

The 2023 Microsoft Vulnerabilities Report – Dissected

 BeyondTrust

> See into the past, present, and future of the Microsoft vulnerability landscape

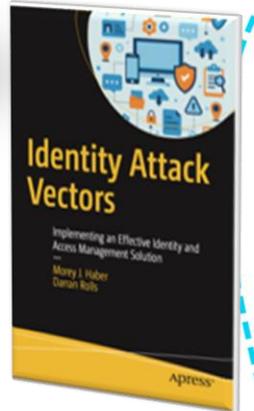
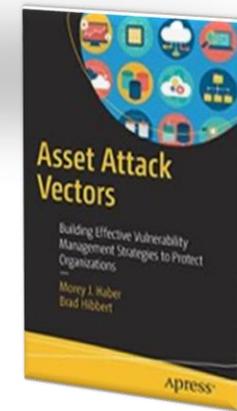
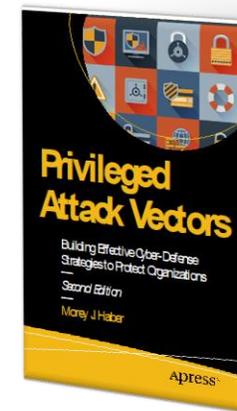
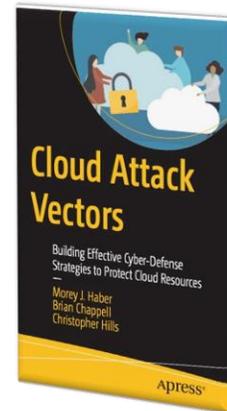
2023 Microsoft Vulnerabilities Report

AGENDA

- Introductions
- The 2023 Microsoft Vulnerabilities Report
- Data Highlights, Trends, & Key Findings
- The Vulnerability Snowball Effect
- A Peek Ahead: The Evolving Microsoft Vulnerabilities Landscape
- Insights from Cybersecurity Experts
- How to Proactively Mitigate Microsoft-Based Vulnerability Risks
- Blended Threat Protection from BeyondTrust

Morey Haber, CSO, BeyondTrust

- 20+ years security experience
- Founding member of the industry group Transparency in Cyber
- Elected in 2020 to the Identity Defined Security Alliance (IDSA) Executive Advisory Board
- Articles on Forbes, Secure World, CSO Online, Dark Reading, and more
- Author of 4 Cybersecurity Attack Vector Books from Apress Media
- Contributing Author to the *Great Power Competition* on Cyber Risks to Critical Infrastructure



What's Inside?



- A **12-month consolidated view and analysis** of the vulnerabilities within Microsoft's platforms and products
- A **10-year review** of key shifts in vulnerability trends
- A **crucial barometer of the threat landscape** for the Microsoft ecosystem
- An **undeniable business case** for the importance of patching and enforcement of least privilege (removing admin rights, etc.) to reduce risk.

Microsoft Patch Tuesday



What Is It?

Patch Tuesday is the unofficial name of Microsoft's scheduled release of the newest security fixes for its Windows operating system and related software applications, as detailed in the Windows Security Updates Guide. It occurs on the second Tuesday of each month.

Why Do We Analyze This Data?

The annual Microsoft Vulnerabilities Report, compiled by BeyondTrust, provides a more holistic view of the Microsoft vulnerabilities landscape and best practices for threat reduction and mitigation.

The Common Vulnerability Scoring System (CVSS)

The industry-standard for identifying a vulnerability's severity level

LOW
0.1 - 3.9

A vulnerability whose **exploitation is extremely difficult**, or has minimal impact

MEDIUM
4.0 - 6.9

Exploitability is **mitigated to a significant degree** by factors such as default configuration, auditing, or difficulty of exploitation

HIGH
7.0 - 8.9

A vulnerability whose **exploitation could result in compromise** of the confidentiality, integrity, or availability of user data, or of the integrity or availability of processing resources

CRITICAL
9.0 - 10.0

A vulnerability whose **exploitation could allow propagation of an internet worm without user action, and possibly without even a prompt**

How vulnerabilities were classified:

- Each vulnerability was classified with the **highest severity rating** of all instances of that vulnerability where it appeared multiple times
- Each vulnerability was classified with the most prevalent type **for all instances** of that Vulnerability
- Product **versions or combinations** were not taken into account
- Vulnerabilities were counted for **both the software and version where appropriate** (for example, a vulnerability for Internet Explorer 11 on Windows 10 is taken as a vulnerability for both Internet Explorer 11 and Windows 10)

Analysis Methodology

The Impact Is Global

1.4 billion monthly active devices are running Windows 10 or 11.¹

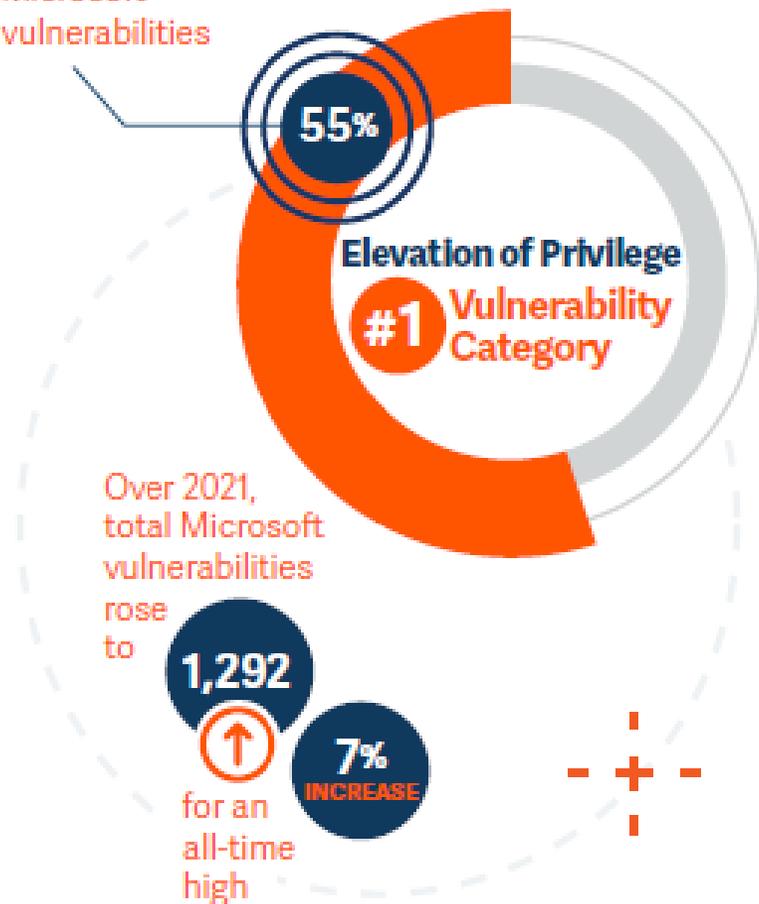
In addition to the 60 million Microsoft 365 consumer subscriptions; 25 million monthly active users on Power Platform; 270 million monthly active users on Teams.

Microsoft Vulnerabilities Report 2023

Highlights & Key Findings

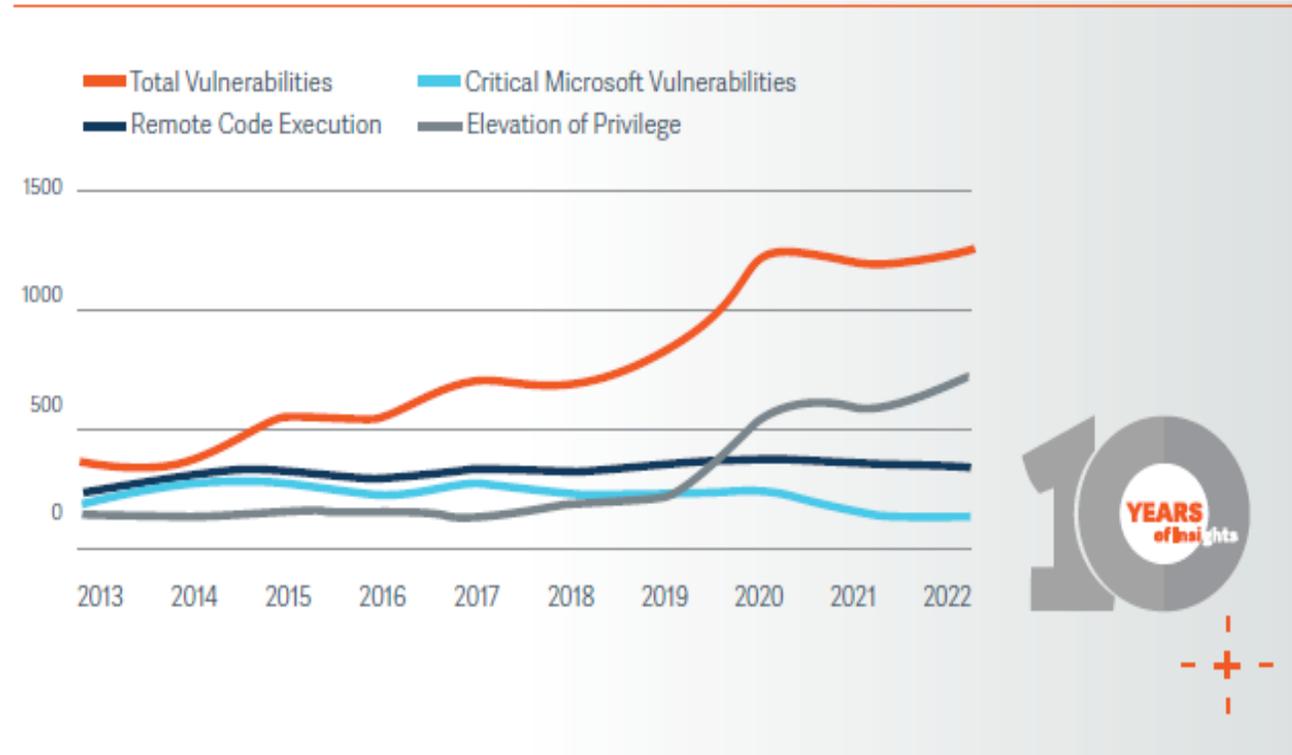
#identiverse

Elevation of Privilege
accounts for
55% of the total
Microsoft
vulnerabilities

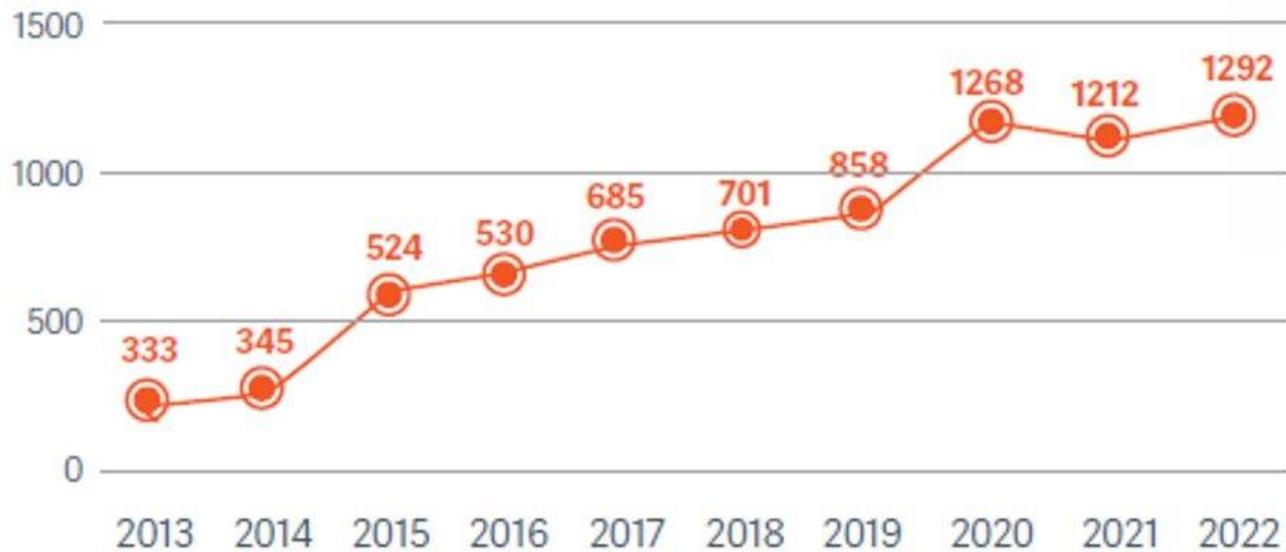


- Total Microsoft **vulnerabilities rose to 1,292, hitting an all-time high** since the report began 10 years ago.
- The **Elevation of Privilege category** dominates the Microsoft vulnerability landscape for the third year in a row and continues its rise.
- Microsoft Azure and Dynamics 365 are not only generating the biggest financial gains for Microsoft; they are also **propelling the biggest gains in number of vulnerabilities.**

A Snapshot of Microsoft Vulnerabilities Across a Decade (2013 – 2022)



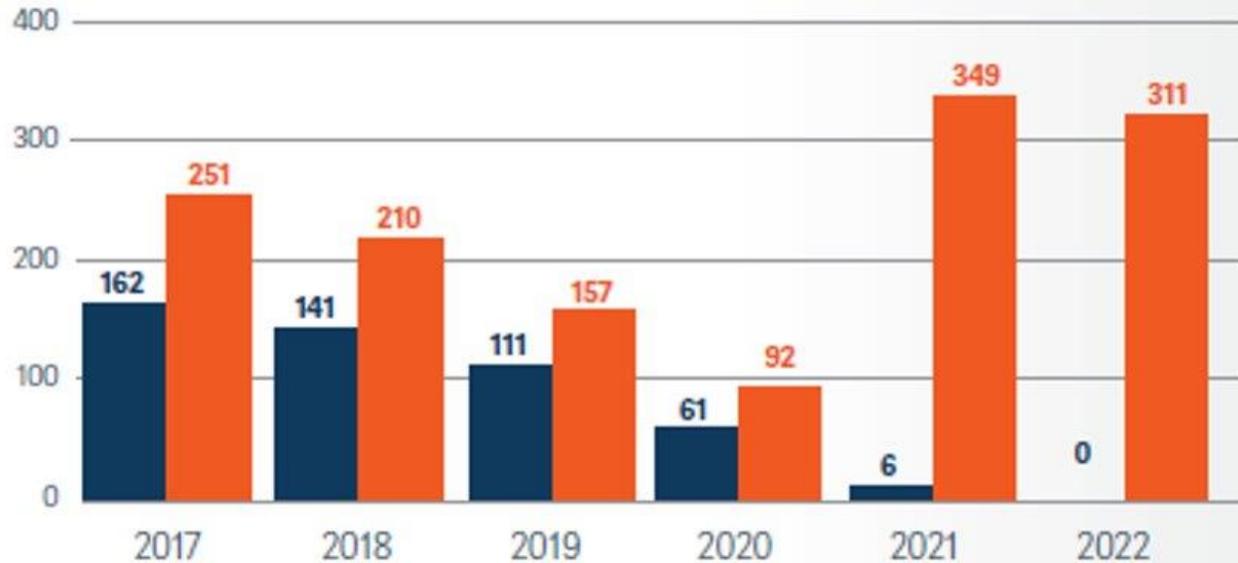
Microsoft Total Vulnerabilities (2013 - 2022)



Total
Microsoft vuln
erabilities **hit**
an all-time high

Microsoft Edge Vulnerabilities* (2017-2022)

■ Total Vulnerabilities
■ Critical Vulnerabilities



*2017-2021 includes Internet Explorer, which was discontinued last year.
2022 figures are for Edge only.

Microsoft
Edge experienced
311 vulnerabilities
last year,
but **none**
were critical.

Microsoft Windows Vulnerabilities
(2017-2022)

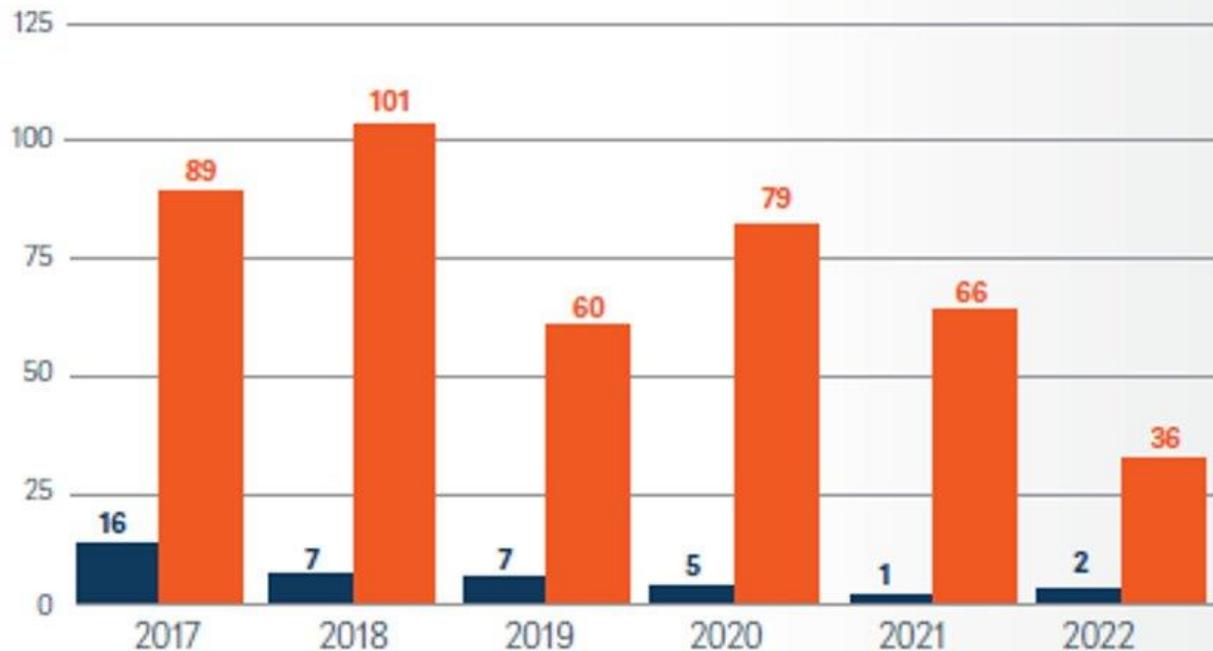
■ Total Vulnerabilities
■ Critical Vulnerabilities



There were **513** Windows vulnerabilities in 2022, 49 of which were critical.

Microsoft Office Vulnerabilities
(2017-2022)

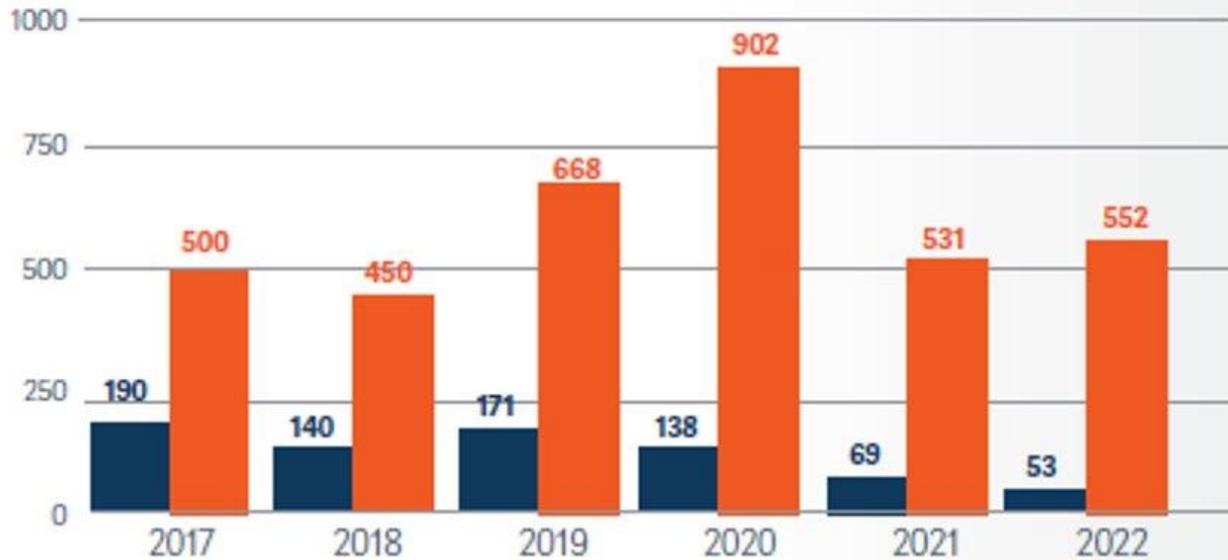
■ Total Vulnerabilities
■ Critical Vulnerabilities



Microsoft Office experienced a five-year low of 36 vulnerabilities in 2022.

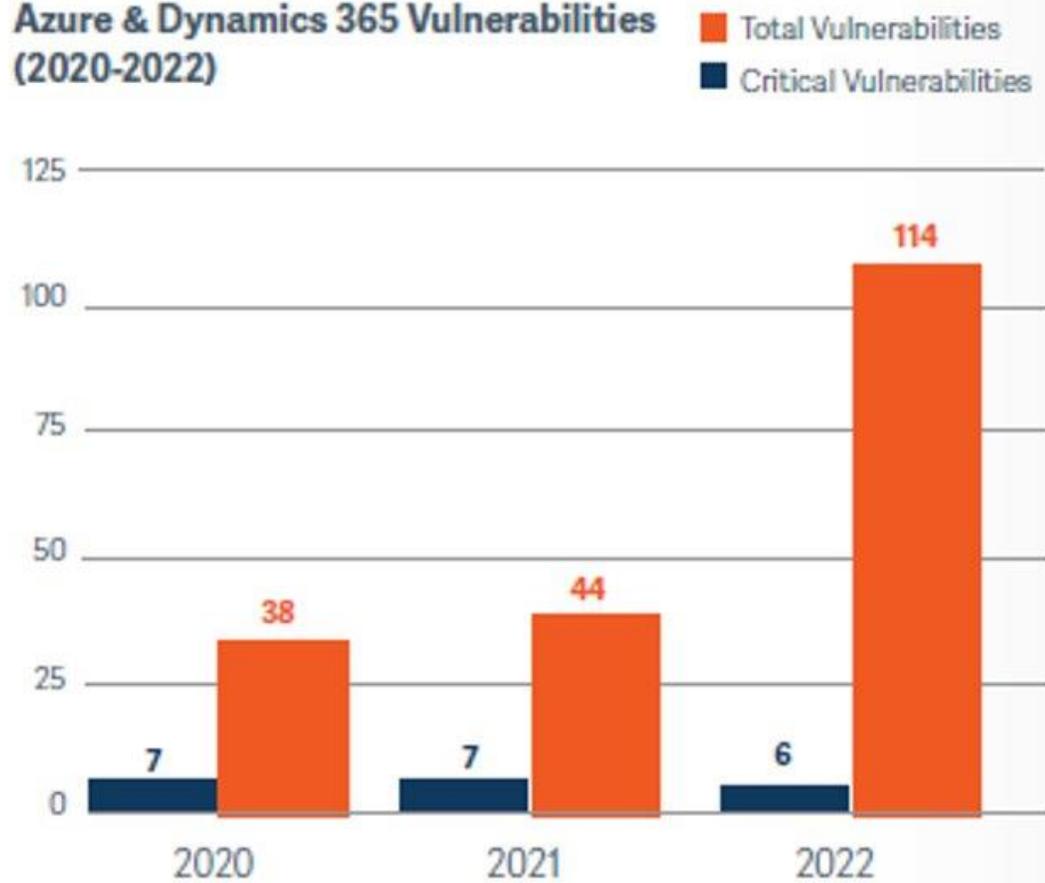
Windows Server Vulnerabilities
(2017-2022)

Total Vulnerabilities
Critical Vulnerabilities



Windows Server vulnerabilities rose slightly to 552 in 2022, but critical vulnerabilities continued their decrease.

Azure & Dynamics 365 Vulnerabilities
(2020-2022)



Azure & Dynamics 365 vulnerabilities **skyrocketed by 159%**, from 44 in 2021 to 114 in 2022.

Key Takeaway?

Vulnerabilities Spotlight

What can we learn?

The importance of proactively recognizing and mitigating vulnerabilities.



THANK YOU!

Available to chat at the BeyondTrust booth #1209

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