

# CYBER GUIDANCE ISSUE 00039

## 'ZEROLOGON' EXPLOIT IN WINDOWS

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IMPACT	LOW	MEDIUM	HIGH
EASE OF EXPLOIT	LOW	MEDIUM	HIGH

### OVERVIEW

"Zerologon" is named so because it is presented as a flaw in Microsoft's Active Directory and domain controllers that could allow an attacker to gain access to a network simply by plugging in to an on-premise port – no login required. [CVE-2020-1472](https://www.cve.org/CVE-ID/CVE-2020-1472)

### BREAKDOWN

Released in the bundle of Microsoft's security patches for August 2020, this exploit has been investigated by a number of independent testers using the Proof of Concept (PoC) method and discovered numerous means to compromise a Windows domain. Although the attacker would need access to the same LAN as their intended target, they would be able to gain full access whilst completely unauthenticated – that is, not requiring a set of login credentials. The origin of the flaw in the Netlogon Remote Protocol which is used in authenticating connected machines where the Initialisation Vector (IV) is set to a fixed 16bits that may be deciphered by an attacker to impersonate any machine on the network.

### REMEDIATION STEPS

- Ensure all devices connected to the LAN have the latest Microsoft security patched installed
- Monitor network for unusual activity – particularly any new connections or new ports in use.
- Ensure technical and management controls are in place to ensure all domain controllers are updated before connecting to the network.
- Stay alert to further patch releases

### REFERENCES & RESOURCES

Threatpost:	<a href="https://threatpost.com/windows-exploit-microsoft-zerologon-flaw/159254/">https://threatpost.com/windows-exploit-microsoft-zerologon-flaw/159254/</a>
Cyber.dhs.gov:	<a href="https://cyber.dhs.gov/ed/20-04/">https://cyber.dhs.gov/ed/20-04/</a>
Tenable:	<a href="https://www.tenable.com/cve/CVE-2020-1472">https://www.tenable.com/cve/CVE-2020-1472</a>
IT News AU	<a href="https://www.itnews.com.au/news/zerologon-windows-domain-admin-bypass-exploit-released-553317">https://www.itnews.com.au/news/zerologon-windows-domain-admin-bypass-exploit-released-553317</a>
ZDNet:	<a href="https://www.zdnet.com/article/zerologon-attack-lets-hackers-take-over-enterprise-networks/">https://www.zdnet.com/article/zerologon-attack-lets-hackers-take-over-enterprise-networks/</a>