

# Microsoft Security Release

April 11, 2023



# Agenda



Security Updates



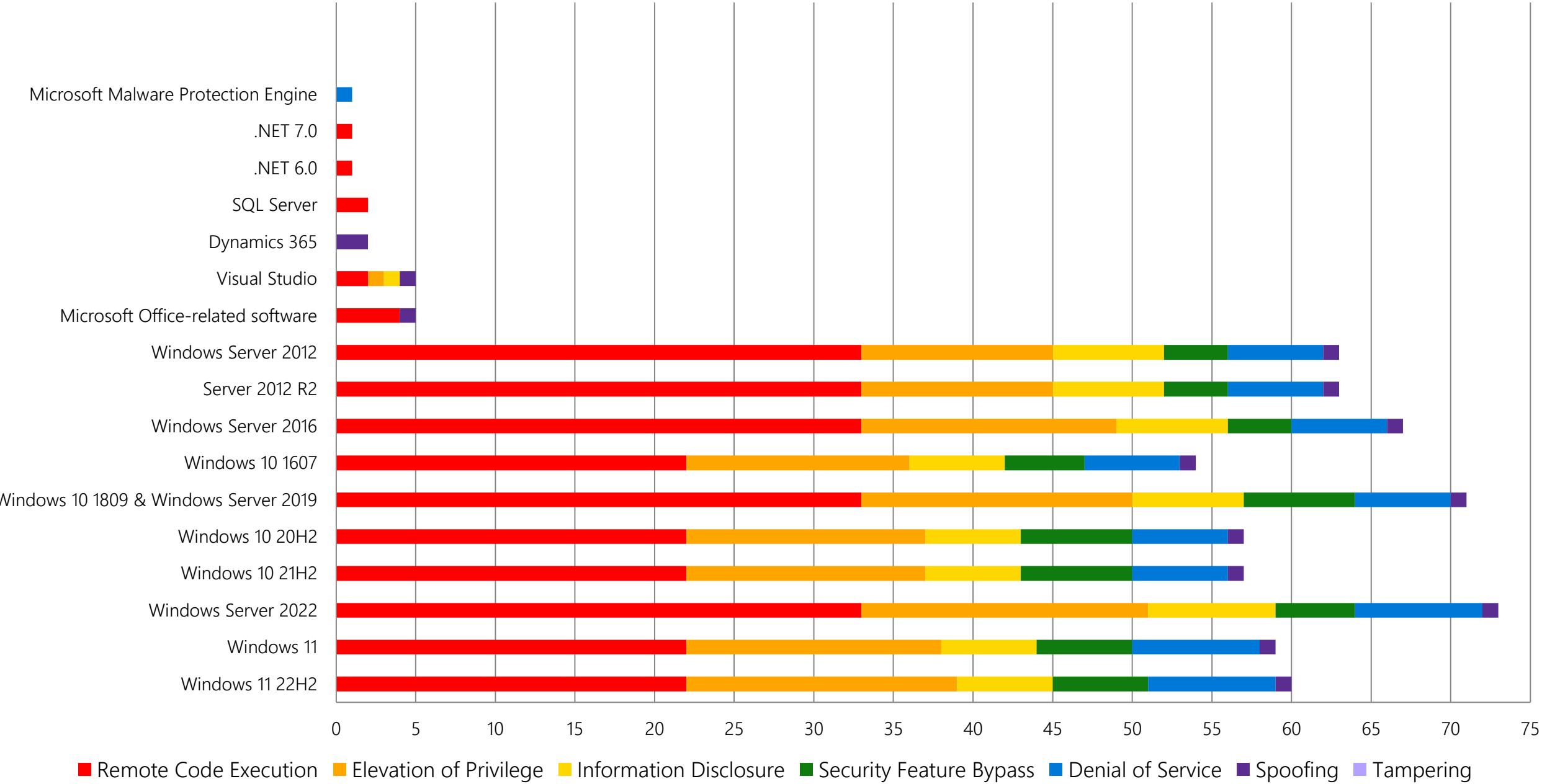
Product Support Lifecycle



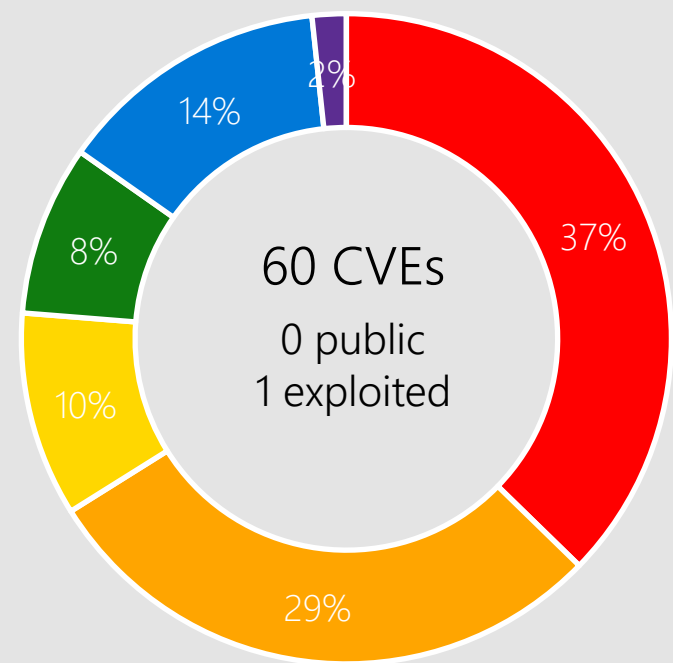
Other resources related to the release

# Monthly Security Release Overview - April 2023

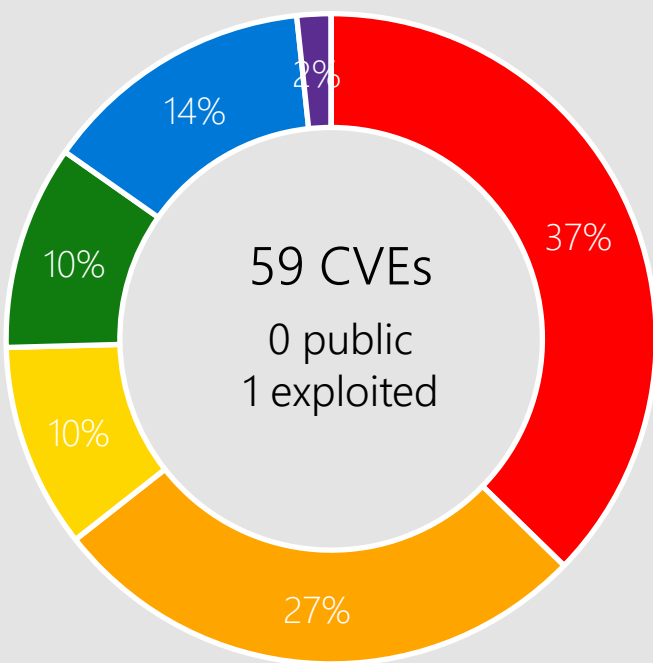
Vulnerabilities fixed by component and by impact



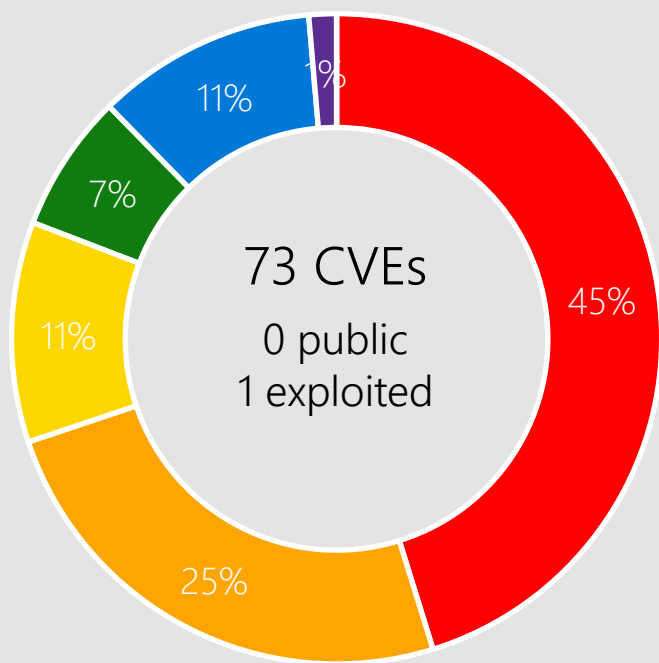
# Windows 11, Server 2022



Windows 11 22H2

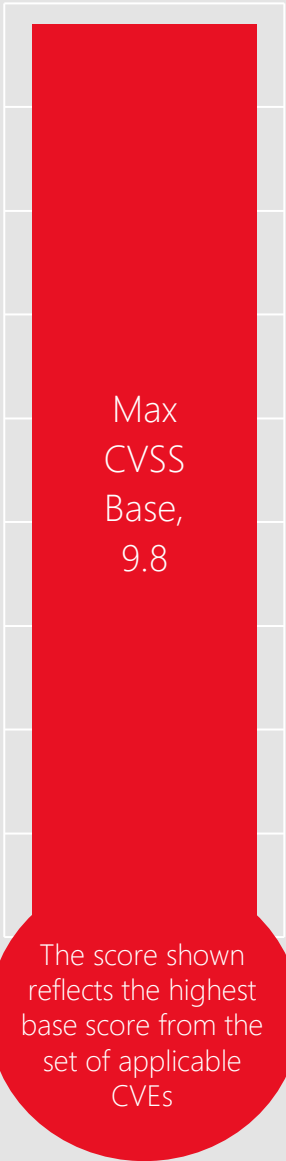


Windows 11



Windows Server 2022

Remote Code Execution   Elevation of Privilege   Information Disclosure   Security Feature Bypass   Denial of Service   Spoofing   Tampering



## Affected Components:

See appendix for details

# CVE-2023-21554 Message Queuing



## Impact, Severity, Disclosure

Remote Code Execution | Critical | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 9.8 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: None | User Interaction: None



## Mitigations

Windows message queuing service needs to be enabled for a system to be exploitable.  
Check for Message Queuing service and TCP 1801 listening



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-28250 PGM



## Impact, Severity, Disclosure

Remote Code Execution | Critical | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 9.8 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: None | User Interaction: None



## Mitigations

Windows message queuing service needs to be enabled for a system to be exploitable.  
Check for Message Queuing service and TCP 1801 listening



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-21727 RPC Runtime



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.8 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: Low | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

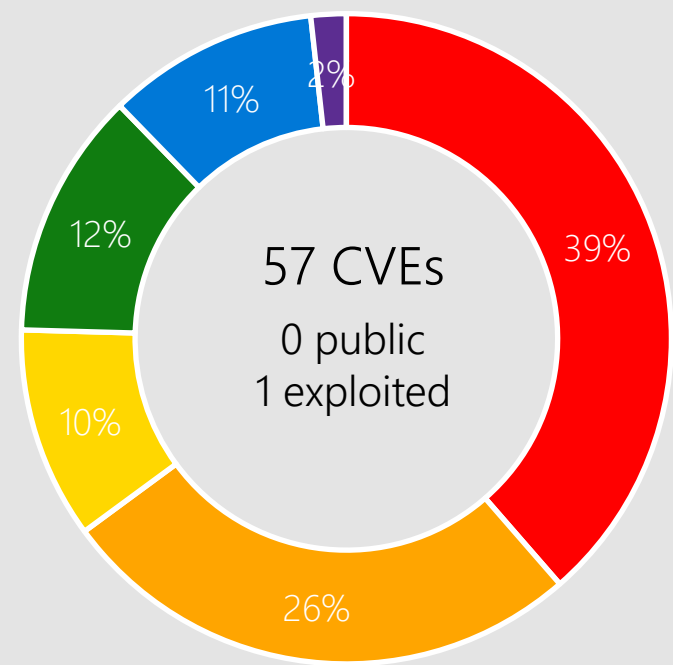
Microsoft has not identified any workarounds for this vulnerability.

## Affected Software

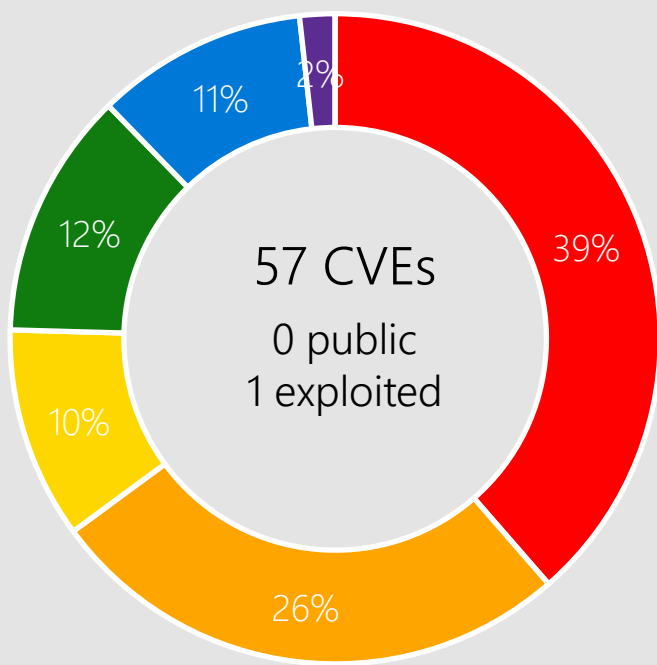


Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

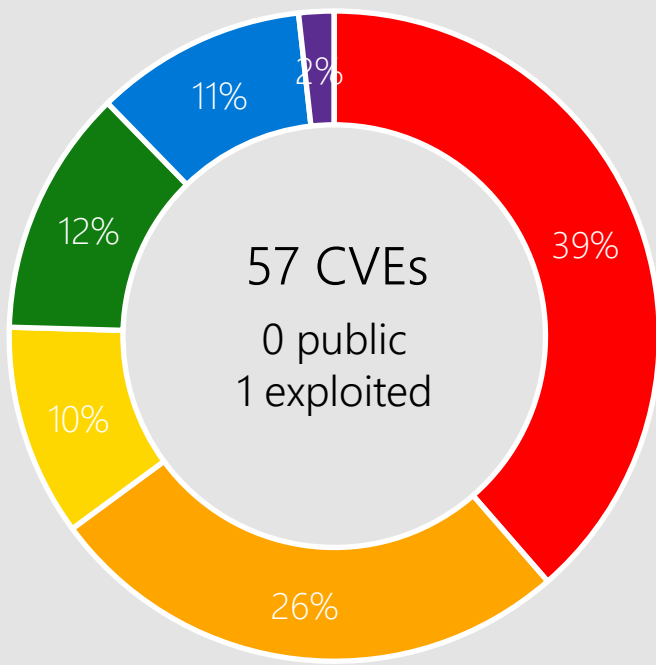
# Windows 10



Windows 10 22H2

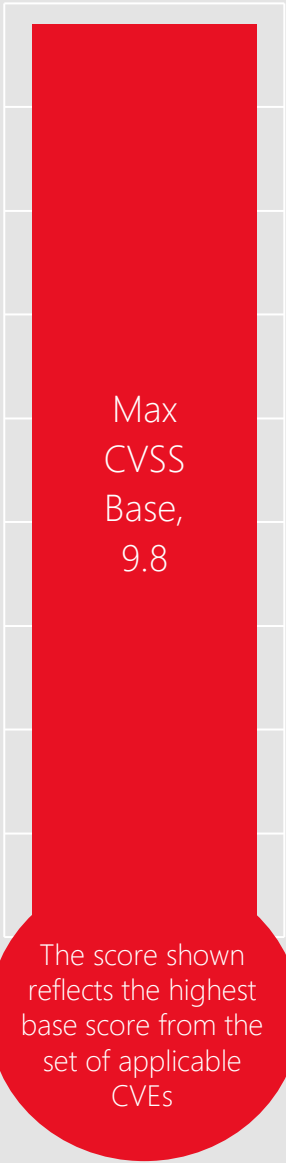


Windows 10 21H2



Windows 10 20H2

Remote Code Execution   Elevation of Privilege   Information Disclosure   Security Feature Bypass   Denial of Service   Spoofing   Tampering



## Affected Components:

See appendix for details



# CVE-2023-28252 Common Log File System Driver



## Impact, Severity, Disclosure

Elevation of Privilege | Important | Privately disclosed | Exploitation Detected



## CVSS Score Metrics

Base CVSS Score: 7.8 | Attack Vector: Local | Attack Complexity: Low | Privileges Required: Low | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-28231 DHCP Server Service



## Impact, Severity, Disclosure

Remote Code Execution | Critical | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.8 | Attack Vector: Adjacent | Attack Complexity: Low | Privileges Required: None | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Server 2022  
Server 2019  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-28219 Layer 2 Tunneling Protocol



## Impact, Severity, Disclosure

Remote Code Execution | Critical | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.1 | Attack Vector: Network | Attack Complexity: High | Privileges Required: None | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

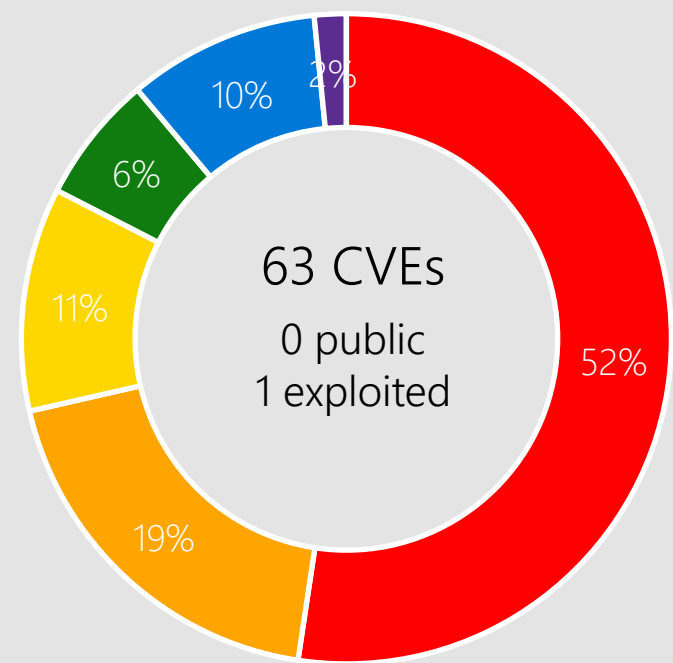
Microsoft has not identified any workarounds for this vulnerability.

## Affected Software

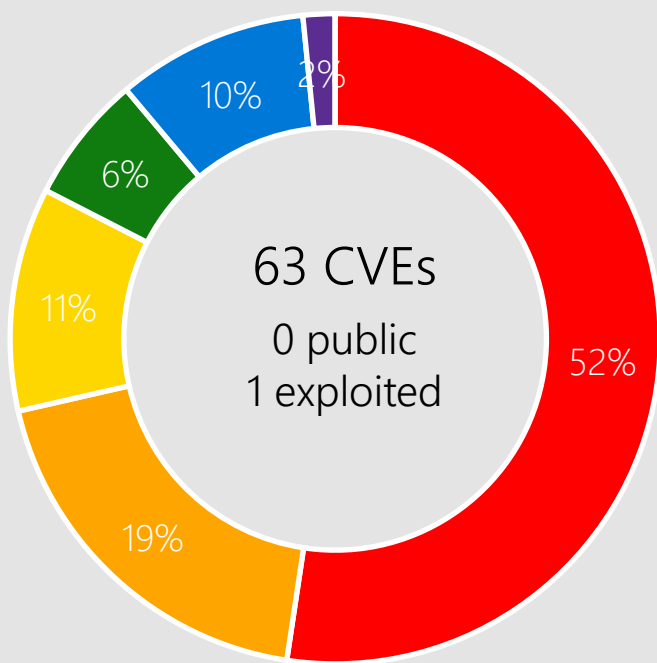


Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# Windows Server 2012 R2, and Server 2012

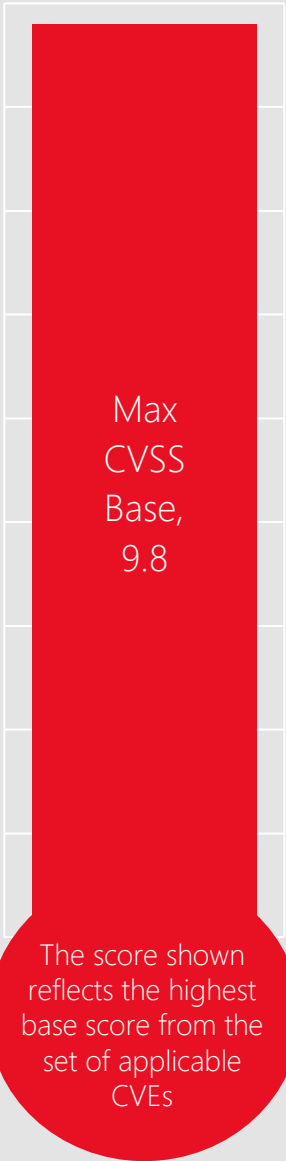


Server 2012 R2



Windows Server 2012

Remote Code Execution   Elevation of Privilege   Information Disclosure   Security Feature Bypass   Denial of Service   Spoofing   Tampering



## Affected Components:

See appendix for details

# CVE-2023-28240 Network Load Balancing



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.8 | Attack Vector: Adjacent | Attack Complexity: Low | Privileges Required: None | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Migrate from [Network Load Balancing](#) to [Software Load Balancing](#).

Microsoft recommends that customer using Network Load Balancing migrate their deployments to the newer Software Load Balancing solution

## Affected Software



Server 2022  
Server 2019  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-24884 Printer Drivers



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.8 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: Low | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# CVE-2023-28275 WDAC OLE DB Provider



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 8.8 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: None | User Interaction: Required



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

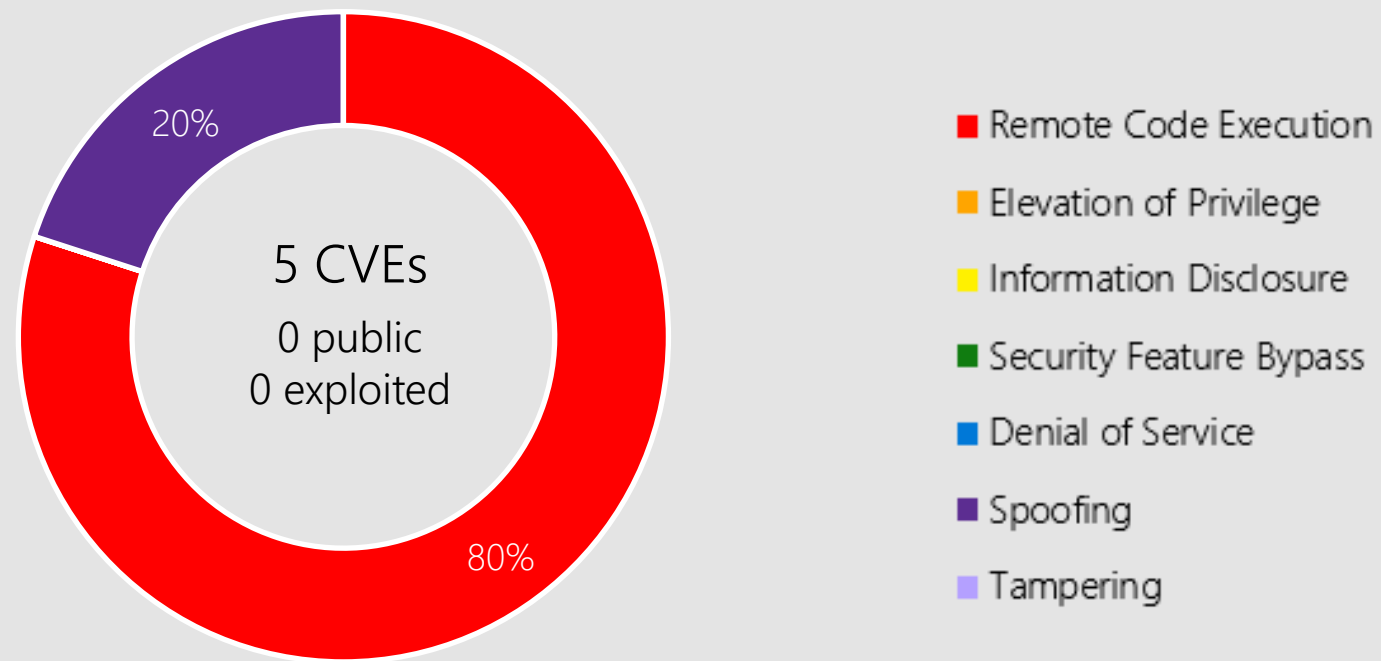
Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11 22H2  
Windows 11 version 21H2  
Server 2022  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012

# Microsoft Office



Microsoft Office-related software

## Products:

Office 2019  
SharePoint Server 2019  
SharePoint Enterprise Server 2013/2016  
365 Apps Enterprise  
Office 2019 for Mac  
Office LTSC for Mac 2021  
Office LTSC 2021  
Publisher 2013  
Publisher 2016  
SharePoint Foundation 2013  
SharePoint Server Subscription Edition



# CVE-2023-28285 Office Graphics



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 7.8 | Attack Vector: Local | Attack Complexity: Low | Privileges Required: None | User Interaction: Required



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

# Affected Software



Office LTSC for Mac 2021  
365 Apps Enterprise  
Office 2019 for Mac

# CVE-2023-28287 Publisher



## Impact, Severity, Disclosure

Remote Code Execution | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 7.8 | Attack Vector: Local | Attack Complexity: Low | Privileges Required: None | User Interaction: Required



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.



# Affected Software

365 Apps Enterprise  
Office 2019  
Office LTSC 2021  
Publisher 2016  
Publisher 2013

# CVE-2023-28288 SharePoint Server



## Impact, Severity, Disclosure

Spoofing | Important | Privately disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 6.5 | Attack Vector: Network | Attack Complexity: Low | Privileges Required: Low | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



SharePoint Server  
Subscription Edition  
SharePoint Foundation  
2013  
SharePoint Server 2019  
SharePoint Enterprise  
Server 2016  
SharePoint Enterprise  
Server 2013

# Other Products

## Dynamics 365

CVE-2023-28309 | Important | Spoofing | Public: No | Exploited: No

CVSS Base Score 7.6

Attack Vector: Network

Attack Complexity: Low

Privileges Required: Low

User Interaction: Required

Products: Dynamics 365 (on-premises) version 9.1, Dynamics 365 (on-premises) version 9.0, Dynamics 365 Field Service (on-premises) v7 series.

CVE-2023-28313 | Important | Spoofing | Public: No | Exploited: No

CVSS Base Score 6.1

Attack Vector: Network

Attack Complexity: Low

Privileges Required: None

User Interaction: Required

Products: Send Customer Voice survey from Dynamics 365.

# Other Products

## Dynamics 365

CVE-2023-28314 | Important | Spoofing | Public: No | Exploited: No

CVSS Base Score 6.1

Attack Vector: Network

Attack Complexity: Low

Privileges Required: None

User Interaction: Required

Products: Dynamics 365 (on-premises) version 9.1, Dynamics 365 (on-premises) version 9.0.

# Other Products

## SQL Server ODBC Driver

CVE-2023-23375 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 7.8

Attack Vector: Local

Attack Complexity: Low

Privileges Required: None

User Interaction: Required

Products: Microsoft ODBC Driver 17 for SQL Server, Microsoft ODBC Driver 18 for SQL Server, Microsoft OLE DB Driver 18 for SQL Server, Microsoft OLE DB Driver 19 for SQL Server

CVE-2023-28304 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 7.8

Attack Vector: Local

Attack Complexity: Low

Privileges Required: None

User Interaction: Required

Products: Microsoft ODBC Driver 17 for SQL Server, Microsoft ODBC Driver 18 for SQL Server, Microsoft OLE DB Driver 18 for SQL Server, Microsoft OLE DB Driver 19 for SQL Server

# Other Products

## .NET 6.0 and .NET 7.0

CVE-2023-28260 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 7.8

Attack Vector: Local

Attack Complexity: Low

Privileges Required: Low

User Interaction: None

Products: .NET 6.0, .NET 7.0.

# Other Products

## Microsoft Malware Protection Engine

CVE-2023-24860 | Important | Denial of Service | Public: No | Exploited: No

CVSS Base Score 7.5  
Attack Vector: Network  
Attack Complexity: Low  
Privileges Required: None  
User Interaction: None  
Products: Malware Protection Engine.



# Other Products

## Visual Studio

CVE-2023-28296 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 8.4  
Attack Vector: Local  
Attack Complexity: Low  
Privileges Required: None  
User Interaction: None  
Products: Visual Studio 2022 version 17.0, Visual Studio 2022 version 17.4, Visual Studio 2022 version 17.5, Visual Studio 2017 version 15.9 (includes 15.0 - 15.8), Visual Studio 2022 version 17.2, Visual Studio 2019 version 16.11 (includes 16.0 - 16.10).

CVE-2023-28260 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 7.8  
Attack Vector: Local  
Attack Complexity: Low  
Privileges Required: Low  
User Interaction: None  
Products: Visual Studio 2022 version 17.4, Visual Studio 2022 version 17.2, Visual Studio 2022 version 17.0, Visual Studio 2022 version 17.5, .NET 6.0, .NET 7.0.

# Other Products

## Visual Studio

CVE-2023-24893 | Important | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 7.8  
Attack Vector: Local  
Attack Complexity: Low  
Privileges Required: None  
User Interaction: Required  
Products: Visual Studio Code.

CVE-2023-28262 | Important | Elevation of Privilege | Public: No | Exploited: No

CVSS Base Score 7.8  
Attack Vector: Local  
Attack Complexity: Low  
Privileges Required: Low  
User Interaction: None  
Products: Visual Studio 2022 version 17.4, Visual Studio 2022 version 17.5, Visual Studio 2022 version 17.0, Visual Studio 2022 version 17.2, Visual Studio 2019 version 16.11 (includes 16.0 - 16.10).

# Other Products

## Visual Studio

CVE-2023-28263 | Important | Information Disclosure | Public: No | Exploited: No

CVSS Base Score 5.5

Attack Vector: Local

Attack Complexity: Low

Privileges Required: Low

User Interaction: None

Products: Visual Studio 2022 version 17.4, Visual Studio 2022 version 17.5, Visual Studio 2022 version 17.0, Visual Studio 2022 version 17.2, Visual Studio 2019 version 16.11 (includes 16.0 - 16.10).

CVE-2023-28299 | Important | Spoofing | Public: No | Exploited: No

CVSS Base Score 5.5

Attack Vector: Local

Attack Complexity: Low

Privileges Required: Low

User Interaction: None

Products: Visual Studio 2022 version 17.0, Visual Studio 2022 version 17.4, Visual Studio 2022 version 17.5, Visual Studio 2017 version 15.9 (includes 15.0 - 15.8), Visual Studio 2022 version 17.2, Visual Studio 2019 version 16.11 (includes 16.0 - 16.10).

# Other Products

## Azure

CVE-2023-28300 Azure Service Connector

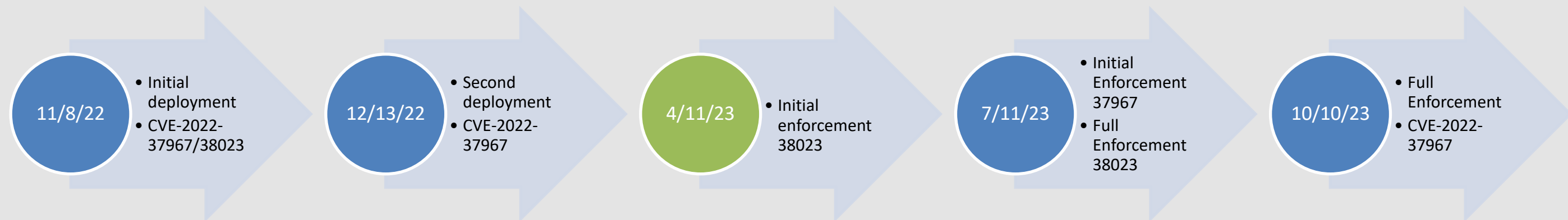
CVE-2023-28312 Azure for Machine Learning

# Managing Kerberos and Netlogon Protocol Changes

## Summary

Microsoft has published CVE-2022-37966, CVE-2022-38023, and CVE-2022-37967 to address cryptographic protocol vulnerabilities:

- Netlogon, when signing messages using the RC4 cipher.
- Kerberos, when signing messages using the RC4 cipher.
- Kerberos, when using a signature algorithm incorrectly.



## Suggested Actions:

1. Review CVE entries including the FAQ section to understand risks
2. Review the Knowledge Base articles for details on deployment and enforcement of these changes

How to manage Kerberos protocol changes related to CVE-2022-37967 <https://support.microsoft.com/help/5020805>

How to manage the Kerberos protocol changes related to CVE-2022-37966 <https://support.microsoft.com/help/5021131>

How to manage Netlogon protocol changes related to CVE-2022-38023 <https://support.microsoft.com/help/5021130>

# Product Lifecycle Update

Products retiring in April

Exchange 2013

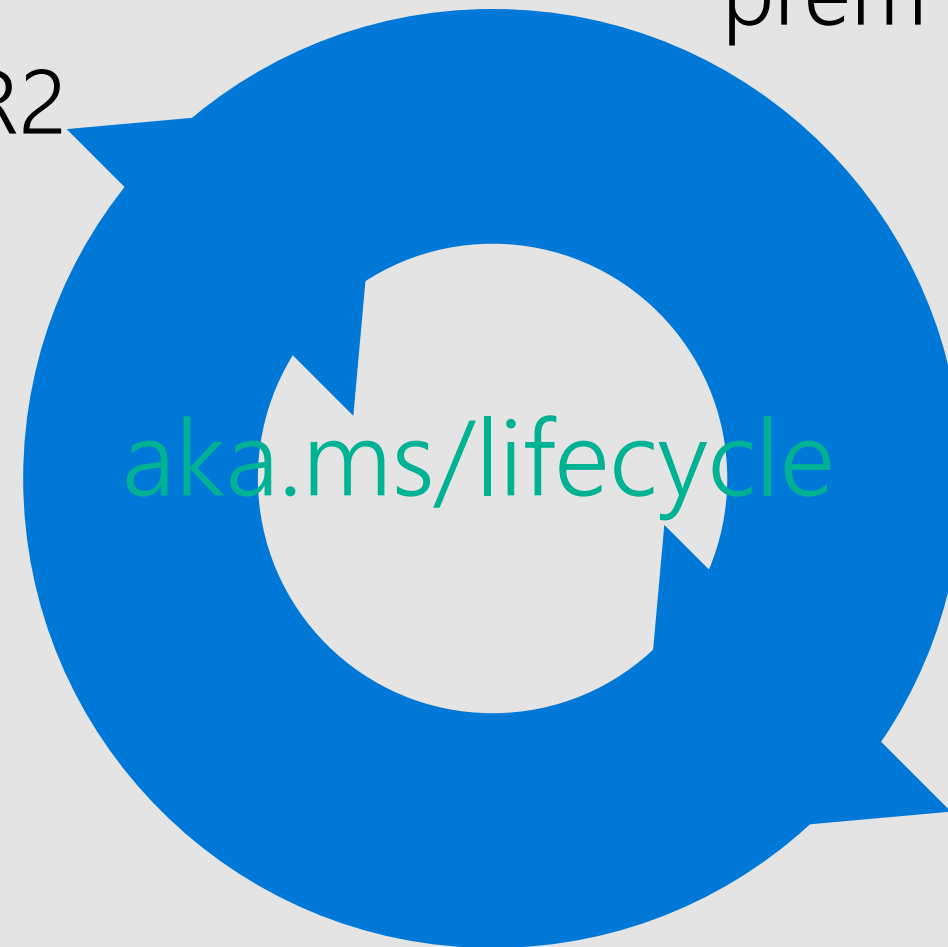
Office 2013

Dynamics GP 2013 and 2013 R2

Lync 2013

Modern Policy

Dynamics 365 Business Central on-prem 2021 release wave 2, version 19.x



[Latest Servicing Stack Updates](#)



Questions?

# Appendix



CVE	Public	Exploited	Product
CVE-2023-21727	No	No	Remote Procedure Call Runtime
CVE-2023-21729	No	No	Remote Procedure Call Runtime
CVE-2023-24914	No	No	Win32k
CVE-2023-24931	No	No	Secure Channel
CVE-2023-28216	No	No	ALPC
CVE-2023-28217	No	No	Network Address Translation (NAT)
CVE-2023-28218	No	No	Ancillary Function Driver for WinSock
CVE-2023-28221	No	No	Error Reporting Service
CVE-2023-28222	No	No	Kernel
CVE-2023-28285	No	No	Office Graphics
CVE-2023-28291	No	No	Raw Image Extension
CVE-2023-28292	No	No	Raw Image Extension
CVE-2023-28297	No	No	RPCSS
CVE-2023-28298	No	No	Kernel

CVE	Public	Exploited	Product
CVE-2023-28305	No	No	DNS Server
CVE-2023-24912	No	No	Graphics Component
CVE-2023-28219	No	No	Layer 2 Tunneling Protocol
CVE-2023-28220	No	No	Layer 2 Tunneling Protocol
CVE-2023-28223	No	No	Domain Name Service
CVE-2023-28224	No	No	Point-to-Point Protocol over Ethernet (PPPoE)
CVE-2023-28225	No	No	NTLM
CVE-2023-28226	No	No	Enroll Engine
CVE-2023-28227	No	No	Bluetooth Driver
CVE-2023-28228	No	No	Windows
CVE-2023-28229	No	No	CNG Key Isolation Service
CVE-2023-28231	No	No	DHCP Server Service
CVE-2023-28232	No	No	Point-to-Point Tunneling Protocol
CVE-2023-28233	No	No	Secure Channel

CVE	Public	Exploited	Product
CVE-2023-28234	No	No	Secure Channel
CVE-2023-28235	No	No	Lock Screen
CVE-2023-28236	No	No	Kernel
CVE-2023-28237	No	No	Kernel
CVE-2023-28238	No	No	IKE Protocol Extensions
CVE-2023-28240	No	No	Network Load Balancing
CVE-2023-28241	No	No	SSTP
CVE-2023-28266	No	No	CLFS Driver
CVE-2023-28267	No	No	Remote Desktop Protocol Client
CVE-2023-28244	No	No	Kerberos
CVE-2023-28268	No	No	Netlogon RPC
CVE-2023-28246	No	No	Registry
CVE-2023-28270	No	No	Lock Screen
CVE-2023-28247	No	No	Network File System

CVE	Public	Exploited	Product
CVE-2023-28248	No	No	Kernel
CVE-2023-28271	No	No	Kernel Memory
CVE-2023-28272	No	No	Kernel
CVE-2023-28250	No	No	Pragmatic General Multicast (PGM)
CVE-2023-28273	No	No	Clip Service
CVE-2023-28274	No	No	Win32k
CVE-2023-28252	No	Yes	Common Log File System Driver
CVE-2023-28253	No	No	Kernel
CVE-2023-28276	No	No	Group Policy
CVE-2023-28254	No	No	DNS Server
CVE-2023-28277	No	No	DNS Server
CVE-2023-28255	No	No	DNS Server
CVE-2023-28278	No	No	DNS Server

CVE	Public	Exploited	Product
CVE-2023-28256	No	No	DNS Server
CVE-2023-28293	No	No	Kernel
CVE-2023-28302	No	No	Message Queuing
CVE-2023-28306	No	No	DNS Server
CVE-2023-28307	No	No	DNS Server
CVE-2023-28308	No	No	DNS Server
CVE-2023-28284	No	No	Edge (Chromium-based)
CVE-2023-24935	No	No	Edge (Chromium-based)
CVE-2023-28301	No	No	Edge (Chromium-based)
CVE-2023-28287	No	No	Publisher
CVE-2023-28288	No	No	SharePoint Server
CVE-2023-28295	No	No	Publisher
CVE-2023-28311	No	No	Word
CVE-2023-21769	No	No	Message Queuing

CVE	Public	Exploited	Product
CVE-2023-23384	No	No	SQL Server
CVE-2023-28300	No	No	Azure Service Connector
CVE-2023-28309	No	No	D365 (on-premises)
CVE-2023-28313	No	No	D365 Customer Voice
CVE-2023-28314	No	No	D365 (on-premises)
CVE-2023-24893	No	No	Visual Studio Code
CVE-2023-21554	No	No	Message Queuing
CVE-2023-23375	No	No	SQL Server
CVE-2023-24860	No	No	Defender
CVE-2023-24924	No	No	PS & PCL6 Printer Driver
CVE-2023-24883	No	No	PS & PCL6 Printer Driver
CVE-2023-24925	No	No	PS & PCL6 Printer Driver
CVE-2023-24884	No	No	PS & PCL6 Printer Driver
CVE-2023-24926	No	No	PS & PCL6 Printer Driver

CVE	Public	Exploited	Product
CVE-2023-24885	No	No	PS & PCL6 Printer Driver
CVE-2023-24927	No	No	PS & PCL6 Printer Driver
CVE-2023-24886	No	No	PS & PCL6 Printer Driver
CVE-2023-24928	No	No	PS & PCL6 Printer Driver
CVE-2023-24887	No	No	PS & PCL6 Printer Driver
CVE-2023-24929	No	No	PS & PCL6 Printer Driver
CVE-2023-28243	No	No	PS & PCL6 Printer Driver
CVE-2023-28275	No	No	WDAC OLE DB provider for SQL Server
CVE-2023-28260	No	No	.NET DLL Hijacking
CVE-2023-28262	No	No	Visual Studio
CVE-2023-28263	No	No	Visual Studio
CVE-2023-28296	No	No	Visual Studio
CVE-2023-28299	No	No	Visual Studio
CVE-2023-28304	No	No	SQL Server

