

# Microsoft Security Release

December 14, 2021



# Agenda



Security Updates



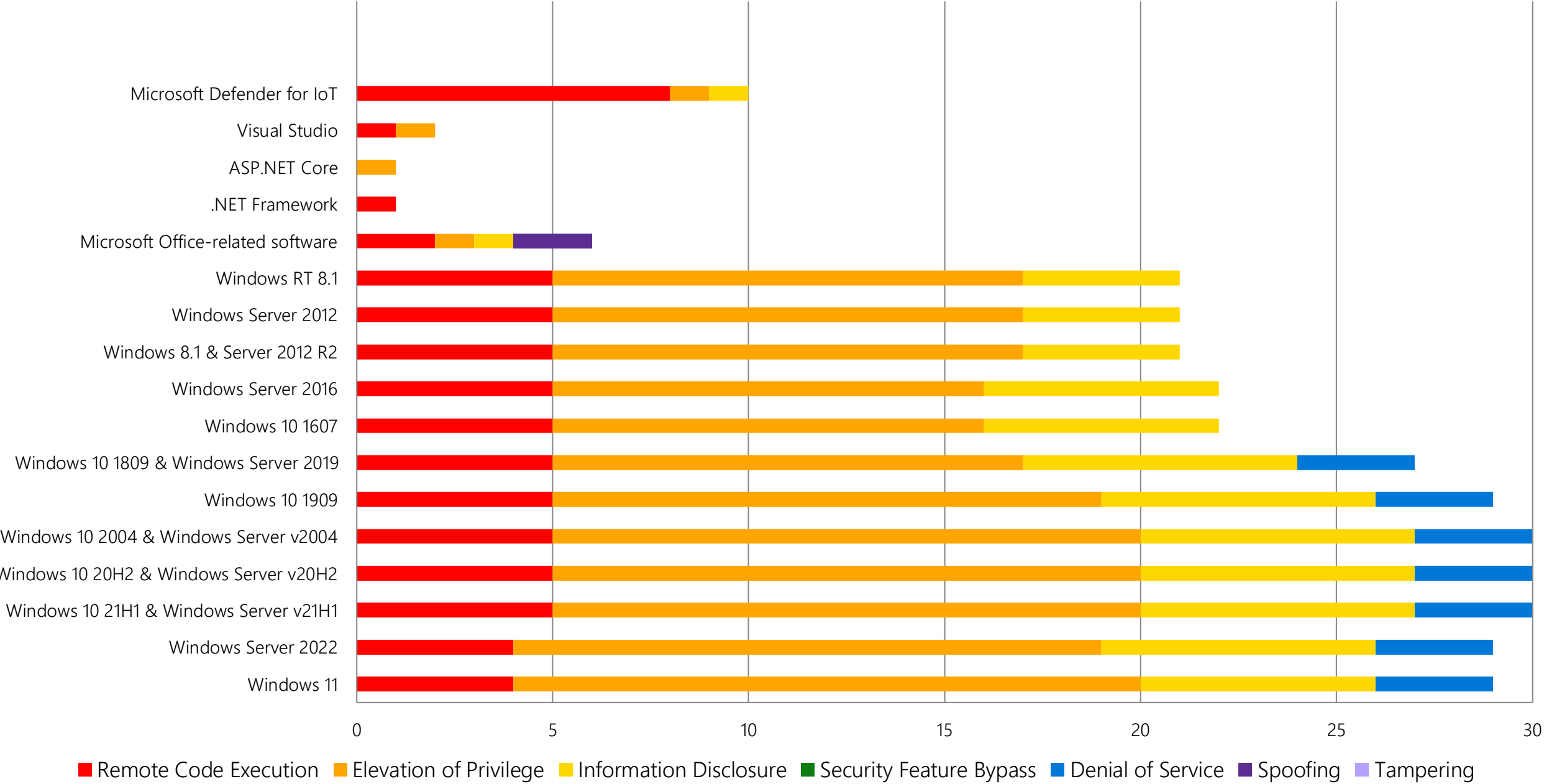
Product Support Lifecycle



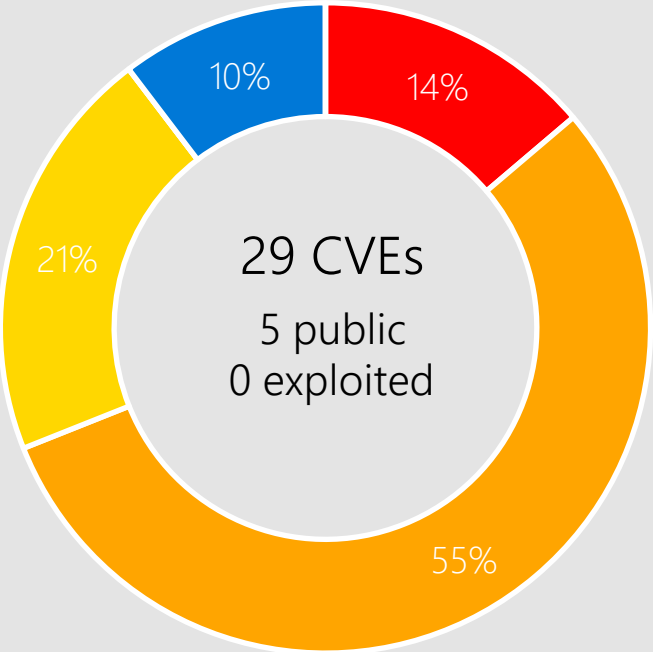
Other resources related to the release

# Monthly Security Release Overview - December 2021

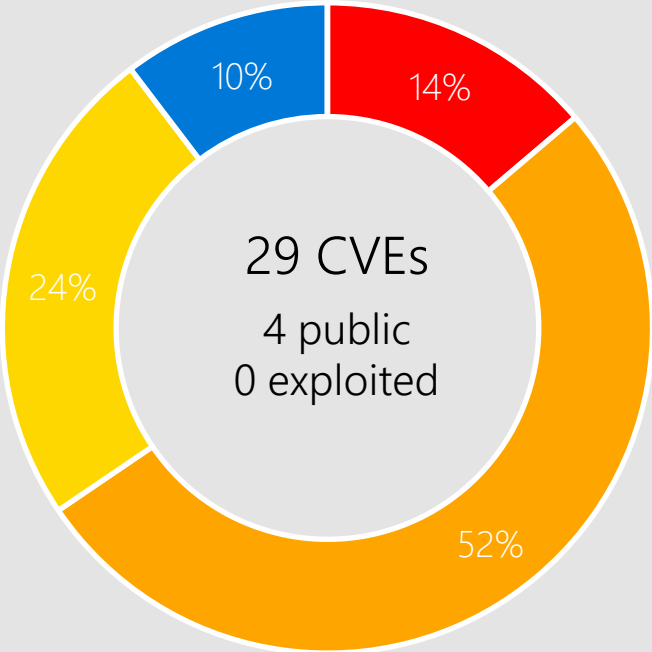
Vulnerabilities fixed by component and by impact



# Windows 11, Server 2022



Windows 11



Windows Server 2022

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



## Affected Components:

Common Log File  
System Driver  
Digital Media Receiver  
DirectX  
EFS

Event Tracing  
Fax Service  
Hyper-V  
Windows Installer

Kernel  
LSA Server  
Message Queuing  
NTFS  
SymCrypt

Print Spooler  
Recovery Environment  
Agent  
Remote Access

RA Connection Manager  
Remote Desktop Client  
Setup  
Storage Spaces  
Controller

# CVE-2021-43215 iSNS



## 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

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11  
Server 2022  
Server, version 20H2  
Server, version 2004  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012  
Windows 8.1

# CVE-2021-43880 Mobile Device Management



## Impact, Severity, Disclosure

Elevation of Privilege | Important | Publicly Disclosed | No known exploits in the wild



## CVSS Score Metrics

Base CVSS Score: 5.5 | Attack Vector: Local | Attack Complexity: Low | Privileges Required: Low | User Interaction: None



## Mitigations

Microsoft has not identified any mitigating factors for this vulnerability.



## Workarounds

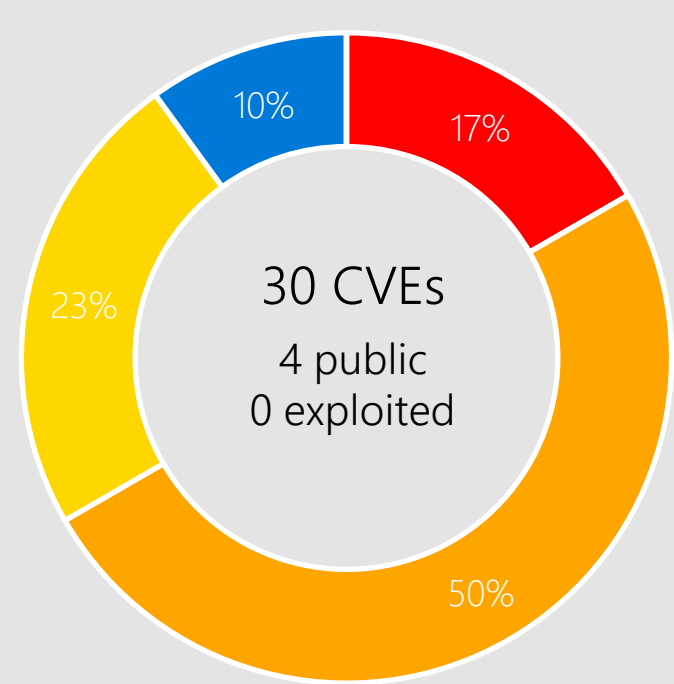
Microsoft has not identified any workarounds for this vulnerability.

## Affected Software

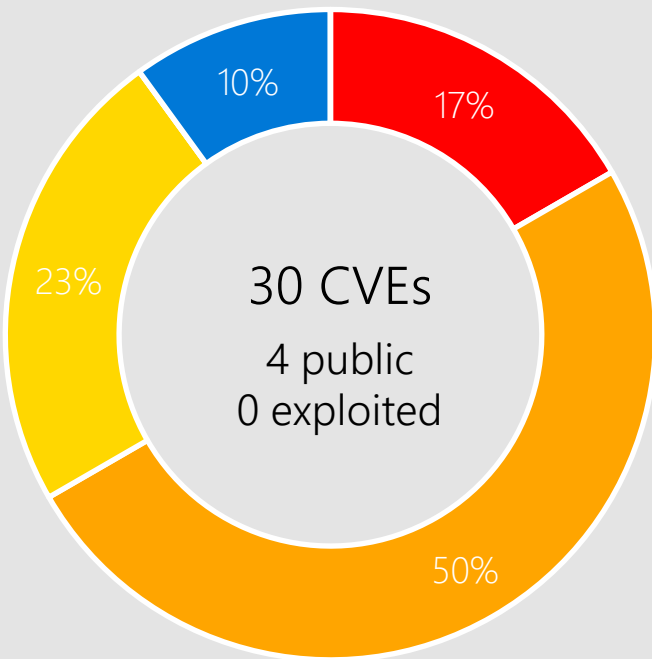


Windows 11

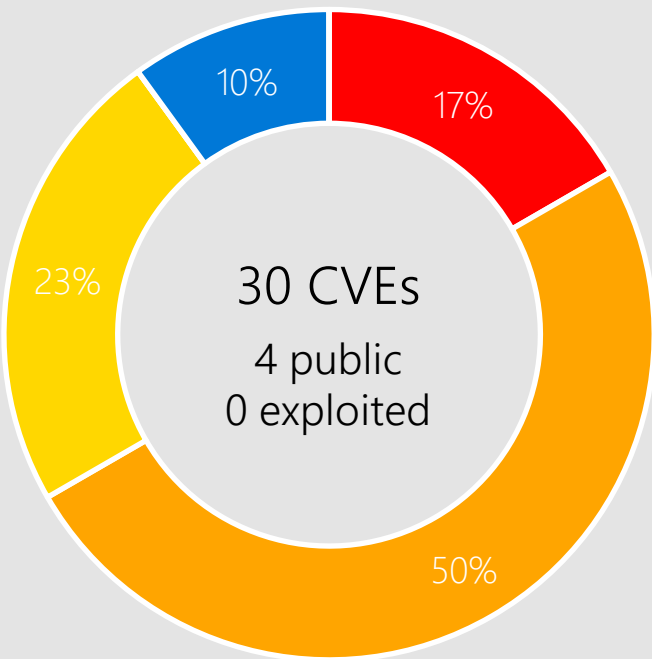
# Windows 10



Windows 10 21H1

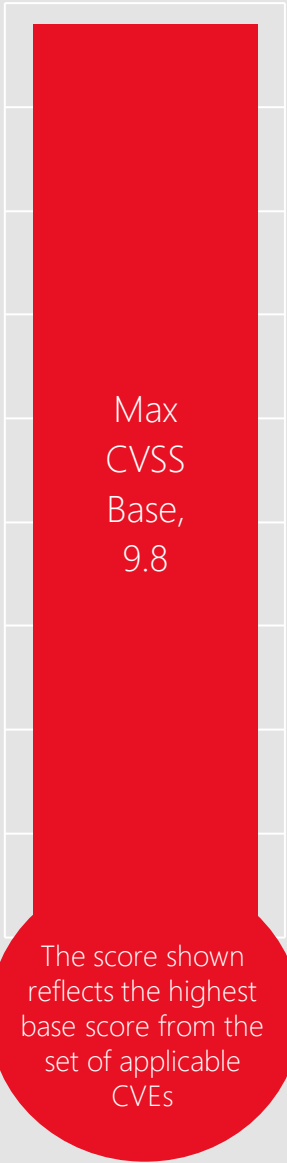


Windows 10 20H2 & Windows Server v20H2



Windows 10 2004 & Windows Server v2004

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



## Affected Components:

Common Log File  
System Driver  
Digital Media Receiver  
DirectX

Event Tracing  
Fax Service  
Hyper-V  
Windows Installer

iSNS Server  
Kernel  
LSA Server  
Message Queuing

NTFS  
Print Spooler  
Recovery Environment  
Agent

Remote Access  
RA Connection Manager  
Remote Desktop Client  
Setup

Storage Spaces  
Controller  
EFS

# CVE-2021-43217 Encrypting File System (EFS)



## 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.



## More Information

EFS security hardening changes in CVE-2021-43217  
<https://support.microsoft.com/help/5009763>

## Affected Software



Windows 11  
Server 2022  
Server, version 20H2  
Server, version 2004  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012  
Windows 8.1



# CVE-2021-43233 Remote Desktop Client



## Impact, Severity, Disclosure

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



## CVSS Score Metrics

Base CVSS Score: 7.5 | Attack Vector: Network | Attack Complexity: High | 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  
Server 2022  
Server, version 20H2  
Server, version 2004  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012  
Windows 8.1

# CVE-2021-43240 NTFS Set Short Name



## Impact, Severity, Disclosure

Elevation of Privilege | Important | Publicly Disclosed | No known exploits in the wild



## CVSSScoreMetrics

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

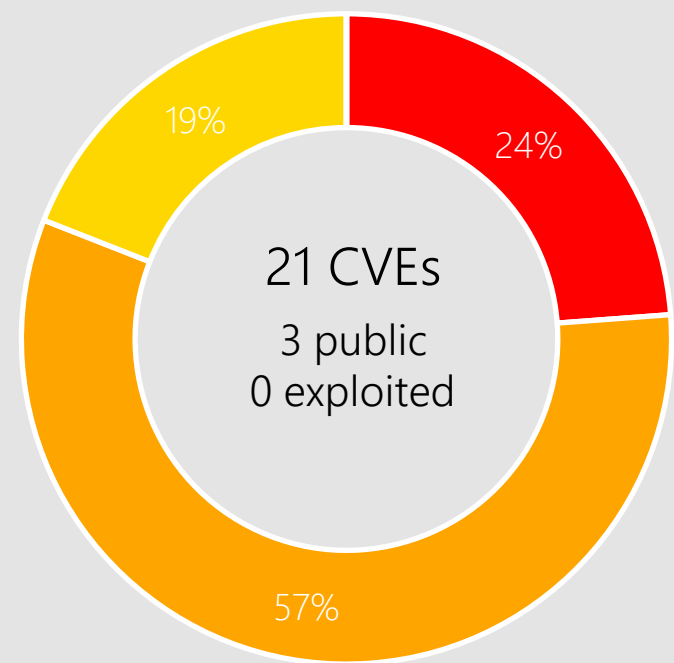
Microsoft has not identified any workarounds for this vulnerability.

# Affected Software

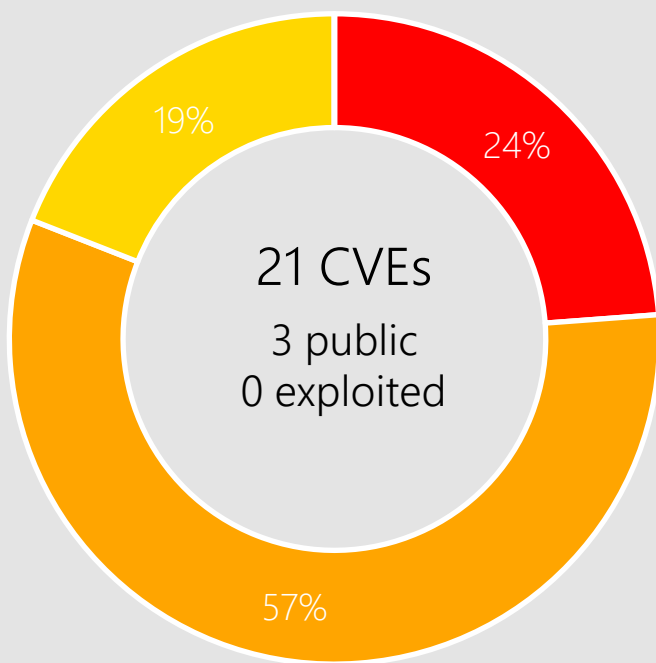


Windows 11  
Server 2022  
Server, version 20H2  
Server, version 2004  
Windows 10

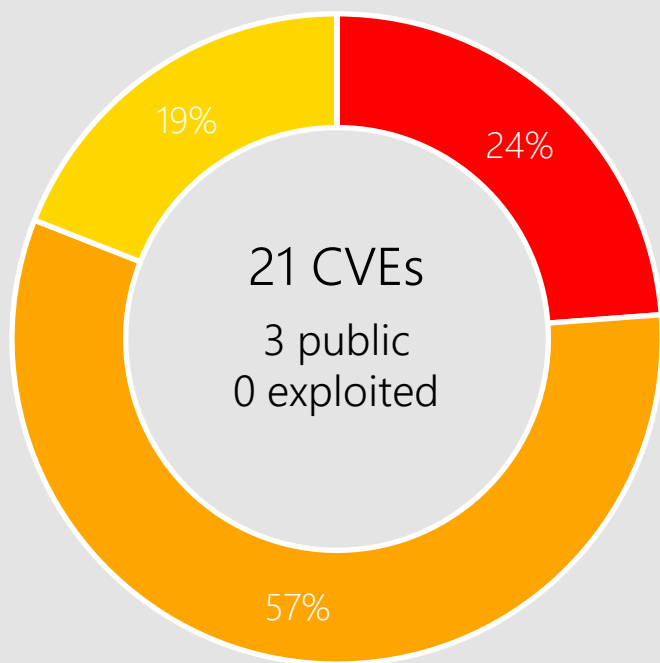
# Windows 8.1, Server 2012 R2, and Server 2012



Windows 8.1 & Server 2012 R2

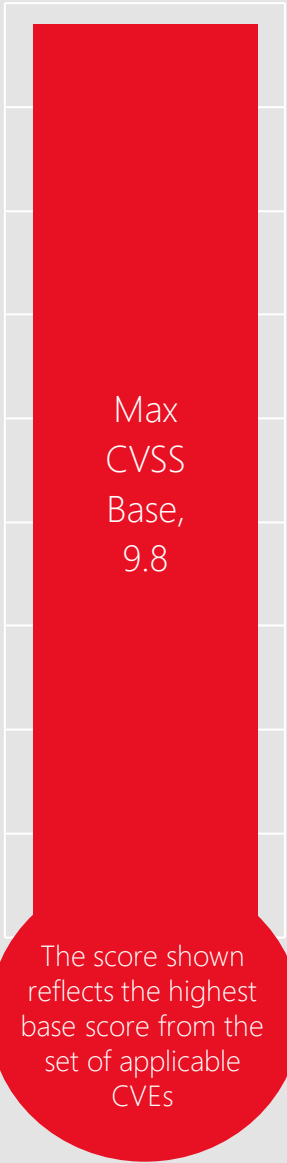


Windows Server 2012



Windows RT 8.1

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



## Affected Components:

Common Log File  
System Driver  
Digital Media Receiver  
Digital TV Tuner

Encrypting File System (EFS)  
Event Tracing  
Fax Service

Windows Installer  
iSNS Server  
LSA Server

Media Center  
Message Queuing  
NTFS

Print Spooler  
Remote Access  
RA Connection Manager

# CVE-2021-41333 Print Spooler



## Impact, Severity, Disclosure

Elevation of Privilege | Important | Publicly Disclosed | No known exploits in the wild



## 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  
Server 2022  
Server, version 20H2  
Server, version 2004  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012  
Windows 8.1

# CVE-2021-43883 Installer



## Impact, Severity, Disclosure

Elevation of Privilege | Important | Publicly Disclosed | No known exploits in the wild



## 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

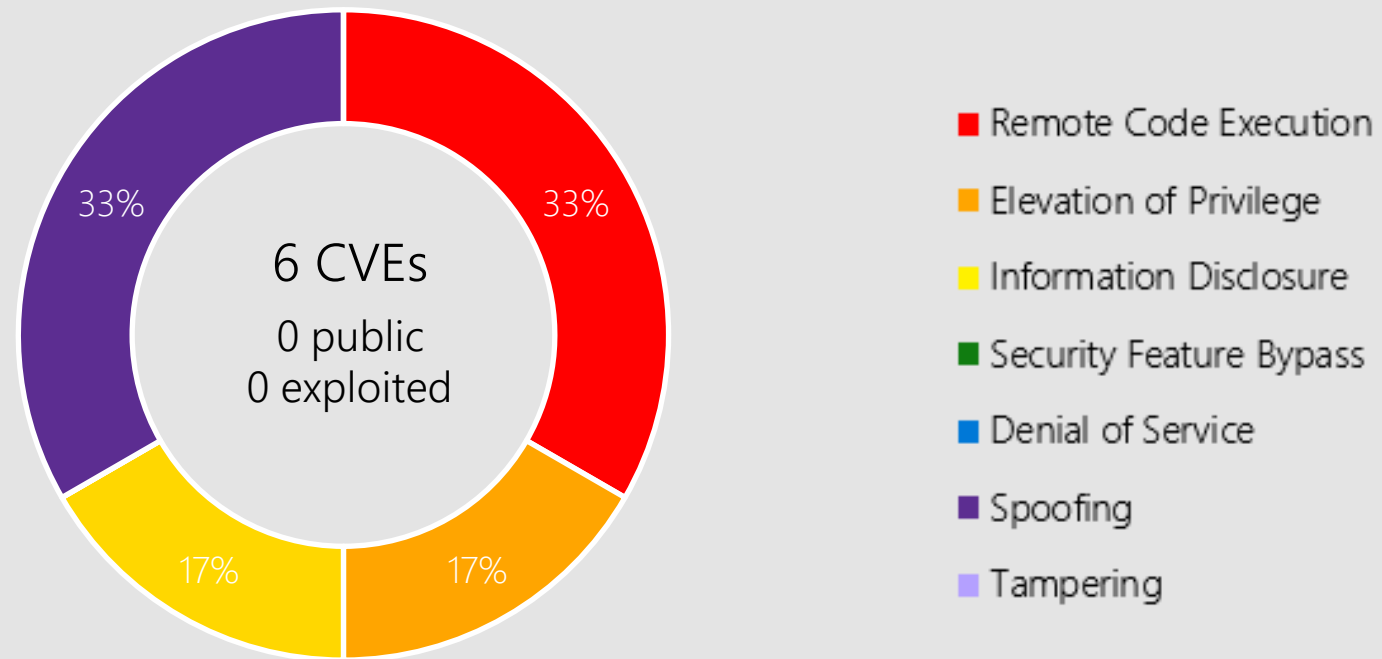
Microsoft has not identified any workarounds for this vulnerability.

## Affected Software



Windows 11  
Server 2022  
Server, version 20H2  
Server, version 2004  
Server 2019  
Windows 10  
Server 2016  
Server 2012 R2  
Server 2012  
Windows 8.1

# Microsoft Office



Microsoft Office-related software

## Products:

Office 2013/2016/2019  
Excel 2013/2016  
SharePoint Server 2019  
SharePoint Enterprise Server 2013/2016  
365 Apps Enterprise  
Office 2019 for Mac  
Office LTSC for Mac 2021  
Office LTSC 2021  
Office Online Server  
Office Web Apps Server 2013  
SharePoint Foundation 2013  
SharePoint Server Subscription Edition  
SharePoint Server Subscription Edition Language Pack

# CVE-2021-42309 SharePoint Server

## Impact, Severity, Disclosure

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

## CVSSScoreMetrics

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



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

# CVE-2021-43256 Excel



## 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



Excel 2016  
Excel 2013  
Office Web Apps Server 2013  
Office Online Server  
365 Apps Enterprise  
Office LTSC 2021



# Other Products

## .NET Core

CVE-2021-43877 | 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: ASP.NET Core 5.0, ASP.NET Core 3.1, ASP.NET Core 6.0, Visual Studio 2019 version 16.7 (includes 16.0 – 16.6), Visual Studio 2019 version 16.9 (includes 16.0 - 16.8), Visual Studio 2019 version 16.11 (includes 16.0 - 16.10), Visual Studio 2022 version 17.0.

# Other Products

## Visual Studio

CVE-2021-43877 | 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: ASP.NET Core 5.0, ASP.NET Core 3.1, ASP.NET Core 6.0, Visual Studio 2019 version 16.7 (includes 16.0 – 16.6), Visual Studio 2019 version 16.9 (includes 16.0 - 16.8), Visual Studio 2019 version 16.11 (includes 16.0 - 16.10), Visual Studio 2022 version 17.0.

# Other Products

## PowerShell

CVE-2021-43896 | Important | Spoofing | Public: No | Exploited: No

CVSS Base Score 5.5  
Attack Vector: Local  
Attack Complexity: Low  
Privileges Required: None  
User Interaction: Required  
Products: PowerShell 7.2.

# Other Products

## Microsoft 4K Wireless Display Adapter

CVE-2021-43899 | Critical | Remote Code Execution | Public: No | Exploited: No

CVSS Base Score 9.8

Attack Vector: Network

Attack Complexity: Low

Privileges Required: None

User Interaction: None

Products: 4K Wireless Display Adapter.

# Other Products

## Developer tools, Defender IoT and Mobile

CVE-2021-43905 Office App CVSS score: 9.6

CVE-2021-43907 VS Code WSL Extension CVSS score: 9.8

CVE-2021-43890 Windows AppX Installer

CVE-2021-43225 Bot Framework SDK for .NET Framework

CVE-2021-43891/43908 VS Code

CVE-2021-43892 BizTalk ESB Toolkit

CVE-2021-41365/42310/42311/42312/42313/42314/42315/43882/43888/43889

Defender IoT

# Product Lifecycle Update

No fixed lifecycle products reaching  
end of support in December

Windows 10 Semi-Annual Channel  
end of service

Windows 10 2004 - December

Server version 2004 - December



[Helping customers shift to a modern desktop](https://aka.ms/lifecycle)



Questions?

# Appendix



CVE	Public	Exploited	Product
CVE-2021-40441	No	No	Media Center
CVE-2021-40452	No	No	HEVC Video Extensions
CVE-2021-40453	No	No	HEVC Video Extensions
CVE-2021-43214	No	No	Web Media Extensions
CVE-2021-43217	No	No	Encrypting File System (EFS)
CVE-2021-43219	No	No	DirectX Graphics Kernel File
CVE-2021-43223	No	No	Remote Access Connection Manager
CVE-2021-43224	No	No	CLFS Driver
CVE-2021-43226	No	No	CLFS Driver
CVE-2021-43227	No	No	Storage Spaces Controller
CVE-2021-43228	No	No	SymCrypt
CVE-2021-43229	No	No	NTFS
CVE-2021-43230	No	No	NTFS
CVE-2021-43231	No	No	NTFS

CVE	Public	Exploited	Product
CVE-2021-43232	No	No	Event Tracing
CVE-2021-43234	No	No	Fax Service
CVE-2021-43235	No	No	Storage Spaces Controller
CVE-2021-43237	No	No	Setup
CVE-2021-43238	No	No	Remote Access
CVE-2021-43239	No	No	Recovery Environment Agent
CVE-2021-43240	Yes	No	NTFS Set Short Name
CVE-2021-43243	No	No	VP9 Video Extensions
CVE-2021-43244	No	No	Kernel
CVE-2021-43245	No	No	Digital TV Tuner
CVE-2021-43246	No	No	Hyper-V
CVE-2021-43247	No	No	TCP/IP Driver
CVE-2021-43248	No	No	Digital Media Receiver
CVE-2021-43875	No	No	Office Graphics

CVE	Public	Exploited	Product
CVE-2021-41333	Yes	No	Print Spooler
CVE-2021-41360	No	No	HEVC Video Extensions
CVE-2021-43207	No	No	Common Log File System Driver
CVE-2021-43880	Yes	No	Mobile Device Management
CVE-2021-43883	Yes	No	Installer
CVE-2021-43893	Yes	No	Encrypting File System (EFS)

CVE	Public	Exploited	Product
CVE-2021-43255	No	No	Office Trust Center
CVE-2021-43256	No	No	Excel
CVE-2021-42293	No	No	Jet Red Database Engine and Access Connectivity Engine
CVE-2021-42294	No	No	SharePoint Server
CVE-2021-42295	No	No	Visual Basic for Applications
CVE-2021-42309	No	No	SharePoint Server

CVE	Public	Exploited	Product
CVE-2021-42320	No	No	SharePoint Server
CVE-2021-43242	No	No	SharePoint Server
CVE-2021-43905	No	No	Office app
CVE-2021-42310	No	No	Defender for IoT
CVE-2021-42311	No	No	Defender for IoT
CVE-2021-42312	No	No	Defender for IOT
CVE-2021-42313	No	No	Defender for IoT
CVE-2021-42314	No	No	Defender for IoT
CVE-2021-42315	No	No	Defender for IoT
CVE-2021-43215	No	No	iSNS Server Can Lead to
CVE-2021-43216	No	No	Local Security Authority Server (lsasrv)
CVE-2021-43222	No	No	Message Queuing
CVE-2021-43225	No	No	Bot Framework SDK
CVE-2021-43233	No	No	Remote Desktop Client

CVE	Public	Exploited	Product
CVE-2021-43236	No	No	Message Queuing
CVE-2021-43877	No	No	ASP.NET Core and Visual Studio
CVE-2021-43882	No	No	Defender for IoT
CVE-2021-43888	No	No	Defender for IoT
CVE-2021-43889	No	No	Defender for IoT
CVE-2021-43891	No	No	Visual Studio Code
CVE-2021-43899	No	No	4K Wireless Display Adapter
CVE-2021-43907	No	No	Visual Studio Code WSL Extension
CVE-2021-41365	No	No	Defender for IoT
CVE-2021-43896	No	No	PowerShell