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

811 702

# **JANUARY 2023**



8.9

January 2023

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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 <u>Software Vulnerability</u> <u>Research</u> and <u>Software Vulnerability Manager</u> 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 <u>Secunia Advisories and their contents</u>.

### 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.



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### Monthly Vulnerability Review January 2023

### Summary

Total advisories : 626  $\uparrow$  (last month: 512).

January reported more advisories than in December,

Important conclusions from this month report are:

- 108 rejected advisories have been reported
- The Secunia Research Team reported No (0) Extremely critical advisories this month (4 last month)
- 5 Zero-Day Advisory reported (Only MS Windows versions)
- Over 1,590 CVE's (last month : 1,456) were covered in the 626 Advisories
- Threat Intelligence indicates that more **Medium Vulnerabilities** are targeted by hackers.
- More than half of all advisories are disclosed by 4 vendors (Redhat 16%, Ubuntu 13%, SUSE 12%, IBM 10%)
- Juniper is contributing to 50% of all Networking related Advisories.

Last month we reported that **64.66%** of all Secunia Advisories had a **Threat** (exploits, malware, ransomware, etc.) associated with them, this month the number has been **higher** to **66.45%** 

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 Russia-Ukraine conflict, 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 are able to 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)

#### Noticeable information this month:

- Three security vulnerabilities affecting VMware's vRealize Log Insight platform now have public exploit code circulating, offering a map for cybercriminals to follow to weaponize them. These include two critical unauthenticated remote code execution (RCE) bugs. Please Patch ASAP!
- CISA added 5 vulnerabilities on the KEV (Known Exploited Vulnerabilities) list . the related January vulns are:
  - CVE-2017-11357, Telerik UI for ASP.NET AJAX
  - CVE-2022-47966, Zoho, ManageEngine
  - o CVE-2022-44877, CWP , Control Web Panel OS Command Injection Vulnerability
  - CVE-2022-41080, Microsoft Exchange Server
  - CVE-2023-21674, Microsoft Windows ALPC

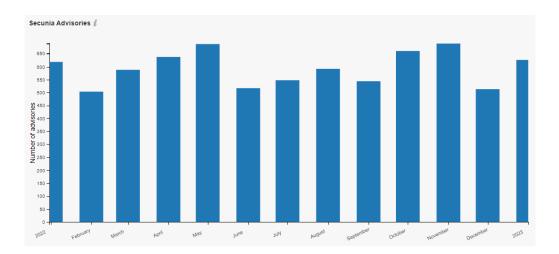
#### Interesting sources of information:

- <u>https://www.cisa.gov/known-exploited-vulnerabilities-catalog</u>
- <u>https://www.bleepingcomputer.com/news/security/</u>
- https://thehackernews.com/search/label/Vulnerability
- https://www.darkreading.com/vulnerability-management?page=1
- <u>https://portswigger.net/daily-swig/vulnerabilities</u>
- <u>https://www.securityweek.com/virus-threats/vulnerabilities</u>

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### Year-to-date overview

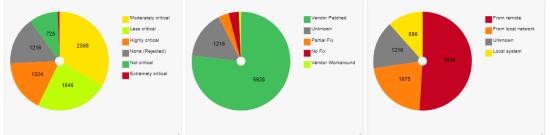
As of January 31, 2023, the year-to-date total is at 626 Advisories  $\uparrow$  which is higher than 2022 : 619 YTD Advisories)

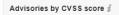


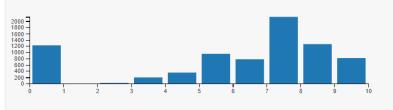
Advisories by level of criticality 🦸

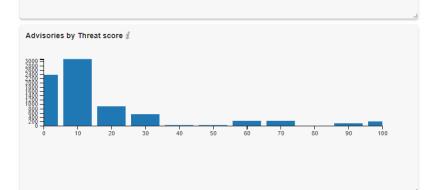












# **Monthly data**

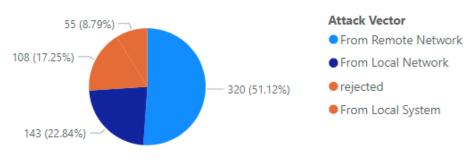
This month, a total of **689**  $\uparrow$  (last month: **689**) advisories were reported by the Secunia Research Team.

This month:	#	Change (last month):
Total # of advisories	626	<b>↑</b> (512)
Unique Vendors	82	<b>↑</b> (81)
Unique Products	309	<b>↓</b> (318)
Unique Versions	375	<b>↑</b> (374)
Rejected Advisories *	108	<b>↑</b> (86)
		$\uparrow$ increased $\downarrow$ lower $\leftrightarrow$ same

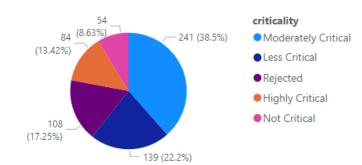
\* **108** advisories have received the "rejected" status which means in general that leveraging it would require one or more violations of security best practices (e.g., product not securely configured or not used securely) or that it was "too weak of a gain" (e.g., administrative, local users already 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**



### Monthly Vulnerability Review January 2023

### Advisories per day

Below an overview of the daily advisory count.

Year	Month	Day	# of Advisories
2023	January	2	3
2023	January	3	21
2023	January	4	12
2023	January	5	21
2023	January	6	8
2023	January	9	27
2023	January	10	45
2023	January	11	28
2023	January	12	35
2023	January	13	25
2023	January	14	11
2023	January	15	2
2023	January	16	7
2023	January	17	42
2023	January	18	56
2023	January	19	14
2023	January	20	21
2023	January	23	65
2023	January	24	58
2023	January	25	28
2023	January	26	22
2023	January	27	19
2023	January	30	33
2023	January	31	23
Total			626

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### **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.

108

626

The Secunia Research team at Flexera evaluates vulnerabilities from hundreds of sources, rescores 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

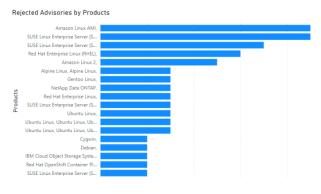
> The vulnerability cannot be exploited because the affected systems cannot be reached by an attacker.

No gain •

> The vulnerability may be reached, but without any gain for the attacker.

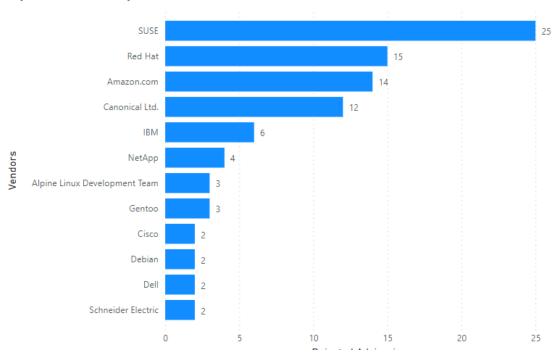
No exploitability •

> 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 Vendors

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### 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**.

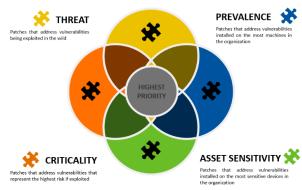
#### **Threat Intelligence:**

- 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	3,506.00
Highly Critical	2,659.00
Less Critical	1,600.00
Not Critical	372.00
Total	8,137.00

#### 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).

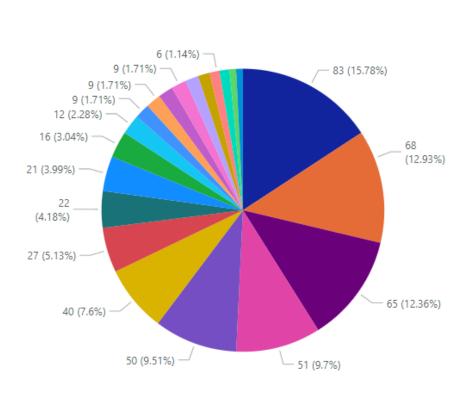


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### **Vendor view**

### Top vendors with the most advisories

Note: Canonical Ltd. = UBUNTU



# Red Hat Canonical Ltd.

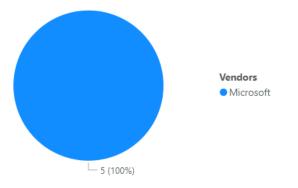
SUSE

Vendors

- IBM
- Oracle Corporation
- Amazon.com
- Debian
- Juniper Networks
- Microsoft
- Alpine Linux Development Team
- CentOS Project
- Dell
- Gentoo
- Linux Foundation
- NetApp
- Cisco
- Apple
- Apache Software Foundation
- SAP
- Mozilla Foundation
- Siemens

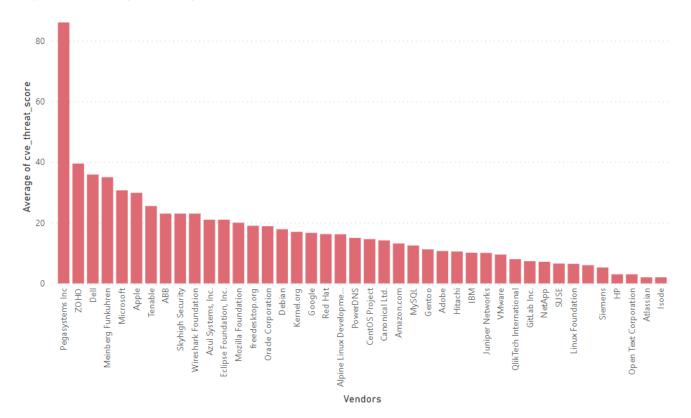
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### Top vendors with zero-day



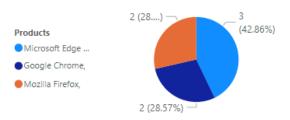
### Top Vendors with highest average threat score

Top Vendors with highest average Threat Score



### **Browser-related advisories**

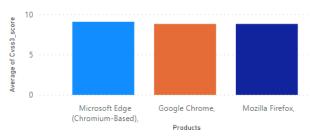
### Advisories per browser



### **Browser zero-day vulnerabilities**

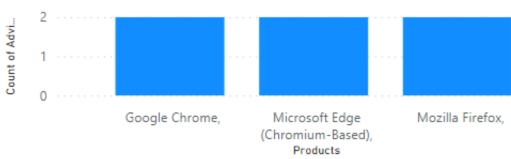
No Browser zero-day vulnerabilities reported this month

### Average CVSS (criticality) score per browser

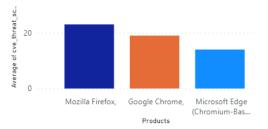


### What's the Attack Vector ?

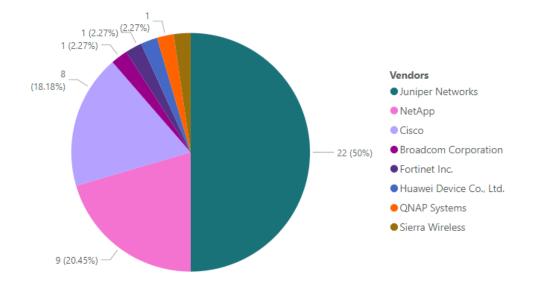
#### Attack\_Vector OFrom Remote Network



### Average threat score per browser



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### **Networking related advisories**

### Monthly Vulnerability Review January 2023

### **Threat intelligence**

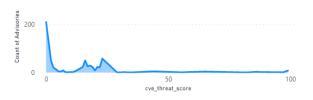
In a world where there are more than 18,000 new vulnerabilities every year, being smart about prioritizing remediation efforts is essential. Leveraging Threat Intelligence, another valuable layer of insight is provided to help you understand which of the vulnerabilities affecting your environment are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









### Threat intelligence advisory statistics:

SAIDs with a threat score (1+)	<b>416个(</b> 331)	66.45%
SAIDs with no threat score (=0)	<b>210<b>↑(</b>181)</b>	33.55%

SAID: Secunia Advisory Identifier

Range	# SAIDS	Last month
Medium-range threat score SAIDs (13-23)	263 个	(175)
Low-range threat score SAIDs (1-12)	113 🕹	(122)
Very critical threat score SAIDs (71-99)	16 🔸	(25)
High-range threat score SAIDs (24-44)	13 🕇	(0)
Critical-range threat score SAIDs (45-70)	11 🕇	(9)

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

- Evidence of exploitation
- <u>Criteria for the threat Score Calculation</u>
- <u>Threat Score Calculation Examples</u>

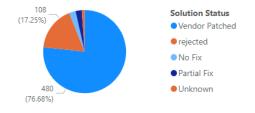
# Patching

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).

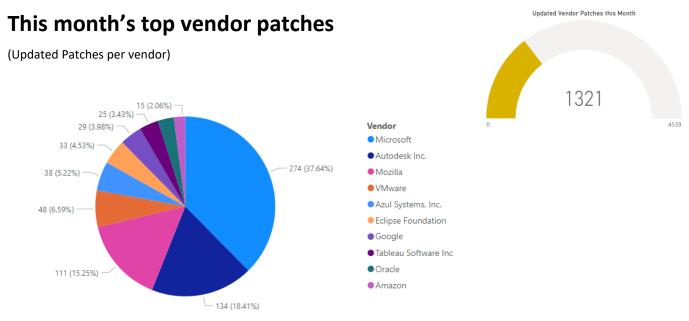
#### The Risk Window 192 DAYS TO REMEDIATION DISCUSSIVE AWARDESS AWARDESS OF AWARDESS

### Vulnerabilities that are vendor patched



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

Flexera has the largest third-party patch catalog (More than 4,500) 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.



# **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
- <u>Flexera's Community Pages</u> with lots of great resources of information including:
  - o Software Vulnerability Management Blog
  - o Software Vulnerability Management Knowledge Base
  - o Product Documentation
  - o Forum
  - o 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.

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