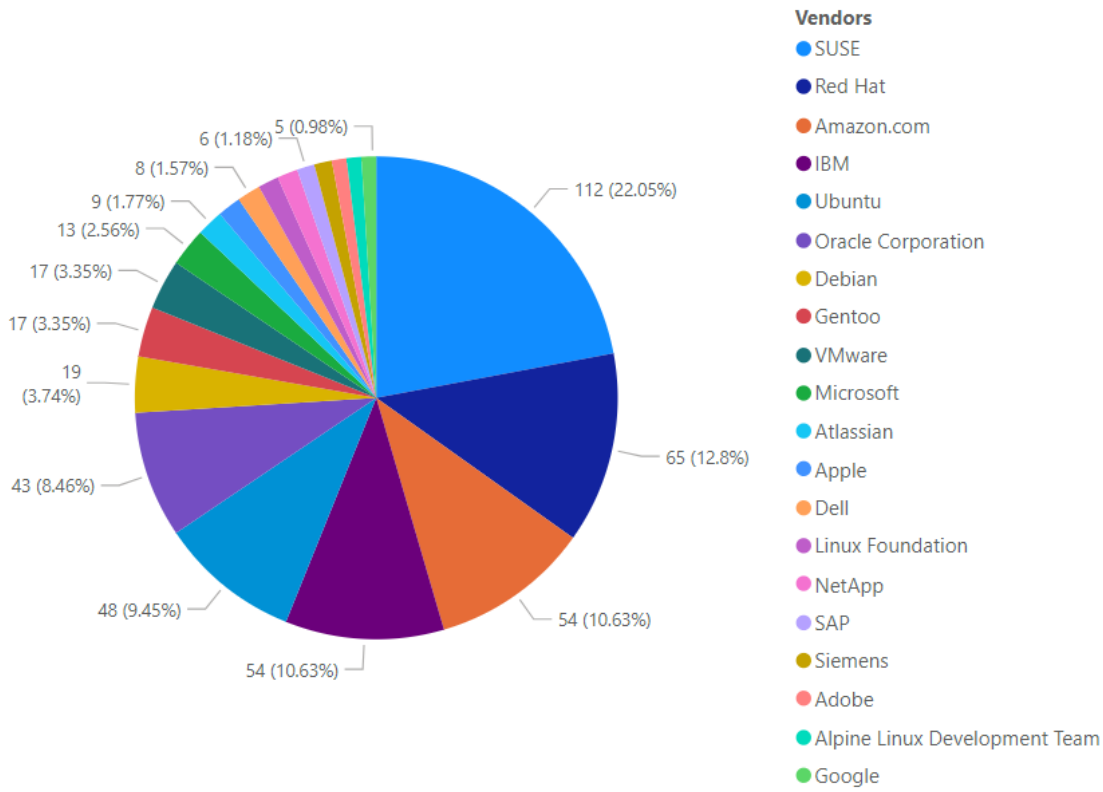
**Take away 2:**

Most vulnerabilities have a patch available (typically within 24 hours after disclosure).  
*(No fix : no patch available for this insecure version, therefore need to upgrade)*

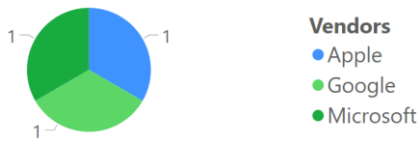


## Vendor view

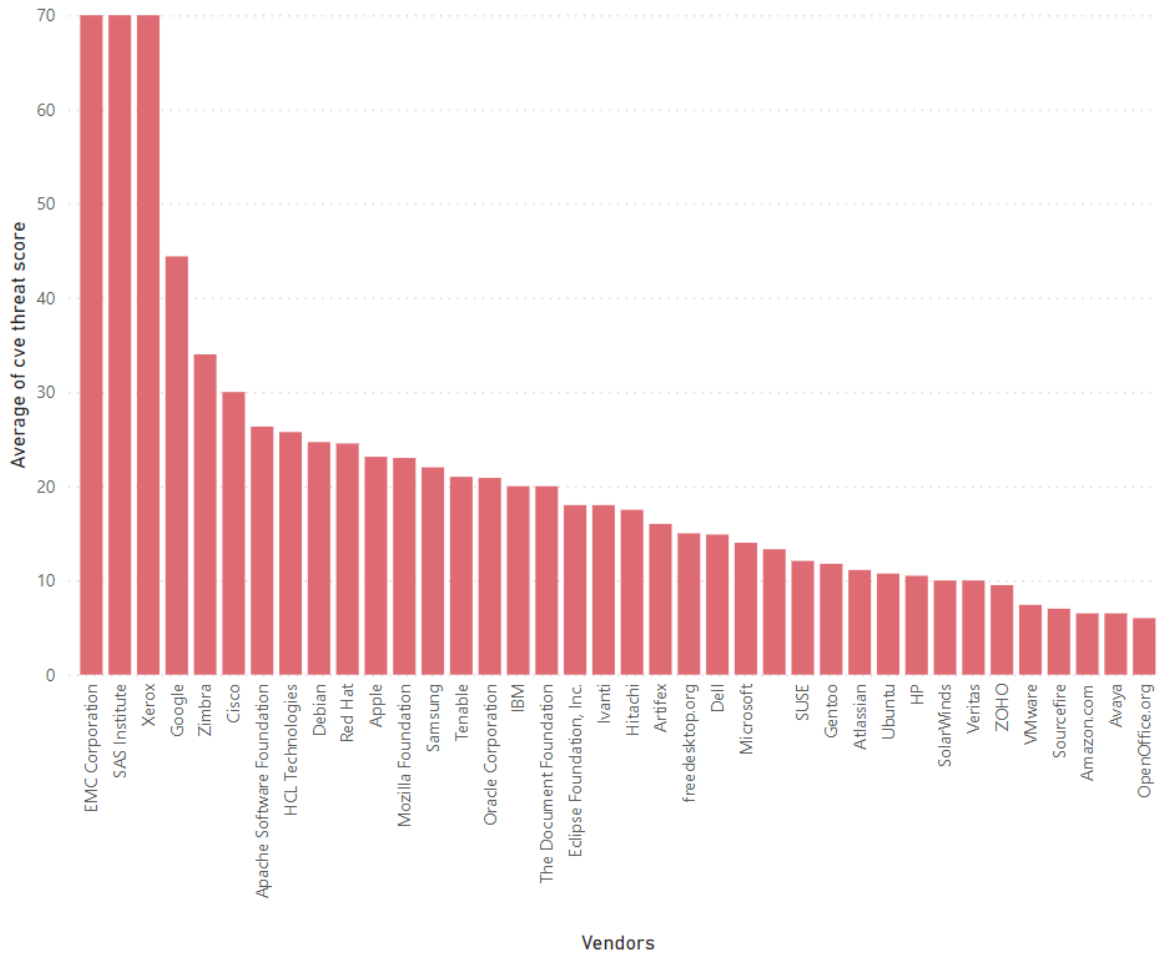
### Top vendors with the most advisories



## Top vendors with zero-day

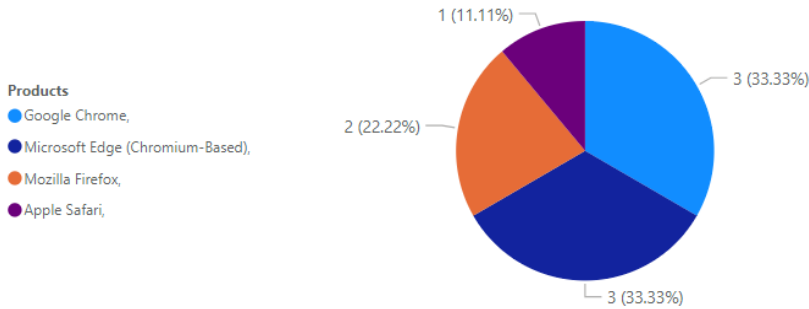


## Top Vendors with highest average threat score



## Browser-related advisories

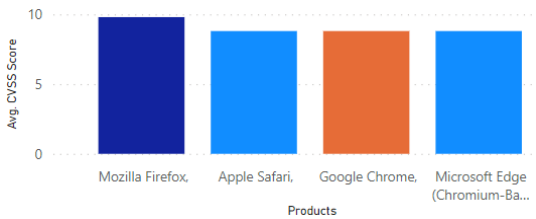
### Advisories per browser



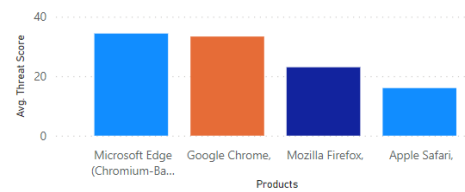
### Browser zero-day vulnerabilities

Count of Advisories	Products	Advisories
1	Google Chrome,	SA122420
1	Microsoft Edge (Chromium-Based),	SA122408
2		

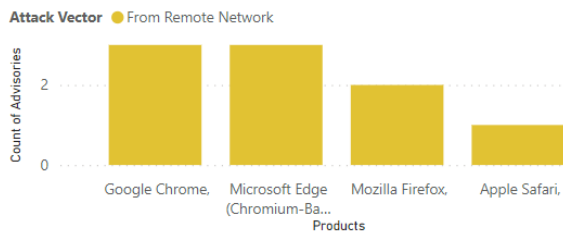
### Average CVSS (criticality) score per browser



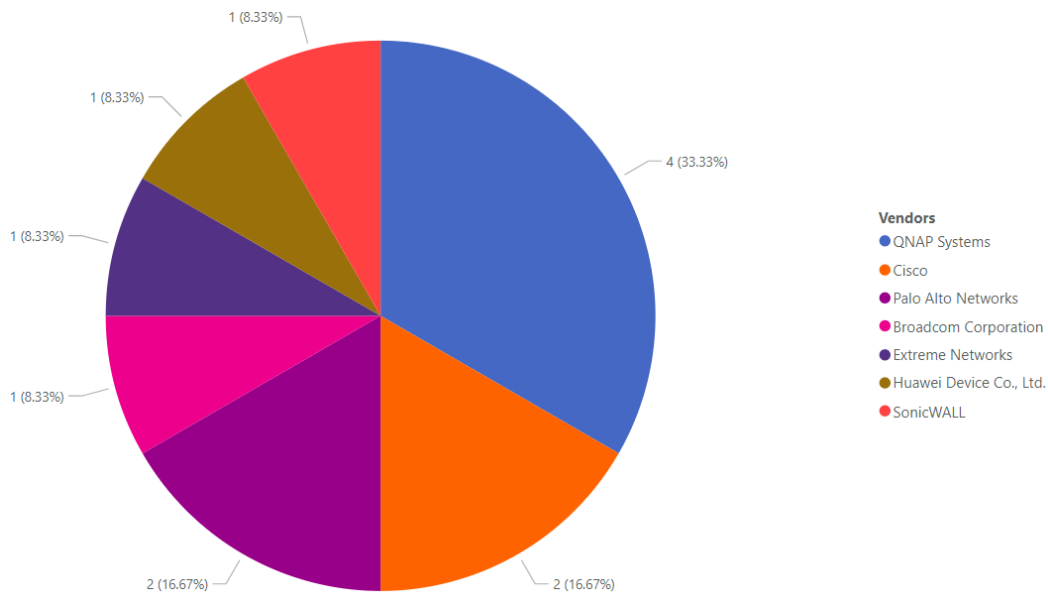
### Average threat score per browser



### What's the Attack Vector?



## Networking related advisories

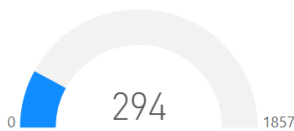


## Threat intelligence

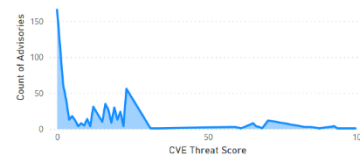
In a world where there are more than 18,000 new vulnerabilities every year, being smart about prioritizing remediation efforts is essential. Leveraging Threat Intelligence, another valuable layer of insight is provided to help you understand which of the vulnerabilities affecting your environment are actually being exploited in the wild.

Leveraging machine learning, artificial intelligence, and human curation from thousands of sources in the open, deep and dark web, Threat Intelligence augments Software Vulnerability Research’s vulnerability intelligence with a Threat Score that provides the ultimate prioritization tool for your busy desktop operations teams.

### Count of malware-exploited CVEs



### Count of advisories by CVE threat score



### Threat intelligence advisory statistics:

SAIDs with a threat score (1+)	<b>471</b> ↓ (727)	73.94%
SAIDs with no threat score (=0)	<b>166</b> ↓ (269)	26.06%

SAID: Secunia Advisory Identifier

Range	# SAIDS	Last month
<b>Low-range threat score SAIDs (1-12)</b>	<b>212</b> ↓	<b>(191)</b>
<b>Medium-range threat score SAIDs (13-23)</b>	<b>208</b> ↓	<b>(433)</b>
Critical-range threat score SAIDs (45-70)	35 ↓	(74)
Very critical threat score SAIDs (71-99)	14 ↓	(25)
High-range threat score SAIDs (24-44)	2 ↓	(4)

More information about how the Secunia team calculates the threat score:

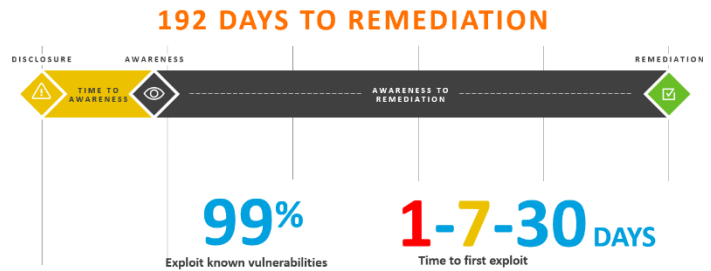
- [Evidence of exploitation](#)
- [Criteria for the threat Score Calculation](#)
- [Threat Score Calculation - Examples](#)

## Patching

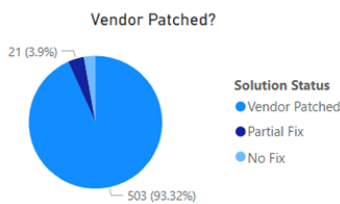
Most of this month's vulnerabilities are vendor patched. In fact, most vulnerabilities are patched within 24 hours after disclosure.

The challenge remains that organizations do not have full visibility or awareness when a vulnerability is disclosed (time to awareness). Another big challenge is the time to remediation (the time from having this information, correlating that with your environment and initiating the process to get the software updated to a secure version).

### The Risk Window



## Vulnerabilities that are vendor patched

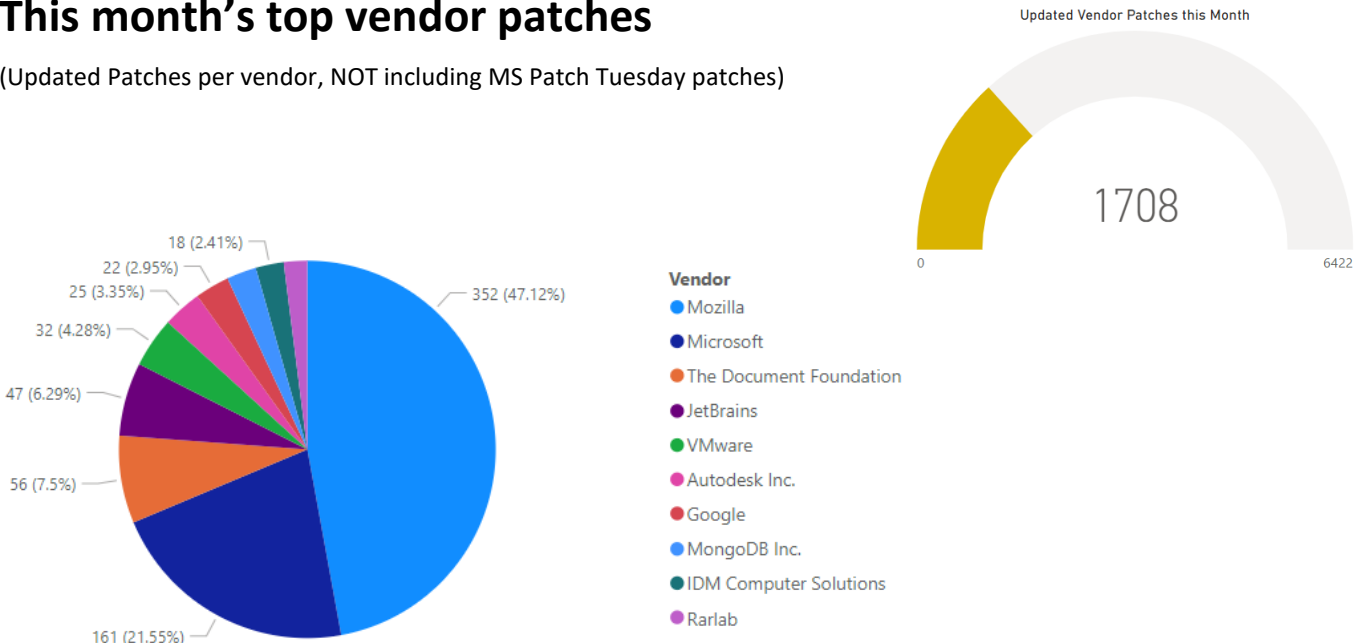


## Flexera's Vendor Patch Module (VPM) statistics

Flexera has the largest third-party patch catalog (**More than 6,400**) in the world. This helps customers act quicker and save time by offering an integrated approach to effectively locate, prioritize threats and remediate them quickly to lower the risk to your organization.

## This month's top vendor patches

(Updated Patches per vendor, NOT including MS Patch Tuesday patches)



## Other sources

### CISA



For the benefit of the cybersecurity community and network defenders—and to help every organization better manage vulnerabilities and keep pace with threat activity—CISA maintains the authoritative source of vulnerabilities that have been exploited in the wild: the Known Exploited Vulnerability (KEV) catalog. CISA strongly recommends all organizations review and monitor the KEV catalog and prioritize remediation of the listed vulnerabilities to reduce the likelihood of compromise by known threat actors.

### This month's additions to the KEV catalog

First column "Day" is the date added to KEV Catalog.

Day	CVE	Vendor	Product	Month	Day
4	CVE-2023-42916	Apple	Multiple Products	December	25
4	CVE-2023-42917	Apple	Multiple Products	December	25
5	CVE-2022-22071	Qualcomm	Multiple Chipsets	December	26
5	CVE-2023-33063	Qualcomm	Multiple Chipsets	December	26
5	CVE-2023-33106	Qualcomm	Multiple Chipsets	December	26
5	CVE-2023-33107	Qualcomm	Multiple Chipsets	December	26
7	CVE-2023-41265	Qlik	Sense	December	28
7	CVE-2023-41266	Qlik	Sense	December	28
11	CVE-2023-6448	Unitronics	Vision PLC and HMI	December	18
21	CVE-2023-47565	QNAP	VioStor NVR	January	11
21	CVE-2023-49897	FXC	AE1021, AE1021PE	January	11



## Due Date this month

CISA adds known exploited vulnerabilities to the catalog when there is a clear action for the affected organization to take. The remediation action referenced in [BOD 22-01](#) requires federal civilian executive branch (FCEB) agencies to take the following actions for all vulnerabilities in the KEV, and

**CISA strongly encourages all organizations to do the same:**

Month	Day	CVE	Vendor	Product
December	4	CVE-2023-47246	SysAid	SysAid Server
December	5	CVE-2023-36025	Microsoft	Windows
December	5	CVE-2023-36033	Microsoft	Windows
December	5	CVE-2023-36036	Microsoft	Windows
December	7	CVE-2020-2551	Oracle	Fusion Middleware
December	7	CVE-2023-1671	Sophos	Web Appliance
December	7	CVE-2023-36584	Microsoft	Windows
December	12	CVE-2023-4911	GNU	GNU C Library
December	18	CVE-2023-6448	Unitronics	Vision PLC and HMI
December	21	CVE-2023-49103	ownCloud	ownCloud graphapi
December	21	CVE-2023-6345	Google	Skia
December	25	CVE-2023-42916	Apple	Multiple Products
December	25	CVE-2023-42917	Apple	Multiple Products
December	26	CVE-2022-22071	Qualcomm	Multiple Chipsets
December	26	CVE-2023-33063	Qualcomm	Multiple Chipsets
December	26	CVE-2023-33106	Qualcomm	Multiple Chipsets
December	26	CVE-2023-33107	Qualcomm	Multiple Chipsets
December	28	CVE-2023-41265	Qlik	Sense
December	28	CVE-2023-41266	Qlik	Sense

## More information

Below a few links with information about how Flexera can help you with creating an effective software vulnerability and patch management process to reduce security risk.

- [Flexera's Software Vulnerability Manager landing page](#)
- [Request a trial / demo](#)
- [Flexera's Community Pages](#) with lots of great resources of information including:
  - Software Vulnerability Management Blog
  - Software Vulnerability Management Knowledge Base
  - Product Documentation
  - Forum
  - Learning Center

## About Flexera

Flexera delivers SaaS-based IT management solutions that enable enterprises to accelerate digital transformation and multiply the value of their technology investments. We help organizations inform their IT with unparalleled visibility into complex hybrid ecosystems. And we help them transform their IT with tools that deliver the actionable intelligence to effectively manage, govern and optimize their hybrid IT estate.

More than 50,000 customers subscribe to our technology value optimization solutions, delivered by 1,300+ passionate team members worldwide. To learn more, visit [flexera.com](https://flexera.com)