# Tenable Vulnerability Management Report

Tenable Vulnerability Management Wed, 14 May 2025 04:54:05 UTC

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•WN19-00-000290 - Windows Server 2019 must employ automated mechanisms to determine the state of system components with regard to flaw remediation using the following frequency: continuously, where Endpoint Security Solution (ESS) is used; 30 days, for any additional internal network scans not covered by ESS; and annually, for external scans by Computer Network Defense Service Provider (CNDSP)	/
•WN19-00-000300 - Windows Server 2019 must automatically remove or disable temporary user accounts after a hours	
•WN19-00-000310 - Windows Server 2019 must automatically remove or disable emergency accounts after the crisis is resolved or within 72 hours	566
•WN19-00-000420 - Windows Server 2019 FTP servers must be configured to prevent anonymous logons	568
•WN19-00-000430 - Windows Server 2019 FTP servers must be configured to prevent access to the system drive	570
•WN19-00-000450 - Windows Server 2019 must have orphaned security identifiers (SIDs) removed from user rights	571
•WN19-AU-000010 - Windows Server 2019 audit records must be backed up to a different system or media than system being audited	
•WN19-AU-000020 - Windows Server 2019 must, at a minimum, offload audit records of interconnected systems real time and offload standalone or nondomain-joined systems weekly	
•WN19-MS-000010 - Windows Server 2019 must only allow Administrators responsible for the member server or standalone or nondomain-joined system to have Administrator rights on the system	

# Audits FAILED

# WN19-00-000020 - Windows Server 2019 passwords for the built-in Administrator account must be changed at least every 60 days.

#### Info

The longer a password is in use, the greater the opportunity for someone to gain unauthorized knowledge of the password. The built-in Administrator account is not generally used and its password might not be changed as frequently as necessary. Changing the password for the built-in Administrator account on a regular basis will limit its exposure.

Windows LAPS must be used to change the built-in Administrator account password.

#### **Solution**

Change the enabled local Administrator account password at least every 60 days. Windows LAPS must be used to change the built-in Administrator account password. Domain-joined systems can configure this to occur more frequently. LAPS will change the password every 30 days by default.

More information is available at:

https://techcommunity.microsoft.com/t5/windows-it-pro-blog/by-popular-demand-windows-laps-available-now/ba-p/3788747 https://learn.microsoft.com/en-us/windows-server/identity/laps/laps-overview#windows-laps-supported-platforms-and-azure-ad-laps-preview-status

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

CSF2.0

Vererences	
800-171	3.5.2
800-171R3	03.05.07d.
800-53	IA-5(1)(d)
800-53R5	IA-5(1)(h)
CAT	II
CCI	CCI-000199
CCI	CCI-004066

CN-L3	7.1.2.7(e)
CN-L3	7.1.3.1(b)
CSF	PR.AC-1
CSF2.0	PR.AA-01

DISA BENCHMARK	Windows Serve	r 2019	STIG
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PR.AA-03

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ISO/IEC-27001 A.9.4.3

ITSG-33 IA-5(1)(d)

NESA T5.2.3

NIAV2 AM20

NIAV2 AM21

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205657r1051065\_rule

**STIG-ID** WN19-00-000020

STIG-LEGACY SV-103559

STIG-LEGACY V-93473

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.2

**VULN-ID** V-205657

#### Assets

#### live-malware

All of the following must pass to satisfy this requirement: PASSED - Password last set date for Admin account.: Remote value: 'PASS: Password age within recommended limits' Policy value: 'PASS: Password age within recommended limits' \_\_\_\_\_ FAILED - LAPS password age configured.: Remote value: NULL Policy value: [0..60] FAILED - LAPS password length configured.: Remote value: NULL Policy value: [14..4294967295] FAILED - LAPS password complexity configured.: Remote value: NULL Policy value: 4 FAILED - LAPS name of administrator account enabled.: Remote value: 'HKLM\Software\Microsoft\Windows\CurrentVersion\Policies \LAPS\_registry\_does\_not\_exist' Policy value: 'HKLM\Software\Microsoft\Windows\CurrentVersion\Policies\LAPS'

# WN19-00-000140 - Windows Server 2019 permissions for the system drive root directory (usually C:\) must conform to minimum requirements.

#### Info

Changing the system's file and directory permissions allows the possibility of unauthorized and anonymous modification to the operating system and installed applications.

The default permissions are adequate when the Security Option 'Network access: Let Everyone permissions apply to anonymous users' is set to 'Disabled' (WN19-SO-000240).

Satisfies: SRG-OS-000312-GPOS-00122, SRG-OS-000312-GPOS-00123, SRG-OS-000312-GPOS-00124

#### **Solution**

Maintain the default permissions for the system drive's root directory and configure the Security Option 'Network access: Let Everyone permissions apply to anonymous users' to 'Disabled' (WN19-SO-000240).

Default Permissions C:\ Type - 'Allow' for all Inherited from - 'None' for all

Principal - Access - Applies to

SYSTEM - Full control - This folder, subfolders, and files Administrators - Full control - This folder, subfolders, and files Users - Read & execute - This folder, subfolders, and files Users - Create folders/append data - This folder and subfolders Users - Create files/write data - Subfolders only CREATOR OWNER - Full Control - Subfolders and files only

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

h	References	
	800-171	3.1.1
	800-171R3	03.01.02
	800-53	AC-3(4)
	800-53R5	AC-3(4)
	CAT	II
	CCI	CCI-002165
	CN-L3	8.1.4.2(f)
	CN-L3	8.1.4.11(b)
	CN-L3	8.1.10.2(c)
	CN-L3	8.5.3.1
	CN-L3	8.5.4.1(a)
	CSF	PR.AC-4
	CSF	PR.PT-3
	CSF2.0	PR.AA-05
	CSF2.0	PR.DS-10
	CSF2.0	PR.IR-01
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(1)

ISO-27001-2022 A.5.15 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3(4) **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3 NIAV2 **SS29** QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 13.2 **RULE-ID** SV-205734r958702\_rule STIG-ID WN19-00-000140

**STIG-LEGACY** SV-103107

**STIG-LEGACY** V-93019

**TBA-FIISB** 31.1

**VULN-ID** V-205734

#### **Assets**

#### live-malware

'C:\ NT AUTHORITY\Authenticated Users:(AD)  ${\tt NT AUTHORITY \backslash Authenticated Users: (OI)(CI)(IO)(M)}$ NT AUTHORITY\SYSTEM:(OI)(CI)(F) BUILTIN\Administrators:(OI)(CI)(F) BUILTIN\Users:(OI)(CI)(RX) Mandatory Label\High Mandatory Level:(OI)(NP)(IO)(NW) Successfully processed 1 files; Failed processing 0 files STATUS: FAILED'

#### WN19-00-000280 - Windows Server 2019 must have a host-based firewall installed and enabled.

#### Info

A firewall provides a line of defense against attack, allowing or blocking inbound and outbound connections based on a set of rules.

#### **Solution**

Install and enable a host-based firewall on the system.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-171R3** 03.13.06

**800-53** CA-3(5)

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

CCI CCI-002080

**CN-L3** 8.1.10.6(d)

CSF DE.AE-1

CSF ID.AM-3

CSF PR.IP-1

CSF2.0 DE.CM-09

**CSF2.0** ID.AM-03

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**GDPR** 32.1.d

**GDPR** 32.2

HIPAA 164.306(a)(1)

ISO-27001-2022 A.5.14

**ISO-27001-2022** A.8.9

**ISO-27001-2022** A.8.21

ITSG-33 CA-3

ITSG-33 CM-6b.

NESA M1.3.5

NESA M1.3.7

NESA T3.2.1

**NESA** T5.4.2

QCSC-V1 4.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

QCSC-V1 5.2.3

**QCSC-V1** 6.2

**RULE-ID** SV-214936r991589\_rule

**STIG-ID** WN19-00-000280

STIG-LEGACY SV-103657

STIG-LEGACY V-93571

SWIFT-CSCV1 2.3

SWIFT-CSCV1 2.5

**VULN-ID** V-214936

#### **Assets**

#### live-malware

All of the following must pass to satisfy this requirement:

\_\_\_\_\_

FAILED - Domain: Remote value: NULL Policy value: 1

FAILED - PrivateProfile: Remote value: NULL Policy value: 1

-----

FAILED - PublicProfile: Remote value: NULL Policy value: 1

# WN19-00-000390 - Windows Server 2019 must have the Server Message Block (SMB) v1 protocol disabled on the SMB server.

#### Info

SMBv1 is a legacy protocol that uses the MD5 algorithm as part of SMB. MD5 is known to be vulnerable to a number of attacks such as collision and preimage attacks as well as not being FIPS compliant.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> MS Security Guide >> 'Configure SMBv1 Server' to 'Disabled'.

The system must be restarted for the change to take effect.

This policy setting requires the installation of the SecGuide custom templates included with the STIG package.

'SecGuide.admx' and 'SecGuide.adml' must be copied to the \Windows\PolicyDefinitions and \Windows

\PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

**CCI** CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

**PCI-DSSV4.0** 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205683r958478\_rule

**STIG-ID** WN19-00-000390

STIG-LEGACY SV-103479

STIG-LEGACY V-93393

SWIFT-CSCV1 2.3

**VULN-ID** V-205683

#### **Assets**

#### live-malware

NULL

# WN19-00-000400 - Windows Server 2019 must have the Server Message Block (SMB) v1 protocol disabled on the SMB client.

#### Info

SMBv1 is a legacy protocol that uses the MD5 algorithm as part of SMB. MD5 is known to be vulnerable to a number of attacks such as collision and preimage attacks as well as not being FIPS compliant.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> MS Security Guide >> 'Configure SMBv1 client driver' to 'Enabled' with 'Disable driver (recommended)' selected for 'Configure MrxSmb10 driver'.

The system must be restarted for the changes to take effect.

This policy setting requires the installation of the SecGuide custom templates included with the STIG package.

'SecGuide.admx' and 'SecGuide.adml' must be copied to the \Windows\PolicyDefinitions and \Windows

\PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ITSG-33** CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205684r958478\_rule

**STIG-ID** WN19-00-000400

STIG-LEGACY SV-103481

STIG-LEGACY V-93395

SWIFT-CSCV1 2.3

**VULN-ID** V-205684

#### Assets

#### live-malware

NULL

# WN19-AC-000010 - Windows Server 2019 account lockout duration must be configured to 15 minutes or greater.

#### Info

The account lockout feature, when enabled, prevents brute-force password attacks on the system. This parameter specifies the period of time that an account will remain locked after the specified number of failed logon attempts.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Account Lockout Policy >> 'Account lockout duration' to '15' minutes or greater.

A value of '0' is also acceptable, requiring an administrator to unlock the account.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.8

**800-171R3** 03.01.08b.

**800-53** AC-7b.

**800-53R5** AC-7b.

CAT

CCI CCI-002238

**CN-L3** 7.1.2.7(f)

**CN-L3** 7.1.3.1(c)

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.5

**ITSG-33** AC-7b.

NESA T5.5.1

NIAV2 AM24

PCI-DSSV3.2.1 8.1.7

PCI-DSSV4.0 8.3.4

**RULE-ID** SV-205795r958736\_rule

**STIG-ID** WN19-AC-000010

STIG-LEGACY SV-103233

STIG-LEGACY V-93145

**TBA-FIISB** 36.2.4

**TBA-FIISB** 45.1.2

**VULN-ID** V-205795

#### Assets

#### live-malware

# WN19-AC-000020 - Windows Server 2019 must have the number of allowed bad logon attempts configured to three or less.

#### Info

The account lockout feature, when enabled, prevents brute-force password attacks on the system. The higher this value is, the less effective the account lockout feature will be in protecting the local system. The number of bad logon attempts must be reasonably small to minimize the possibility of a successful password attack while allowing for honest errors made during normal user logon.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Account Lockout Policy >> 'Account lockout threshold' to '3' or fewer invalid logon attempts (excluding '0', which is unacceptable).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.8

**800-171R3** 03.01.08a.

**800-53** AC-7a.

**800-53R5** AC-7a.

CAT

CCI CCI-000044

**CN-L3** 8.1.4.1(b)

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.5

ITSG-33 AC-7a.

NESA T5.5.1

NIAV2 AM24

**PCI-DSSV3.2.1** 8.1.6

PCI-DSSV4.0 8.3.4

**RULE-ID** SV-205629r958388\_rule

**STIG-ID** WN19-AC-000020

STIG-LEGACY SV-103229

STIG-LEGACY V-93141

**TBA-FIISB** 45.1.2

**TBA-FIISB** 45.2.1

**TBA-FIISB** 45.2.2

**VULN-ID** V-205629

#### **Assets**

#### live-malware

# WN19-AC-000030 - Windows Server 2019 must have the period of time before the bad logon counter is reset configured to 15 minutes or greater.

#### Info

The account lockout feature, when enabled, prevents brute-force password attacks on the system. This parameter specifies the period of time that must pass after failed logon attempts before the counter is reset to '0'. The smaller this value is, the less effective the account lockout feature will be in protecting the local system. Satisfies: SRG-OS-000021-GPOS-00005, SRG-OS-000329-GPOS-00128

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Account Lockout Policy >> 'Reset account lockout counter after' to at least '15' minutes.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**GDPR** 

ISO-27001-2022

800-171	3.1.8
800-171R3	03.01.08a.
800-171R3	03.01.08b.
800-53	AC-7a.
800-53	AC-7b.
800-53R5	AC-7a.
800-53R5	AC-7b.
CAT	II
CCI	CCI-000044
CCI	CCI-002238
CN-L3	7.1.2.7(f)
CN-L3	7.1.3.1(c)
CN-L3	8.1.4.1(b)
CSF2.0	PR.AA-03
DISA_BENCHMARK	Windows_Server_2019_STIG

32.1.b

A.8.5

HIPAA 164.306(a)(1)

ITSG-33 AC-7a.

ITSG-33 AC-7b.

NESA T5.5.1

NIAV2 AM24

**PCI-DSSV3.2.1** 8.1.6

**PCI-DSSV3.2.1** 8.1.7

PCI-DSSV4.0 8.3.4

**RULE-ID** SV-205630r958388\_rule

**STIG-ID** WN19-AC-000030

STIG-LEGACY SV-103231

STIG-LEGACY V-93143

**TBA-FIISB** 36.2.4

**TBA-FIISB** 45.1.2

**TBA-FIISB** 45.2.1

**TBA-FIISB** 45.2.2

**VULN-ID** V-205630

#### **Assets**

#### live-malware

# WN19-AC-000040 - Windows Server 2019 password history must be configured to 24 passwords remembered.

#### Info

A system is more vulnerable to unauthorized access when system users recycle the same password several times without being required to change to a unique password on a regularly scheduled basis. This enables users to effectively negate the purpose of mandating periodic password changes. The default value is '24' for Windows domain systems. DOD has decided this is the appropriate value for all Windows systems.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Enforce password history' to '24' passwords remembered.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.7

**800-171R3** 03.05.07b.

**800-53** IA-5(1)(b)

**800-53R5** IA-5(1)(b)

CAT

CCI CCI-004061

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ISO/IEC-27001 A.9.4.3

ITSG-33 IA-5(1)(b)

NESA T5.2.3

NIAV2 AM22d

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205660r1000129\_rule

**STIG-ID** WN19-AC-000040

STIG-LEGACY SV-103565

STIG-LEGACY V-93479

SWIFT-CSCV1 4.1

**VULN-ID** V-205660

#### Assets

#### live-malware

# WN19-AC-000060 - Windows Server 2019 minimum password age must be configured to at least one day.

#### Info

Permitting passwords to be changed in immediate succession within the same day allows users to cycle passwords through their history database. This enables users to effectively negate the purpose of mandating periodic password changes.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Minimum password age' to at least '1' day.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.2

**800-171R3** 03.05.07d.

**800-53** IA-5(1)(d)

**800-53R5** IA-5(1)(h)

CAT

**CCI** CCI-000198

CCI CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

**ISO/IEC-27001** A.9.4.3

ITSG-33 IA-5(1)(d)

NESA T5.2.3

NIAV2 AM20

NIAV2 AM21

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205656r1051064\_rule

**STIG-ID** WN19-AC-000060

STIG-LEGACY SV-103557

STIG-LEGACY V-93471

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.2

**VULN-ID** V-205656

#### **Assets**

#### live-malware

# WN19-AC-000070 - Windows Server 2019 minimum password length must be configured to 14 characters.

#### Info

Information systems not protected with strong password schemes (including passwords of minimum length) provide the opportunity for anyone to crack the password, thus gaining access to the system and compromising the device, information, or the local network.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Minimum password length' to '14' characters.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.7

**800-171R3** 03.05.07a.

**800-53** IA-5(1)(a)

**800-53R5** IA-5(1)(h)

CAT

CCI CCI-000205

CCI CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

**ISO/IEC-27001** A.9.4.3

ITSG-33 IA-5(1)(a)

NESA T5.2.3

NIAV2 AM19a

NIAV2 AM19b

NIAV2 AM19c

NIAV2 AM19d

NIAV2 AM22a

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205662r1051069\_rule

**STIG-ID** WN19-AC-000070

STIG-LEGACY SV-103549

STIG-LEGACY V-93463

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.1

**TBA-FIISB** 26.2.4

**VULN-ID** V-205662

#### Assets

#### live-malware

# WN19-AU-000080 - Windows Server 2019 must be configured to audit Account Logon - Credential Validation failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Credential Validation records events related to validation tests on credentials for a user account logon.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Logon >> 'Audit Credential Validation' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**DISA\_BENCHMARK** 

R	leterences et al.	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

NESA T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205833r991578\_rule

**STIG-ID** WN19-AU-000080

STIG-LEGACY SV-103243

STIG-LEGACY V-93155

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205833

#### **Assets**

#### live-malware

'success'

# WN19-AU-000140 - Windows Server 2019 must be configured to audit Detailed Tracking - Process Creation successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Process Creation records events related to the creation of a process and the source.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000471-GPOS-00215

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Detailed Tracking >> 'Audit Process Creation' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

P	Δf		ra	n	ces
	CI	<b>C</b>			CCO

CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**QCSC-V1** 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205770r958732\_rule

**STIG-ID** WN19-AU-000140

STIG-LEGACY SV-103179

STIG-LEGACY V-93091

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205770

### Assets

## live-malware

# WN19-AU-000170 - Windows Server 2019 must be configured to audit Logon/Logoff - Group Membership successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Group Membership records information related to the group membership of a user's logon token.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Group Membership' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

DISA\_BENCHMARK

800-171	3.3.1
800-171	3.3.2
800-171R3	03.03.03a.
800-53	AU-12c.
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.3(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

**ITSG-33** AU-12c.

NESA T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205834r991578\_rule

**STIG-ID** WN19-AU-000170

STIG-LEGACY SV-103247

STIG-LEGACY V-93159

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205834

### Assets

### live-malware

# WN19-AU-000240 - Windows Server 2019 must be configured to audit Object Access - Removable Storage successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Removable Storage auditing under Object Access records events related to access attempts on file system objects on removable storage devices.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Object Access >> 'Audit Removable Storage' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

K	references	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205840r991583\_rule

**STIG-ID** WN19-AU-000240

STIG-LEGACY SV-103255

STIG-LEGACY V-93167

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205840

## Assets

# live-malware

# WN19-AU-000250 - Windows Server 2019 must be configured to audit Object Access - Removable Storage failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Removable Storage auditing under Object Access records events related to access attempts on file system objects on removable storage devices.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Object Access >> 'Audit Removable Storage' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**DISA\_BENCHMARK** 

References	
800-171	3.3.1
800-171	3.3.2
800-171R3	03.03.03a.
800-53	AU-12c.
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.3(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205841r991583\_rule

**STIG-ID** WN19-AU-000250

STIG-LEGACY SV-103257

STIG-LEGACY V-93169

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205841

### Assets

### live-malware

### WN19-AU-000290 - Windows Server 2019 must be configured to audit Policy Change - Authorization Policy Change successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Authorization Policy Change records events related to changes in user rights, such as 'Create a token object'. OS-000466-GPOS-00210

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Policy Change >> 'Audit Authorization Policy Change' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### R

CN-L3

References		
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205774r958732\_rule

**STIG-ID** WN19-AU-000290

STIG-LEGACY SV-103187

STIG-LEGACY V-93099

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205774

### Assets

## live-malware

# WN19-AU-000300 - Windows Server 2019 must be configured to audit Privilege Use - Sensitive Privilege Use successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Sensitive Privilege Use records events related to use of sensitive privileges, such as 'Act as part of the operating system' or 'Debug programs'.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000064-GPOS-00033, SRG-OS-000462-GPOS-00206, SRG-OS-000466-GPOS-00210

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Privilege Use >> 'Audit Sensitive Privilege Use' with 'Success' selected.

#### See Also

CN-L3

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

Thtps://di.dod.oybot.htm/wp-content/dpiodds/stigs/2p/o_tvio_vviildows_oct/voi_2010_v0i/4_0110.2p			
References			
800-171	3.1.7		
800-171	3.3.1		
800-171	3.3.2		
800-171R3	03.01.07b.		
800-171R3	03.03.03a.		
800-53	AC-6(9)		
800-53	AU-12c.		
800-53R5	AC-6(9)		
800-53R5	AU-12c.		
CAT	II		
CCI	CCI-000172		
CCI	CCI-002234		
CN-L3	7.1.3.2(b)		
CN-L3	7.1.3.2(g)		
CN-L3	7.1.3.3(a)		
CN-L3	7.1.3.3(b)		
CN-L3	7.1.3.3(c)		
CN-L3	8.1.3.5(a)		
CN-L3	8.1.3.5(b)		

8.1.4.2(d)

**CN-L3** 8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

ISO/IEC-27001 A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

NESA T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205775r958732\_rule

**STIG-ID** WN19-AU-000300

STIG-LEGACY SV-103189

STIG-LEGACY V-93101

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205775

#### Assets

#### live-malware

# WN19-AU-000310 - Windows Server 2019 must be configured to audit Privilege Use - Sensitive Privilege Use failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Sensitive Privilege Use records events related to use of sensitive privileges, such as 'Act as part of the operating system' or 'Debug programs'.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000064-GPOS-00033, SRG-OS-000462-GPOS-00206, SRG-OS-000466-GPOS-00210

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Privilege Use >> 'Audit Sensitive Privilege Use' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

References
800-171

3.1.7

800-171

3.3.1

800-171

3.3.2

800-171R3

03.01.07b.

800-171R3

03.03.03a.

800-53

AC-6(9)

800-53

AU-12c.

800-53R5

AC-6(9)

000 00110

800-53R5

AU-12c.

CAT

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CCI

CCI-000172

CCI

CCI-002234

CN-L3

7.1.3.2(b)

CN-L3

7.1.3.2(g)

CN-L3

CN-L3

7.1.3.3(a)

7.1.3.3(b)

CN-L3

7.1.3.3(c)

CN-L3

8.1.3.5(a)

CN-L3

8.1.3.5(b)

CN-L3

8.1.4.2(d)

**CN-L3** 8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

ISO/IEC-27001 A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

NESA T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205776r958732\_rule

**STIG-ID** WN19-AU-000310

STIG-LEGACY SV-103191

STIG-LEGACY V-93103

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205776

#### Assets

#### live-malware

# WN19-AU-000320 - Windows Server 2019 must be configured to audit System - IPsec Driver successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

IPsec Driver records events related to the IPsec Driver, such as dropped packets.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit IPsec Driver' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205777r958732\_rule

**STIG-ID** WN19-AU-000320

STIG-LEGACY SV-103193

STIG-LEGACY V-93105

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205777

### Assets

## live-malware

# WN19-AU-000330 - Windows Server 2019 must be configured to audit System - IPsec Driver failures. Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

IPsec Driver records events related to the IPsec Driver, such as dropped packets.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit IPsec Driver' with 'Failure' selected.

#### See Also

CN-L3

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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References	
800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)

8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

ISO/IEC-27001 A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205778r958732\_rule

**STIG-ID** WN19-AU-000330

STIG-LEGACY SV-103195

STIG-LEGACY V-93107

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205778

## Assets

# live-malware

# WN19-CC-000010 - Windows Server 2019 must prevent the display of slide shows on the lock screen.

#### Info

Slide shows that are displayed on the lock screen could display sensitive information to unauthorized personnel. Turning off this feature will limit access to the information to a logged-on user.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Control Panel >> Personalization >> 'Prevent enabling lock screen slide show' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ITSG-33** CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205686r958478\_rule

**STIG-ID** WN19-CC-000010

STIG-LEGACY SV-103485

STIG-LEGACY V-93399

SWIFT-CSCV1 2.3

**VULN-ID** V-205686

### Assets

# live-malware

NULL

## WN19-CC-000020 - Windows Server 2019 must have WDigest Authentication disabled.

#### Info

When the WDigest Authentication protocol is enabled, plain-text passwords are stored in the Local Security Authority Subsystem Service (LSASS), exposing them to theft. WDigest is disabled by default in Windows Server 2019. This setting ensures this is enforced.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> MS Security Guide >> 'WDigest Authentication (disabling may require KB2871997)' to 'Disabled'.

This policy setting requires the installation of the SecGuide custom templates included with the STIG package. 'SecGuide.admx' and 'SecGuide.adml' must be copied to the \Windows\PolicyDefinitions and \Windows\PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ITSG-33** CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205687r958478\_rule

**STIG-ID** WN19-CC-000020

STIG-LEGACY SV-103487

STIG-LEGACY V-93401

SWIFT-CSCV1 2.3

**VULN-ID** V-205687

## **Assets**

## live-malware

NULL

# WN19-CC-000030 - Windows Server 2019 Internet Protocol version 6 (IPv6) source routing must be configured to the highest protection level to prevent IP source routing.

#### Info

Configuring the system to disable IPv6 source routing protects against spoofing.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> MSS (Legacy) >> 'MSS: (DisableIPSourceRouting IPv6) IP source routing protection level (protects against packet spoofing)' to 'Enabled' with 'Highest protection, source routing is completely disabled' selected.

This policy setting requires the installation of the MSS-Legacy custom templates included with the STIG package. 'MSS-Legacy.admx' and 'MSS-Legacy.adml' must be copied to the \Windows\PolicyDefinitions and \Windows \PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205858r991589\_rule

**STIG-ID** WN19-CC-000030

STIG-LEGACY SV-103321

STIG-LEGACY V-93233

SWIFT-CSCV1 2.3

**VULN-ID** V-205858

#### **Assets**

### live-malware

NULL

# WN19-CC-000040 - Windows Server 2019 source routing must be configured to the highest protection level to prevent Internet Protocol (IP) source routing.

#### Info

Configuring the system to disable IP source routing protects against spoofing.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> MSS (Legacy) >> 'MSS: (DisableIPSourceRouting) IP source routing protection level (protects against packet spoofing)' to 'Enabled' with 'Highest protection, source routing is completely disabled' selected.

This policy setting requires the installation of the MSS-Legacy custom templates included with the STIG package. 'MSS-Legacy.admx' and 'MSS-Legacy.adml' must be copied to the \Windows\PolicyDefinitions and \Windows \PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205859r991589\_rule

**STIG-ID** WN19-CC-000040

STIG-LEGACY SV-103323

STIG-LEGACY V-93235

SWIFT-CSCV1 2.3

**VULN-ID** V-205859

#### **Assets**

### live-malware

NULL

# WN19-CC-000050 - Windows Server 2019 must be configured to prevent Internet Control Message Protocol (ICMP) redirects from overriding Open Shortest Path First (OSPF)-generated routes.

#### Info

Allowing ICMP redirect of routes can lead to traffic not being routed properly. When disabled, this forces ICMP to be routed via the shortest path first.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> MSS (Legacy) >> 'MSS: (EnableICMPRedirect) Allow ICMP redirects to override OSPF generated routes' to 'Disabled'.

This policy setting requires the installation of the MSS-Legacy custom templates included with the STIG package.

'MSS-Legacy.admx' and 'MSS-Legacy.adml' must be copied to the \Windows\PolicyDefinitions and \Windows \PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205860r991589\_rule

**STIG-ID** WN19-CC-000050

STIG-LEGACY SV-103325

STIG-LEGACY V-93237

SWIFT-CSCV1 2.3

**VULN-ID** V-205860

#### **Assets**

### live-malware

NULL

# WN19-CC-000060 - Windows Server 2019 must be configured to ignore NetBIOS name release requests except from WINS servers.

#### Info

Configuring the system to ignore name release requests, except from WINS servers, prevents a denial of service (DoS) attack. The DoS consists of sending a NetBIOS name release request to the server for each entry in the server's cache, causing a response delay in the normal operation of the server's WINS resolution capability.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> MSS (Legacy) >> 'MSS: (NoNameReleaseOnDemand) Allow the computer to ignore NetBIOS name release requests except from WINS servers' to 'Enabled'.

This policy setting requires the installation of the MSS-Legacy custom templates included with the STIG package. 'MSS-Legacy.admx' and 'MSS-Legacy.adml' must be copied to the \Windows\PolicyDefinitions and \Windows \PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** SC-5

**800-53R5** SC-5a.

CAT

CCI CCI-002385

CSF DE.CM-1

CSF PR.DS-4

CSF2.0 DE.CM-01

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-5

ITSG-33 SC-5a.

NESA T3.3.1

NIAV2 GS8e

NIAV2 GS10c

QCSC-V1 8.2.1

**RULE-ID** SV-205819r958902\_rule

**STIG-ID** WN19-CC-000060

STIG-LEGACY SV-103627

STIG-LEGACY V-93541

**VULN-ID** V-205819

## Assets

# live-malware

NULL

## WN19-CC-000070 - Windows Server 2019 insecure logons to an SMB server must be disabled.

#### Info

Insecure guest logons allow unauthenticated access to shared folders. Shared resources on a system must require authentication to establish proper access.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Network >> Lanman Workstation >> 'Enable insecure guest logons' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205861r991589\_rule

**STIG-ID** WN19-CC-000070

STIG-LEGACY SV-103327

STIG-LEGACY V-93239

SWIFT-CSCV1 2.3

**VULN-ID** V-205861

### **Assets**

#### live-malware

# WN19-CC-000080 - Windows Server 2019 hardened Universal Naming Convention (UNC) paths must be defined to require mutual authentication and integrity for at least the \\\*\SYSVOL and \\\*\NETLOGON shares.

#### Info

Additional security requirements are applied to UNC paths specified in hardened UNC paths before allowing access to them. This aids in preventing tampering with or spoofing of connections to these paths.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Network >> Network >> Network >> 'Hardened UNC Paths' to 'Enabled' with at least the following configured in 'Hardened UNC Paths' (click the 'Show' button to display):

Value Name: \\\*\SYSVOL Value: RequireMutualAuthentication=1, RequireIntegrity=1 Value Name: \\\*\NETLOGON Value: RequireMutualAuthentication=1, RequireIntegrity=1

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

**CCI** CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205862r991589\_rule

**STIG-ID** WN19-CC-000080

STIG-LEGACY SV-103329

STIG-LEGACY V-93241

SWIFT-CSCV1 2.3

**VULN-ID** V-205862

#### **Assets**

## WN19-CC-000090 - Windows Server 2019 command line data must be included in process creation events.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Enabling 'Include command line data for process creation events' will record the command line information with the process creation events in the log. This can provide additional detail when malware has run on a system.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Audit Process Creation >> 'Include command line in process creation events' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.3.1

**800-171** 3.3.2

**800-171R3** 03.03.02b.

**800-53** AU-3(1)

**800-53R5** AU-3(1)

CAT

CCI CCI-000135

**CN-L3** 7.1.3.3(b)

CSF PR.PT-1

CSF2.0 PR.PS-04

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.5.28

**ISO-27001-2022** A.8.15

**ITSG-33** AU-3(1)

**NESA** T3.6.2

NIAV2 AM34a

NIAV2 AM34b

NIAV2 AM34c

NIAV2 AM34d

NIAV2 AM34e

NIAV2 AM34f

NIAV2 AM34g

**PCI-DSSV3.2.1** 10.3

**PCI-DSSV3.2.1** 10.3.1

PCI-DSSV3.2.1 10.3.2

PCI-DSSV3.2.1 10.3.3

PCI-DSSV3.2.1 10.3.4

**PCI-DSSV3.2.1** 10.3.5

PCI-DSSV3.2.1 10.3.6

PCI-DSSV4.0 10.2.2

QCSC-V1 8.2.1

QCSC-V1 13.2

RULE-ID SV-205638r958422\_rule

**STIG-ID** WN19-CC-000090

STIG-LEGACY SV-103261

STIG-LEGACY V-93173

SWIFT-CSCV1 6.4

**VULN-ID** V-205638

#### **Assets**

### live-malware

## WN19-CC-000100 - Windows Server 2019 must be configured to enable Remote host allows delegation of non-exportable credentials.

#### Info

An exportable version of credentials is provided to remote hosts when using credential delegation which exposes them to theft on the remote host. Restricted Admin mode or Remote Credential Guard allow delegation of non-exportable credentials providing additional protection of the credentials. Enabling this configures the host to support Restricted Admin mode or Remote Credential Guard.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Credentials Delegation >> 'Remote host allows delegation of non-exportable credentials' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205863r991589\_rule

**STIG-ID** WN19-CC-000100

STIG-LEGACY SV-103331

STIG-LEGACY V-93243

SWIFT-CSCV1 2.3

**VULN-ID** V-205863

#### **Assets**

## WN19-CC-000140 - Windows Server 2019 group policy objects must be reprocessed even if they have not changed.

#### Info

Registry entries for group policy settings can potentially be changed from the required configuration. This could occur as part of troubleshooting or by a malicious process on a compromised system. Enabling this setting and then selecting the 'Process even if the Group Policy objects have not changed' option ensures the policies will be reprocessed even if none have been changed. This way, any unauthorized changes are forced to match the domain-based group policy settings again.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Group Policy >> 'Configure registry policy processing' to 'Enabled' with the option 'Process even if the Group Policy objects have not changed' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205866r991589\_rule

**STIG-ID** WN19-CC-000140

STIG-LEGACY SV-103339

STIG-LEGACY V-93251

SWIFT-CSCV1 2.3

**VULN-ID** V-205866

### Assets

## live-malware

## WN19-CC-000150 - Windows Server 2019 downloading print driver packages over HTTP must be turned off.

#### Info

Some features may communicate with the vendor, sending system information or downloading data or components for the feature. Turning off this capability will prevent potentially sensitive information from being sent outside the enterprise and will prevent uncontrolled updates to the system.

This setting prevents the computer from downloading print driver packages over HTTP.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Internet Communication Management >> Internet Communication settings >> 'Turn off downloading of print drivers over HTTP' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ITSG-33** CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205688r958478\_rule

**STIG-ID** WN19-CC-000150

STIG-LEGACY SV-103489

STIG-LEGACY V-93403

SWIFT-CSCV1 2.3

**VULN-ID** V-205688

## **Assets**

## live-malware

### WN19-CC-000160 - Windows Server 2019 printing over HTTP must be turned off.

#### Info

Some features may communicate with the vendor, sending system information or downloading data or components for the feature. Turning off this capability will prevent potentially sensitive information from being sent outside the enterprise and will prevent uncontrolled updates to the system.

This setting prevents the client computer from printing over HTTP, which allows the computer to print to printers on the intranet as well as the Internet.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Internet Communication Management >> Internet Communication settings >> 'Turn off printing over HTTP' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

**PCI-DSSV4.0** 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205689r958478\_rule

**STIG-ID** WN19-CC-000160

STIG-LEGACY SV-103491

STIG-LEGACY V-93405

SWIFT-CSCV1 2.3

**VULN-ID** V-205689

## **Assets**

## live-malware

## WN19-CC-000170 - Windows Server 2019 network selection user interface (UI) must not be displayed on the logon screen.

#### Info

Enabling interaction with the network selection UI allows users to change connections to available networks without signing in to Windows.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Logon >> 'Do not display network selection UI' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205690r958478\_rule

**STIG-ID** WN19-CC-000170

STIG-LEGACY SV-103493

STIG-LEGACY V-93407

SWIFT-CSCV1 2.3

**VULN-ID** V-205690

### Assets

## live-malware

## WN19-CC-000180 - Windows Server 2019 users must be prompted to authenticate when the system wakes from sleep (on battery).

#### Info

A system that does not require authentication when resuming from sleep may provide access to unauthorized users. Authentication must always be required when accessing a system. This setting ensures users are prompted for a password when the system wakes from sleep (on battery).

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Power Management >> Sleep Settings >> 'Require a password when a computer wakes (on battery)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205867r991589\_rule

**STIG-ID** WN19-CC-000180

STIG-LEGACY SV-103341

STIG-LEGACY V-93253

SWIFT-CSCV1 2.3

**VULN-ID** V-205867

#### **Assets**

## WN19-CC-000190 - Windows Server 2019 users must be prompted to authenticate when the system wakes from sleep (plugged in).

#### Info

A system that does not require authentication when resuming from sleep may provide access to unauthorized users. Authentication must always be required when accessing a system. This setting ensures users are prompted for a password when the system wakes from sleep (plugged in).

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Power Management >> Sleep Settings >> 'Require a password when a computer wakes (plugged in)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205868r991589\_rule

**STIG-ID** WN19-CC-000190

STIG-LEGACY SV-103343

STIG-LEGACY V-93255

SWIFT-CSCV1 2.3

**VULN-ID** V-205868

#### **Assets**

## WN19-CC-000200 - Windows Server 2019 Application Compatibility Program Inventory must be prevented from collecting data and sending the information to Microsoft.

#### Info

Some features may communicate with the vendor, sending system information or downloading data or components for the feature. Turning off this capability will prevent potentially sensitive information from being sent outside the enterprise and will prevent uncontrolled updates to the system.

This setting will prevent the Program Inventory from collecting data about a system and sending the information to Microsoft.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Application Compatibility >> 'Turn off Inventory Collector' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ITSG-33** CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205691r958478\_rule

**STIG-ID** WN19-CC-000200

STIG-LEGACY SV-103495

STIG-LEGACY V-93409

SWIFT-CSCV1 2.3

**VULN-ID** V-205691

## **Assets**

## live-malware

## WN19-CC-000210 - Windows Server 2019 Autoplay must be turned off for non-volume devices.

#### Info

Allowing AutoPlay to execute may introduce malicious code to a system. AutoPlay begins reading from a drive as soon as media is inserted into the drive. As a result, the setup file of programs or music on audio media may start. This setting will disable AutoPlay for non-volume devices, such as Media Transfer Protocol (MTP) devices.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> AutoPlay Policies >> 'Disallow Autoplay for non-volume devices' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.7

**800-171R3** 03.04.06

**800-53** CM-7(2)

**800-53R5** CM-7(2)

CAT

CCI CCI-001764

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ITSG-33** CM-7(2)

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.2

QCSC-V1 3.2

**RULE-ID** SV-205804r958804\_rule

**STIG-ID** WN19-CC-000210

STIG-LEGACY SV-103459

STIG-LEGACY V-93373

SWIFT-CSCV1 2.3

**VULN-ID** V-205804

#### **Assets**

#### live-malware

## WN19-CC-000220 - Windows Server 2019 default AutoRun behavior must be configured to prevent AutoRun commands.

#### Info

Allowing AutoRun commands to execute may introduce malicious code to a system. Configuring this setting prevents AutoRun commands from executing.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> AutoPlay Policies >> 'Set the default behavior for AutoRun' to 'Enabled' with 'Do not execute any autorun commands' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.7

**800-171R3** 03.04.06

**800-53** CM-7(2)

**800-53R5** CM-7(2)

CAT

**CCI** CCI-001764

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7(2)

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.2

QCSC-V1 3.2

**RULE-ID** SV-205805r958804\_rule

**STIG-ID** WN19-CC-000220

STIG-LEGACY SV-103461

STIG-LEGACY V-93375

SWIFT-CSCV1 2.3

**VULN-ID** V-205805

#### **Assets**

### WN19-CC-000230 - Windows Server 2019 AutoPlay must be disabled for all drives.

#### Info

Allowing AutoPlay to execute may introduce malicious code to a system. AutoPlay begins reading from a drive as soon media is inserted into the drive. As a result, the setup file of programs or music on audio media may start. By default, AutoPlay is disabled on removable drives, such as the floppy disk drive (but not the CD-ROM drive) and on network drives. Enabling this policy disables AutoPlay on all drives.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> AutoPlay Policies >> 'Turn off AutoPlay' to 'Enabled' with 'All Drives' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.7

**800-171R3** 03.04.06

**800-53** CM-7(2)

**800-53R5** CM-7(2)

CAT

CCI CCI-001764

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7(2)

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.2

QCSC-V1 3.2

**RULE-ID** SV-205806r958804\_rule

**STIG-ID** WN19-CC-000230

STIG-LEGACY SV-103463

STIG-LEGACY V-93377

SWIFT-CSCV1 2.3

**VULN-ID** V-205806

### **Assets**

## WN19-CC-000240 - Windows Server 2019 administrator accounts must not be enumerated during elevation.

### Info

Enumeration of administrator accounts when elevating can provide part of the logon information to an unauthorized user. This setting configures the system to always require users to type in a username and password to elevate a running application.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Credential User Interface >> 'Enumerate administrator accounts on elevation' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-3

ITSG-33 SC-3a.

NESA T3.4.1

NESA T4.3.1

**NESA** T4.3.2

**RULE-ID** SV-205714r958518\_rule

**STIG-ID** WN19-CC-000240

STIG-LEGACY SV-103603

STIG-LEGACY V-93517

**VULN-ID** V-205714

#### **Assets**

#### live-malware

### WN19-CC-000250 - Windows Server 2019 Telemetry must be configured to Security or Basic.

#### Info

Some features may communicate with the vendor, sending system information or downloading data or components for the feature. Limiting this capability will prevent potentially sensitive information from being sent outside the enterprise. The 'Security' option for Telemetry configures the lowest amount of data, effectively none outside of the Malicious Software Removal Tool (MSRT), Defender, and telemetry client settings. 'Basic' sends basic diagnostic and usage data and may be required to support some Microsoft services.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Data Collection >> 'Allow Telemetry' to 'Enabled' with '0 - Security [Enterprise Only]' or '1 - Basic' selected in 'Options'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205869r991589\_rule

**STIG-ID** WN19-CC-000250

STIG-LEGACY SV-103345

STIG-LEGACY V-93257

SWIFT-CSCV1 2.3

**VULN-ID** V-205869

### **Assets**

## WN19-CC-000260 - Windows Server 2019 Windows Update must not obtain updates from other PCs on the Internet.

#### Info

Windows Update can obtain updates from additional sources instead of Microsoft. In addition to Microsoft, updates can be obtained from and sent to PCs on the local network as well as on the Internet. This is part of the Windows Update trusted process, however to minimize outside exposure, obtaining updates from or sending to systems on the Internet must be prevented.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Delivery Optimization >> 'Download Mode' to 'Enabled' with any option except 'Internet' selected. Acceptable selections include:

Bypass (100) Group (2) HTTP only (0) LAN (1) Simple (99)

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205870r991589\_rule

**STIG-ID** WN19-CC-000260

STIG-LEGACY SV-103347

STIG-LEGACY V-93259

SWIFT-CSCV1 2.3

**VULN-ID** V-205870

### Assets

## live-malware

## WN19-CC-000270 - Windows Server 2019 Application event log size must be configured to 32768 KB or greater.

#### Info

Inadequate log size will cause the log to fill up quickly. This may prevent audit events from being recorded properly and require frequent attention by administrative personnel.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Event Log Service >> Application >> 'Specify the maximum log file size (KB)' to 'Enabled' with a 'Maximum Log Size (KB)' of '32768' or greater.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** AU-4

**800-53R5** AU-4

CAT

CCI CCI-001849

CSF PR.DS-4

CSF PR.PT-1

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.6

ITSG-33 AU-4

NESA T3.3.1

NESA T3.6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205796r958752\_rule

**STIG-ID** WN19-CC-000270

STIG-LEGACY SV-103265

STIG-LEGACY V-93177

**VULN-ID** V-205796

### Assets

#### live-malware

## WN19-CC-000280 - Windows Server 2019 Security event log size must be configured to 196608 KB or greater.

#### Info

Inadequate log size will cause the log to fill up quickly. This may prevent audit events from being recorded properly and require frequent attention by administrative personnel.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Event Log Service >> Security >> 'Specify the maximum log file size (KB)' to 'Enabled' with a 'Maximum Log Size (KB)' of '196608' or greater.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** AU-4

**800-53R5** AU-4

CAT

CCI CCI-001849

CSF PR.DS-4

CSF PR.PT-1

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.6

ITSG-33 AU-4

NESA T3.3.1

NESA T3.6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205797r958752\_rule

**STIG-ID** WN19-CC-000280

STIG-LEGACY SV-103267

STIG-LEGACY V-93179

**VULN-ID** V-205797

### **Assets**

#### live-malware

## WN19-CC-000290 - Windows Server 2019 System event log size must be configured to 32768 KB or greater.

#### Info

Inadequate log size will cause the log to fill up quickly. This may prevent audit events from being recorded properly and require frequent attention by administrative personnel.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Event Log Service >> System >> 'Specify the maximum log file size (KB)' to 'Enabled' with a 'Maximum Log Size (KB)' of '32768' or greater.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** AU-4

**800-53R5** AU-4

CAT

CCI CCI-001849

CSF PR.DS-4

CSF PR.PT-1

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.6

ITSG-33 AU-4

NESA T3.3.1

NESA T3.6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205798r958752\_rule

**STIG-ID** WN19-CC-000290

STIG-LEGACY SV-103269

STIG-LEGACY V-93181

**VULN-ID** V-205798

### Assets

#### live-malware

#### WN19-CC-000300 - Windows Server 2019 Windows Defender SmartScreen must be enabled.

#### Info

Windows Defender SmartScreen helps protect systems from programs downloaded from the internet that may be malicious. Enabling SmartScreen can block potentially malicious programs or warn users.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> File Explorer >> 'Configure Windows Defender SmartScreen' to 'Enabled' with either option 'Warn' or 'Warn and prevent bypass' selected.

Windows 2019 includes duplicate policies for this setting. It can also be configured under Computer Configuration >> Administrative Templates >> Windows Components >> Windows Defender SmartScreen >> Explorer.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205692r958478\_rule

**STIG-ID** WN19-CC-000300

STIG-LEGACY SV-103497

STIG-LEGACY V-93411

SWIFT-CSCV1 2.3

**VULN-ID** V-205692

## **Assets**

## live-malware

## WN19-CC-000340 - Windows Server 2019 must not save passwords in the Remote Desktop Client.

## Info

Saving passwords in the Remote Desktop Client could allow an unauthorized user to establish a remote desktop session to another system. The system must be configured to prevent users from saving passwords in the Remote Desktop Client.

Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

## **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Remote Desktop Services >> Remote Desktop Connection Client >> 'Do not allow passwords to be saved' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

CCI CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(d)

QCSC-V1 13.2

**RULE-ID** SV-205808r1051080\_rule

**STIG-ID** WN19-CC-000340

STIG-LEGACY SV-103511

STIG-LEGACY V-93425

**VULN-ID** V-205808

#### **Assets**

## live-malware

## WN19-CC-000350 - Windows Server 2019 Remote Desktop Services must prevent drive redirection.

## Info

Preventing users from sharing the local drives on their client computers with Remote Session Hosts that they access helps reduce possible exposure of sensitive data.

## **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Remote Desktop Services >> Remote Desktop Session Host >> Device and Resource Redirection >> 'Do not allow drive redirection' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.13.4

**800-171R3** 03.13.04

**800-53** SC-4

**800-53R5** SC-4

CAT

CCI CCI-001090

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-4

ITSG-33 SC-4a.

**RULE-ID** SV-205722r958524\_rule

**STIG-ID** WN19-CC-000350

STIG-LEGACY SV-103619

STIG-LEGACY V-93533

**VULN-ID** V-205722

#### **Assets**

#### live-malware

# WN19-CC-000360 - Windows Server 2019 Remote Desktop Services must always prompt a client for passwords upon connection.

#### Info

This setting controls the ability of users to supply passwords automatically as part of their remote desktop connection. Disabling this setting would allow anyone to use the stored credentials in a connection item to connect to the terminal server.

Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Remote Desktop Services >> Remote Desktop Session Host >> Security >> 'Always prompt for password upon connection' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

CCI CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(d)

QCSC-V1 13.2

**RULE-ID** SV-205809r1051081\_rule

**STIG-ID** WN19-CC-000360

STIG-LEGACY SV-103513

STIG-LEGACY V-93427

**VULN-ID** V-205809

#### Assets

## live-malware

# WN19-CC-000370 - Windows Server 2019 Remote Desktop Services must require secure Remote Procedure Call (RPC) communications.

#### Info

Allowing unsecure RPC communication exposes the system to man-in-the-middle attacks and data disclosure attacks. A man-in-the-middle attack occurs when an intruder captures packets between a client and server and modifies them before allowing the packets to be exchanged. Usually the attacker will modify the information in the packets in an attempt to cause either the client or server to reveal sensitive information.

Satisfies: SRG-OS-000033-GPOS-00014, SRG-OS-000250-GPOS-00093

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Remote Desktop Services >> Remote Desktop Session Host >> Security >> 'Require secure RPC communication' to 'Enabled'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

 800-171
 3.1.13

 800-171R3
 03.13.08

 800-53
 AC-17(2)

 800-53R5
 AC-17(2)

 CAT
 II

 CCI
 CCI-000068

CCI CCI-001453

CN-L3 7.1.2.7(g)
CN-L3 7.1.3.1(d)
CN-L3 8.1.4.1(c)
CSF PR.AC-3
CSF PR.PT-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.6.7

ISO/IEC-27001 A.6.2.2

**ITSG-33** AC-17(2)

NESA T5.4.2

NIAV2 AM37

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV4.0** 2.2.7

**QCSC-V1** 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

**RULE-ID** SV-205636r958408\_rule

**STIG-ID** WN19-CC-000370

STIG-LEGACY SV-103059

STIG-LEGACY V-92971

SWIFT-CSCV1 2.6

**VULN-ID** V-205636

## Assets

## live-malware

# WN19-CC-000380 - Windows Server 2019 Remote Desktop Services must be configured with the client connection encryption set to High Level.

#### Info

Remote connections must be encrypted to prevent interception of data or sensitive information. Selecting 'High Level' will ensure encryption of Remote Desktop Services sessions in both directions.

Satisfies: SRG-OS-000033-GPOS-00014, SRG-OS-000250-GPOS-00093

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Remote Desktop Services >> Remote Desktop Session Host >> Security >> 'Set client connection encryption level' to 'Enabled' with 'High Level' selected.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171 3.1.13 800-171R3 03.13.08 800-53 AC-17(2) 800-53R5 AC-17(2) **CAT** CCI CCI-000068 CCI CCI-001453 CN-L3 7.1.2.7(g) CN-L3 7.1.3.1(d)

**CN-L3** 8.1.4.1(c)

CSF PR.AC-3

CSF PR.PT-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(1)

ISO-27001-2022 A.5.14

**ISO-27001-2022** A.6.7

ISO/IEC-27001 A.6.2.2

ITSG-33 AC-17(2)

NESA T5.4.2

NIAV2 AM37

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV4.0** 2.2.7

**QCSC-V1** 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

**RULE-ID** SV-205637r958408\_rule

**STIG-ID** WN19-CC-000380

STIG-LEGACY SV-103061

STIG-LEGACY V-92973

SWIFT-CSCV1 2.6

**VULN-ID** V-205637

## **Assets**

## live-malware

# WN19-CC-000390 - Windows Server 2019 must prevent attachments from being downloaded from RSS feeds.

#### Info

Attachments from RSS feeds may not be secure. This setting will prevent attachments from being downloaded from RSS feeds.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> RSS Feeds >> 'Prevent downloading of enclosures' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205873r991589\_rule

**STIG-ID** WN19-CC-000390

STIG-LEGACY SV-103353

STIG-LEGACY V-93265

SWIFT-CSCV1 2.3

**VULN-ID** V-205873

## **Assets**

## live-malware

## WN19-CC-000410 - Windows Server 2019 must prevent Indexing of encrypted files.

## Info

Indexing of encrypted files may expose sensitive data. This setting prevents encrypted files from being indexed.

## **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Search >> 'Allow indexing of encrypted files' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

**PCI-DSSV4.0** 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205694r958478\_rule

**STIG-ID** WN19-CC-000410

STIG-LEGACY SV-103501

STIG-LEGACY V-93415

SWIFT-CSCV1 2.3

**VULN-ID** V-205694

## Assets

## live-malware

## WN19-CC-000420 - Windows Server 2019 must prevent users from changing installation options.

## Info

Installation options for applications are typically controlled by administrators. This setting prevents users from changing installation options that may bypass security features.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Installer >> 'Allow user control over installs' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.9

**800-53** CM-11(2)

**800-53R5** CM-11(2)

CAT

**CCI** CCI-001812

CCI CCI-003980

CSF DE.CM-3

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

CSF2.0 PR.PS-02

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.19

ISO/IEC-27001 A.12.6.2

QCSC-V1 8.2.1

**RULE-ID** SV-205801r1051078\_rule

**STIG-ID** WN19-CC-000420

STIG-LEGACY SV-103287

STIG-LEGACY V-93199

SWIFT-CSCV1 5.1

**VULN-ID** V-205801

## **Assets**

live-malware

# WN19-CC-000430 - Windows Server 2019 must disable the Windows Installer Always install with elevated privileges option.

#### Info

Standard user accounts must not be granted elevated privileges. Enabling Windows Installer to elevate privileges when installing applications can allow malicious persons and applications to gain full control of a system.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Installer >> 'Always install with elevated privileges' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.9

**800-53** CM-11(2)

**800-53R5** CM-11(2)

CAT

**CCI** CCI-001812

**CCI** CCI-003980

CSF DE.CM-3

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

CSF2.0 PR.PS-02

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.19

ISO/IEC-27001 A.12.6.2

QCSC-V1 8.2.1

**RULE-ID** SV-205802r1051079\_rule

**STIG-ID** WN19-CC-000430

STIG-LEGACY SV-103289

STIG-LEGACY V-93201

SWIFT-CSCV1 5.1

VULN-ID V-205802

#### **Assets**

live-malware

## WN19-CC-000460 - Windows Server 2019 PowerShell script block logging must be enabled.

## Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Enabling PowerShell script block logging will record detailed information from the processing of PowerShell commands and scripts. This can provide additional detail when malware has run on a system.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows PowerShell >> 'Turn on PowerShell Script Block Logging' to 'Enabled'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.3.1

**800-171** 3.3.2

**800-171R3** 03.03.02b.

**800-53** AU-3(1)

**800-53R5** AU-3(1)

CAT

CCI CCI-000135

**CN-L3** 7.1.3.3(b)

CSF PR.PT-1

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.5.28

**ISO-27001-2022** A.8.15

**ITSG-33** AU-3(1)

NESA T3.6.2

NIAV2 AM34a

NIAV2 AM34b

NIAV2 AM34c

NIAV2 AM34d

NIAV2 AM34e

NIAV2 AM34f

NIAV2 AM34g

**PCI-DSSV3.2.1** 10.3

**PCI-DSSV3.2.1** 10.3.1

PCI-DSSV3.2.1 10.3.2

PCI-DSSV3.2.1 10.3.3

PCI-DSSV3.2.1 10.3.4

**PCI-DSSV3.2.1** 10.3.5

PCI-DSSV3.2.1 10.3.6

PCI-DSSV4.0 10.2.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205639r958422\_rule

**STIG-ID** WN19-CC-000460

STIG-LEGACY SV-103263

STIG-LEGACY V-93175

SWIFT-CSCV1 6.4

**VULN-ID** V-205639

## **Assets**

## live-malware

## WN19-CC-000470 - Windows Server 2019 Windows Remote Management (WinRM) client must not use Basic authentication.

#### Info

Basic authentication uses plain-text passwords that could be used to compromise a system. Disabling Basic authentication will reduce this potential.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Client >> 'Allow Basic authentication' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.7.5

**800-171R3** 03.07.05b.

**800-53** MA-4c.

**800-53R5** MA-4c.

CAT

CCI CCI-000877

CSF PR.MA-2

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 MA-4c.

NESA T2.3.4

**NESA** T5.4.4

QCSC-V1 5.2.2

**RULE-ID** SV-205711r958510\_rule

**STIG-ID** WN19-CC-000470

STIG-LEGACY SV-103589

STIG-LEGACY V-93503

**TBA-FIISB** 45.2.3

**VULN-ID** V-205711

### Assets

#### live-malware

# WN19-CC-000480 - Windows Server 2019 Windows Remote Management (WinRM) client must not allow unencrypted traffic.

#### Info

Unencrypted remote access to a system can allow sensitive information to be compromised. Windows remote management connections must be encrypted to prevent this.

Satisfies: SRG-OS-000393-GPOS-00173, SRG-OS-000394-GPOS-00174

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Client >> 'Allow unencrypted traffic' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.7.5

800-171R3 03.07.05

**800-53** MA-4(6)

**800-53R5** MA-4(6)

CAT

CCI CCI-002890

CCI CCI-003123

CSF PR.MA-2

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 MA-4(6)

NESA T2.3.4

NESA T5.4.4

QCSC-V1 5.2.2

**RULE-ID** SV-205816r958848\_rule

**STIG-ID** WN19-CC-000480

STIG-LEGACY SV-103585

STIG-LEGACY V-93499

SWIFT-CSCV1 2.6

**TBA-FIISB** 45.2.3

**VULN-ID** V-205816

## **Assets**

live-malware

# WN19-CC-000490 - Windows Server 2019 Windows Remote Management (WinRM) client must not use Digest authentication.

## Info

Digest authentication is not as strong as other options and may be subject to man-in-the-middle attacks. Disallowing Digest authentication will reduce this potential.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Client >> 'Disallow Digest authentication' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.7.5

**800-171R3** 03.07.05b.

**800-53** MA-4c.

**800-53R5** MA-4c.

CAT

CCI CCI-000877

CSF PR.MA-2

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 MA-4c.

NESA T2.3.4

**NESA** T5.4.4

QCSC-V1 5.2.2

**RULE-ID** SV-205712r958510\_rule

**STIG-ID** WN19-CC-000490

STIG-LEGACY SV-103591

STIG-LEGACY V-93505

**TBA-FIISB** 45.2.3

**VULN-ID** V-205712

### Assets

#### live-malware

## WN19-CC-000500 - Windows Server 2019 Windows Remote Management (WinRM) service must not use Basic authentication.

#### Info

Basic authentication uses plain-text passwords that could be used to compromise a system. Disabling Basic authentication will reduce this potential.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Service >> 'Allow Basic authentication' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.7.5

**800-171R3** 03.07.05b.

**800-53** MA-4c.

**800-53R5** MA-4c.

CAT

CCI CCI-000877

CSF PR.MA-2

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 MA-4c.

NESA T2.3.4

**NESA** T5.4.4

QCSC-V1 5.2.2

**RULE-ID** SV-205713r958510\_rule

**STIG-ID** WN19-CC-000500

STIG-LEGACY SV-103593

STIG-LEGACY V-93507

**TBA-FIISB** 45.2.3

**VULN-ID** V-205713

### Assets

#### live-malware

# WN19-CC-000510 - Windows Server 2019 Windows Remote Management (WinRM) service must not allow unencrypted traffic.

#### Info

Unencrypted remote access to a system can allow sensitive information to be compromised. Windows remote management connections must be encrypted to prevent this.

Satisfies: SRG-OS-000393-GPOS-00173, SRG-OS-000394-GPOS-00174

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Service >> 'Allow unencrypted traffic' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.7.5

**800-171R3** 03.07.05

**800-53** MA-4(6)

**800-53R5** MA-4(6)

CAT

CCI CCI-002890

CCI CCI-003123

CSF PR.MA-2

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 MA-4(6)

NESA T2.3.4

NESA T5.4.4

QCSC-V1 5.2.2

**RULE-ID** SV-205817r958848\_rule

**STIG-ID** WN19-CC-000510

STIG-LEGACY SV-103587

STIG-LEGACY V-93501

SWIFT-CSCV1 2.6

**TBA-FIISB** 45.2.3

**VULN-ID** V-205817

## **Assets**

live-malware

## WN19-CC-000520 - Windows Server 2019 Windows Remote Management (WinRM) service must not store RunAs credentials.

#### Info

Storage of administrative credentials could allow unauthorized access. Disallowing the storage of RunAs credentials for Windows Remote Management will prevent them from being used with plug-ins. Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Remote Management (WinRM) >> WinRM Service >> 'Disallow WinRM from storing RunAs credentials' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

CCI CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(d)

**QCSC-V1** 13.2

**RULE-ID** SV-205810r1051082\_rule

**STIG-ID** WN19-CC-000520

STIG-LEGACY SV-103515

STIG-LEGACY V-93429

**VULN-ID** V-205810

#### **Assets**

#### live-malware

## WN19-CC-000530 - Windows Server 2019 must have PowerShell Transcription enabled.

## Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Enabling PowerShell Transcription will record detailed information from the processing of PowerShell commands and scripts. This can provide additional detail when malware has run on a system.

## **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows PowerShell >> 'Turn on PowerShell Transcription' to 'Enabled'.

Specify the Transcript output directory to point to a Central Log Server or another secure location to prevent user access.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.3.1

**800-171** 3.3.2

**800-171R3** 03.03.02a.

**800-53** AU-3

**800-53R5** AU-3e.

CAT

**CCI** CCI-000134

**CN-L3** 7.1.2.3(a)

**CN-L3** 7.1.2.3(b)

**CN-L3** 7.1.3.3(a)

**CN-L3** 8.1.4.3(b)

CSF PR.PT-1

**CSF2.0** PR.PS-04

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.5.28

**ISO-27001-2022** A.8.15

ITSG-33 AU-3

NESA T3.6.2

NIAV2 AM34a

NIAV2 AM34b

NIAV2 AM34c

NIAV2 AM34d

NIAV2 AM34e

NIAV2 AM34f

NIAV2 AM34g

**PCI-DSSV3.2.1** 10.3

**PCI-DSSV3.2.1** 10.3.1

PCI-DSSV3.2.1 10.3.2

PCI-DSSV3.2.1 10.3.3

PCI-DSSV3.2.1 10.3.4

**PCI-DSSV3.2.1** 10.3.5

PCI-DSSV3.2.1 10.3.6

PCI-DSSV4.0 10.2.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-257503r958420\_rule

**STIG-ID** WN19-CC-000530

SWIFT-CSCV1 6.4

**VULN-ID** V-257503

## Assets

## live-malware

WN19-MS-000040 - Windows Server 2019 must restrict unauthenticated Remote Procedure Call (RPC) clients from connecting to the RPC server on domain-joined member servers and standalone or nondomain-joined systems.

#### Info

Unauthenticated RPC clients may allow anonymous access to sensitive information. Configuring RPC to restrict unauthenticated RPC clients from connecting to the RPC server will prevent anonymous connections.

## **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Remote Procedure Call >> 'Restrict Unauthenticated RPC clients' to 'Enabled' with 'Authenticated' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171R3** 03.05.02

**800-53** IA-3(1)

**800-53R5** IA-3(1)

CAT

CCI CCI-001967

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

ITSG-33 IA-3(1)

**NESA** T5.4.3

**QCSC-V1** 13.2

**RULE-ID** SV-205814r971545\_rule

**STIG-ID** WN19-MS-000040

STIG-LEGACY SV-103539

STIG-LEGACY V-93453

TBA-FIISB 27.1

**VULN-ID** V-205814

#### **Assets**

live-malware

WN19-MS-000060 - Windows Server 2019 must restrict remote calls to the Security Account Manager (SAM) to Administrators on domain-joined member servers and standalone or nondomain-joined systems.

#### Info

The Windows SAM stores users' passwords. Restricting Remote Procedure Call (RPC) connections to the SAM to Administrators helps protect those credentials.

## **Solution**

Navigate to the policy Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Restrict clients allowed to make remote calls to SAM'.

Select 'Edit Security' to configure the 'Security descriptor:'.

Add 'Administrators' in 'Group or user names:' if it is not already listed (this is the default).

Select 'Administrators' in 'Group or user names:'.

Select 'Allow' for 'Remote Access' in 'Permissions for 'Administrators'.

Click 'OK'.

The 'Security descriptor:' must be populated with 'O:BAG:BAD:(A;;RC;;;BA) for the policy to be enforced.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### Poforoncos

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235

CN-L3	7.1.3.2(b)

CN-L3	7.1.3.2(g)	

CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)

CSF	PR.AC-4

DISA BENCHMARK	Windows Se	erver 2019 STIG
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**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

**NESA** T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205747r958726\_rule

**STIG-ID** WN19-MS-000060

STIG-LEGACY SV-103133

STIG-LEGACY V-93045

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205747

## Assets

live-malware

1 1

WN19-MS-000070 - Windows Server 2019 'Access this computer from the network' user right must only be assigned to the Administrators and Authenticated Users groups on domain-joined member servers and standalone or nondomain-joined systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Access this computer from the network' user right may access resources on the system, and this right must be limited to those requiring it.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Access this computer from the network' to include only the following accounts or groups:

- Administrators

ISO-27001-2022

- Authenticated Users

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

References	
800-171	3.1.1
800-171R3	03.01.02
800-53	AC-3
800-53R5	AC-3
CAT	II
CCI	CCI-000213
CN-L3	8.1.4.2(f)
CN-L3	8.1.4.11(b)
CN-L3	8.1.10.2(c)
CN-L3	8.5.3.1
CN-L3	8.5.4.1(a)
CSF	PR.AC-4
CSF	PR.PT-3
CSF2.0	PR.AA-05
CSF2.0	PR.DS-10
CSF2.0	PR.IR-01
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15

A.5.33

**ISO-27001-2022** A.8.3

**ISO-27001-2022** A.8.18

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.9.4.1

**ISO/IEC-27001** A.9.4.5

ITSG-33 AC-3

NESA T4.2.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

NESA T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205671r958472\_rule

**STIG-ID** WN19-MS-000070

STIG-LEGACY SV-103095

STIG-LEGACY V-93007

TBA-FIISB 31.1

**VULN-ID** V-205671

## Assets

## live-malware

'backup operators' && 'users' && 'administrators' && 'everyone'

WN19-MS-000080 - Windows Server 2019 'Deny access to this computer from the network' user right on domain-joined member servers must be configured to prevent access from highly privileged domain accounts and local accounts and from unauthenticated access on all systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny access to this computer from the network' user right defines the accounts that are prevented from logging on from the network.

In an Active Directory Domain, denying logons to the Enterprise Admins and Domain Admins groups on lower-trust systems helps mitigate the risk of privilege escalation from credential theft attacks, which could lead to the compromise of an entire domain.

Local accounts on domain-joined systems must also be assigned this right to decrease the risk of lateral movement resulting from credential theft attacks.

The Guests group must be assigned this right to prevent unauthenticated access.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny access to this computer from the network' to include the following: Domain Systems Only:

- Enterprise Admins group
- Domain Admins group
- 'Local account and member of Administrators group' or 'Local account' (see Note below)
   All Systems:
- Guests group

Note: These are built-in security groups. 'Local account' is more restrictive but may cause issues on servers such as systems that provide failover clustering.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

800-171	3.1.1
800-171R3	03.01.02
800-53	AC-3
800-53R5	AC-3
CAT	II
CCI	CCI-000213
CN-L3	8.1.4.2(f)
CN-L3	8.1.4.11(b)
CN-L3	8.1.10.2(c)
CN-L3	8.5.3.1
CN-L3	8.5.4.1(a)
CSF	PR.AC-4
CSF	PR.PT-3
CSF2.0	PR.AA-05
CSF2.0	PR.DS-10
CSF2.0	PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.3

**ISO-27001-2022** A.8.18

**ISO-27001-2022** A.8.20

**ISO/IEC-27001** A.9.4.1

**ISO/IEC-27001** A.9.4.5

ITSG-33 AC-3

NESA T4.2.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

**NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205672r958472\_rule

**STIG-ID** WN19-MS-000080

STIG-LEGACY SV-103097

STIG-LEGACY V-93009

TBA-FIISB 31.1

VULN-ID V-205672

Assets

live-malware

WN19-MS-000090 - Windows Server 2019 'Deny log on as a batch job' user right on domain-joined member servers must be configured to prevent access from highly privileged domain accounts and from unauthenticated access on all systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on as a batch job' user right defines accounts that are prevented from logging on to the system as a batch job, such as Task Scheduler.

In an Active Directory Domain, denying logons to the Enterprise Admins and Domain Admins groups on lowertrust systems helps mitigate the risk of privilege escalation from credential theft attacks, which could lead to the compromise of an entire domain.

The Guests group must be assigned to prevent unauthenticated access.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on as a batch job' to include the following: Domain Systems Only:

- Enterprise Admins Group
- Domain Admins Group

All Systems:

- Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

Refere	nces	
800-1	171	3.1.1
800-1	171R3	03.01.02
800-5	53	AC-3
800-5	53R5	AC-3
CAT		II
CCI		CCI-000213
CN-L	3	8.1.4.2(f)
CN-L	3	8.1.4.11(b)
CN-L	3	8.1.10.2(c)
CN-L	3	8.5.3.1
CN-L	3	8.5.4.1(a)
CSF		PR.AC-4
CSF		PR.PT-3
CSF2	2.0	PR.AA-05
CSF2	2.0	PR.DS-10
CSF2	2.0	PR.IR-01
DISA	BENCHMARK	Windows_Server_2019_STIG
GDPI	R	32.1.b
HIPA	A	164.306(a)(1)

**HIPAA** 164.312(a)(1) ISO-27001-2022 A.5.15 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205673r958472\_rule

**STIG-ID** WN19-MS-000090

STIG-LEGACY SV-103099

STIG-LEGACY V-93011

TBA-FIISB 31.1

**VULN-ID** V-205673

## Assets

## live-malware

WN19-MS-000110 - Windows Server 2019 'Deny log on locally' user right on domain-joined member servers must be configured to prevent access from highly privileged domain accounts and from unauthenticated access on all systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on locally' user right defines accounts that are prevented from logging on interactively. In an Active Directory Domain, denying logons to the Enterprise Admins and Domain Admins groups on lower-trust systems helps mitigate the risk of privilege escalation from credential theft attacks, which could lead to the compromise of an entire domain.

The Guests group must be assigned this right to prevent unauthenticated access.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on locally' to include the following:

Domain Systems Only:

- Enterprise Admins Group
- Domain Admins Group

All Systems:

- Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

References		
	800-171	3.1.1
	800-171R3	03.01.02
	800-53	AC-3
	800-53R5	AC-3
	CAT	II
	CCI	CCI-000213
	CN-L3	8.1.4.2(f)
	CN-L3	8.1.4.11(b)
	CN-L3	8.1.10.2(c)
	CN-L3	8.5.3.1
	CN-L3	8.5.4.1(a)
	CSF	PR.AC-4
	CSF	PR.PT-3
	CSF2.0	PR.AA-05
	CSF2.0	PR.DS-10
	CSF2.0	PR.IR-01
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)

**HIPAA** 164.312(a)(1) ISO-27001-2022 A.5.15 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4

**NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

SS29 NIAV2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205675r958472\_rule

STIG-ID WN19-MS-000110

STIG-LEGACY SV-103103

STIG-LEGACY V-93015

**TBA-FIISB** 31.1

**VULN-ID** V-205675

## **Assets**

## live-malware

WN19-MS-000120 - Windows Server 2019 'Deny log on through Remote Desktop Services' user right on domain-joined member servers must be configured to prevent access from highly privileged domain accounts and all local accounts and from unauthenticated access on all systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on through Remote Desktop Services' user right defines the accounts that are prevented from logging on using Remote Desktop Services.

In an Active Directory Domain, denying logons to the Enterprise Admins and Domain Admins groups on lower-trust systems helps mitigate the risk of privilege escalation from credential theft attacks, which could lead to the compromise of an entire domain.

Local accounts on domain-joined systems must also be assigned this right to decrease the risk of lateral movement resulting from credential theft attacks.

The Guests group must be assigned this right to prevent unauthenticated access.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on through Remote Desktop Services' to include the following: Domain Systems Only:

- Enterprise Admins group
- Domain Admins group
- Local account (see Note below)

All Systems:

- Guests group

Note: 'Local account' is referring to the Windows built-in security group.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

П	reieieiices	
	800-171	3.1.12
	800-171R3	03.01.12
	800-53	AC-17(1)
	800-53R5	AC-17(1)
	CAT	II
	CCI	CCI-002314
	CN-L3	8.1.4.4(c)
	CN-L3	8.1.10.6(i)
	CSF	PR.AC-3
	CSF	PR.PT-4
	CSF2.0	PR.AA-05
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(1)
	ISO-27001-2022	A.8.16
	ISO/IEC-27001	A.6.2.2

**ITSG-33** AC-17(1)

NESA T5.4.4

QCSC-V1 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

**RULE-ID** SV-205733r958672\_rule

**STIG-ID** WN19-MS-000120

STIG-LEGACY SV-103053

STIG-LEGACY V-92965

SWIFT-CSCV1 2.6

**VULN-ID** V-205733

### **Assets**

### live-malware

## WN19-PK-000010 - Windows Server 2019 must have the DoD Root Certificate Authority (CA) certificates installed in the Trusted Root Store.

#### Info

To ensure secure DoD websites and DoD-signed code are properly validated, the system must trust the DoD Root CAs. The DoD root certificates will ensure that the trust chain is established for server certificates issued from the DoD CAs.

Satisfies: SRG-OS-000066-GPOS-00034, SRG-OS-000403-GPOS-00182

#### **Solution**

Install the DoD Root CA certificates:

DoD Root CA 3 DoD Root CA 4 DoD Root CA 5 DoD Root CA 6

The InstallRoot tool is available on Cyber Exchange at https://cyber.mil/pki-pke/tools-configuration-files. Certificate bundles published by the PKI can be found at https://crl.gds.disa.mil/.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

 800-171
 3.5.2

 800-171
 3.13.15

 800-171R3
 03.05.12

 800-171R3
 03.13.15

 800-53
 IA-5(2)(a)

 800-53
 SC-23(5)

 800-53R5
 IA-5(2)(b)(1)

**800-53R5** SC-23(5)

CAT

CCI CCI-000185

CCI CCI-002470

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

ISO-27001-2022 A.5.17

ITSG-33 IA-5(2)(a)

ITSG-33 SC-23

ITSG-33 SC-23a.

**NESA** T4.5.1

**NESA** T5.2.3

QCSC-V1 5.2.1

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205648r958448\_rule

STIG-ID WN19-PK-000010

STIG-LEGACY SV-103573

**STIG-LEGACY** V-93487

**VULN-ID** V-205648

#### **Assets**

#### live-malware

All of the following must pass to satisfy this requirement:

FAILED - Root CA 4:

Remote value: 'No matching certificates found'

Policy value: 'B8269F25DBD937ECAFD4C35A9838571723F2D026'

\_\_\_\_\_

FAILED - Root CA 6:

Remote value: 'No matching certificates found'

Policy value: 'D37ECF61C0B4ED88681EF3630C4E2FC787B37AEF'

FAILED - Root CA 5:

Remote value: 'No matching certificates found'

Policy value: '4ECB5CC3095670454DA1CBD410FC921F46B8564B'

FAILED - Root CA 3:

Remote value: 'No matching certificates found'

Policy value: 'D73CA91102A2204A36459ED32213B467D7CE97FB'

# WN19-PK-000020 - Windows Server 2019 must have the DoD Interoperability Root Certificate Authority (CA) cross-certificates installed in the Untrusted Certificates Store on unclassified systems.

#### Info

To ensure users do not experience denial of service when performing certificate-based authentication to DoD websites due to the system chaining to a root other than DoD Root CAs, the DoD Interoperability Root CA cross-certificates must be installed in the Untrusted Certificate Store. This requirement only applies to unclassified systems. Satisfies: SRG-OS-000066-GPOS-00034, SRG-OS-000403-GPOS-00182

#### Solution

Install the DoD Interoperability Root CA cross-certificates on unclassified systems.

Issued To - Issued By - Thumbprint

DoD Root CA 3 - DoD Interoperability Root CA 2 - 49CBE933151872E17C8EAE7F0ABA97FB610F6477 Administrators should run the Federal Bridge Certification Authority (FBCA) Cross-Certificate Removal Tool once as an administrator and once as the current user.

The FBCA Cross-Certificate Remover Tool and User Guide are available on Cyber Exchange at https://cyber.mil/pki-pke/tools-configuration-files.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

ISO-27001-2022

Veletice2	
800-171	3.5.2
800-171	3.13.15
800-171R3	03.05.12
800-171R3	03.13.15
800-53	IA-5(2)(a)
800-53	SC-23(5)
800-53R5	IA-5(2)(b)(1)
800-53R5	SC-23(5)
CAT	II
CCI	CCI-000185
CCI	CCI-002470
CSF	PR.AC-1
CSF2.0	PR.AA-01
CSF2.0	PR.AA-03
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(2)(i)

164.312(d)

A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(a)

**ITSG-33** SC-23

**ITSG-33** SC-23a.

NESA T4.5.1

NESA T5.2.3

QCSC-V1 5.2.1

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205649r958448\_rule

**STIG-ID** WN19-PK-000020

STIG-LEGACY SV-103575

STIG-LEGACY V-93489

**VULN-ID** V-205649

### Assets

#### live-malware

'No matching certificates found'

## WN19-PK-000030 - Windows Server 2019 must have the US DoD CCEB Interoperability Root CA cross-certificates in the Untrusted Certificates Store on unclassified systems.

#### Info

To ensure users do not experience denial of service when performing certificate-based authentication to DoD websites due to the system chaining to a root other than DoD Root CAs, the US DoD CCEB Interoperability Root CA cross-certificates must be installed in the Untrusted Certificate Store. This requirement only applies to unclassified systems.

Satisfies: SRG-OS-000066-GPOS-00034, SRG-OS-000403-GPOS-00182

#### Solution

Install the US DoD CCEB Interoperability Root CA cross-certificate on unclassified systems.

Issued To - Issued By - Thumbprint

DoD Root CA 3 - US DoD CCEB Interoperability Root CA 2 - 9B74964506C7ED9138070D08D5F8B969866560C8 DoD Root CA 6 - US DOD CCEB Interoperability Root CA 2 -D471CA32F7A692CE6CBB6196BD3377FE4DBCD106 Administrators should run the Federal Bridge Certification Authority (FBCA) Cross-Certificate Removal Tool once as an administrator and once as the current user.

The FBCA Cross-Certificate Remover Tool and User Guide are available on Cyber Exchange at https://cyber.mil/pki-pke/tools-configuration-files. Certificate bundles published by the PKI can be found at https://crl.gds.disa.mil/.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

References	
800-171	3.5.2
800-171	3.13.15
800-171R3	03.05.12
800-171R3	03.13.15
800-53	IA-5(2)(a)
800-53	SC-23(5)
800-53R5	IA-5(2)(b)(1)
800-53R5	SC-23(5)
CAT	II
CCI	CCI-000185
CCI	CCI-002470
CSF	PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(a)

**ITSG-33** SC-23

**ITSG-33** SC-23a.

**NESA** T4.5.1

NESA T5.2.3

QCSC-V1 5.2.1

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205650r1028366\_rule

**STIG-ID** WN19-PK-000030

STIG-LEGACY SV-103577

STIG-LEGACY V-93491

**VULN-ID** V-205650

#### Assets

#### live-malware

All of the following must pass to satisfy this requirement:

\_\_\_\_\_

FAILED - Root CA 3:

Remote value: 'No matching certificates found'

Policy value: '[a-zA-Z\s-]\*CN=DoD Root CA 3, OU=PKI, OU=DoD, O=U\.S\. Government, C=US'

-----

FAILED - Root CA 6:

Remote value: 'No matching certificates found'

Policy value: '[a-zA-Z\s-]\*CN=DoD Root CA 6, OU=PKI, OU=DoD, O=U\.S\. Government, C=US'

### WN19-SO-000040 - Windows Server 2019 built-in guest account must be renamed.

#### Info

The built-in guest account is a well-known user account on all Windows systems and, as initially installed, does not require a password. This can allow access to system resources by unauthorized users. Renaming this account to an unidentified name improves the protection of this account and the system.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Accounts: Rename guest account' to a name other than 'Guest'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205910r991589\_rule

**STIG-ID** WN19-SO-000040

STIG-LEGACY SV-103371

STIG-LEGACY V-93283

SWIFT-CSCV1 2.3

**VULN-ID** V-205910

#### Assets

#### live-malware

'Guest'

## WN19-SO-000050 - Windows Server 2019 must force audit policy subcategory settings to override audit policy category settings.

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

This setting allows administrators to enable more precise auditing capabilities.

### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Audit: Force audit policy subcategory settings (Windows Vista or later) to override audit policy category settings' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

800-171 3.3.1

800-171 3.3.2

800-171R3 03.03.03a.

800-53 AU-12a.

800-53R5 AU-12a.

CAT

CCI CCI-000169

**CSF** DE.CM-1

**CSF** DE.CM-3

**CSF** DE.CM-7

**CSF** PR.PT-1

CSF2.0 DE.CM-01

DE.CM-03 CSF2.0

CSF2.0 DE.CM-09

PR.PS-04 CSF2.0

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.8.15

ITSG-33 AU-12a.

PCI-DSSV3.2.1 10.1 QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

**QCSC-V1** 13.2

**RULE-ID** SV-205644r958442\_rule

**STIG-ID** WN19-SO-000050

STIG-LEGACY SV-103239

STIG-LEGACY V-93151

SWIFT-CSCV1 6.4

**VULN-ID** V-205644

#### **Assets**

## live-malware

## WN19-SO-000120 - Windows Server 2019 machine inactivity limit must be set to 15 minutes or less, locking the system with the screen saver.

#### Info

Unattended systems are susceptible to unauthorized use and should be locked when unattended. The screen saver should be set at a maximum of 15 minutes and be password protected. This protects critical and sensitive data from exposure to unauthorized personnel with physical access to the computer.

Satisfies: SRG-OS-000028-GPOS-00009, SRG-OS-000029-GPOS-00010, SRG-OS-000031-GPOS-00012

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Interactive logon: Machine inactivity limit' to '900' seconds or less, excluding '0' which is effectively disabled.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

 800-171
 3.1.10

 800-171R3
 03.01.10

 800-171R3
 03.01.10a.

 800-171R3
 03.01.10b.

 800-53
 AC-11a.

 800-53
 AC-11b.

 800-53
 AC-11(1)

 800-53R5
 AC-11a.

 800-53R5
 AC-11b.

 800-53R5
 AC-11(1)

CAT

**CCI** CCI-000056

**CCI** CCI-000057

**CCI** CCI-000060

**CN-L3** 8.1.4.1(b)

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(2)(iii)

**ISO-27001-2022** A.7.7

**ISO-27001-2022** A.8.1

ISO/IEC-27001 A.11.2.8

**ITSG-33** AC-11a.

**ITSG-33** AC-11b.

ITSG-33 AC-11(1)

NESA T2.3.8

NESA T2.3.9

NIAV2 AM23a

NIAV2 AM23b

NIAV2 AM23c

NIAV2 AM23d

NIAV2 AM23e

**PCI-DSSV3.2.1** 8.1.8

PCI-DSSV4.0 8.2.8

**RULE-ID** SV-205633r958400\_rule

**STIG-ID** WN19-SO-000120

STIG-LEGACY SV-103049

STIG-LEGACY V-92961

**VULN-ID** V-205633

#### Assets

#### live-malware

## WN19-SO-000130 - Windows Server 2019 required legal notice must be configured to display before console logon.

#### Info

Failure to display the logon banner prior to a logon attempt will negate legal proceedings resulting from unauthorized access to system resources.

Satisfies: SRG-OS-000023-GPOS-00006, SRG-OS-000024-GPOS-00007, SRG-OS-000228-GPOS-00088

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Interactive Logon: Message text for users attempting to log on' to the following:

You are accessing a U.S. Government (USG) Information System (IS) that is provided for USG-authorized use only. By using this IS (which includes any device attached to this IS), you consent to the following conditions:

- -The USG routinely intercepts and monitors communications on this IS for purposes including, but not limited to, penetration testing, COMSEC monitoring, network operations and defense, personnel misconduct (PM), law enforcement (LE), and counterintelligence (CI) investigations.
- -At any time, the USG may inspect and seize data stored on this IS.
- -Communications using, or data stored on, this IS are not private, are subject to routine monitoring, interception, and search, and may be disclosed or used for any USG-authorized purpose.
- -This IS includes security measures (e.g., authentication and access controls) to protect USG interests--not for your personal benefit or privacy.
- -Notwithstanding the above, using this IS does not constitute consent to PM, LE or CI investigative searching or monitoring of the content of privileged communications, or work product, related to personal representation or services by attorneys, psychotherapists, or clergy, and their assistants. Such communications and work product are private and confidential. See User Agreement for details.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

Vererences	
800-171	3.1.9
800-171R3	03.01.09
800-53	AC-8a.
800-53	AC-8b.
800-53	AC-8c.1.
800-53	AC-8c.2.
800-53	AC-8c.3.
800-53R5	AC-8a.
800-53R5	AC-8b.
800-53R5	AC-8c.1.
800-53R5	AC-8c.2.
800-53R5	AC-8c.3.
CAT	II
CCI	CCI-000048
CCI	CCI-000050
CCI	CCI-001384
CCI	CCI-001385

**CCI** CCI-001386

**CCI** CCI-001387

**CCI** CCI-001388

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.5

ITSG-33 AC-8a.

ITSG-33 AC-8b.

ITSG-33 AC-8c.a.

ITSG-33 AC-8c.b.

ITSG-33 AC-8c.c.

NESA M5.2.5

NESA T5.5.1

NIAV2 AM10a

NIAV2 AM10b

NIAV2 AM10c

NIAV2 AM10d

NIAV2 AM10e

NIAV2 AM10f

**RULE-ID** SV-205631r958390\_rule

**STIG-ID** WN19-SO-000130

STIG-LEGACY SV-103235

STIG-LEGACY V-93147

**TBA-FIISB** 45.2.4

**VULN-ID** V-205631

### **Assets**

## live-malware

'No content provided to compare with.'

## WN19-SO-000140 - Windows Server 2019 title for legal banner dialog box must be configured with the appropriate text.

#### Info

Failure to display the logon banner prior to a logon attempt will negate legal proceedings resulting from unauthorized access to system resources.

Satisfies: SRG-OS-000023-GPOS-00006, SRG-OS-000228-GPOS-00088

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Interactive Logon: Message title for users attempting to log on' to 'DoD Notice and Consent Banner', 'US Department of Defense Warning Statement', or an organization-defined equivalent. If an organization-defined title is used, it can in no case contravene or modify the language of the message text required in WN19-SO-000130.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

ITSG-33

I/CICICIOCO	
800-171	3.1.9
800-171R3	03.01.09
800-53	AC-8a.
800-53	AC-8c.1.
800-53	AC-8c.2.
800-53	AC-8c.3.
800-53R5	AC-8a.
800-53R5	AC-8c.1.
800-53R5	AC-8c.2.
800-53R5	AC-8c.3.
CAT	III
CCI	CCI-000048
CCI	CCI-001384
CCI	CCI-001385
CCI	CCI-001386
CCI	CCI-001387
CCI	CCI-001388
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
ISO-27001-2022	A.8.5

AC-8a.

ITSG-33 AC-8c.a.

ITSG-33 AC-8c.b.

ITSG-33 AC-8c.c.

NESA M5.2.5

NESA T5.5.1

NIAV2 AM10a

NIAV2 AM10b

NIAV2 AM10c

NIAV2 AM10d

NIAV2 AM10e

**RULE-ID** SV-205632r958390\_rule

**STIG-ID** WN19-SO-000140

STIG-LEGACY SV-103237

STIG-LEGACY V-93149

**TBA-FIISB** 45.2.4

**VULN-ID** V-205632

#### **Assets**

#### live-malware

'No content provided to compare with.'

## WN19-SO-000150 - Windows Server 2019 Smart Card removal option must be configured to Force Logoff or Lock Workstation.

#### Info

Unattended systems are susceptible to unauthorized use and must be locked. Configuring a system to lock when a smart card is removed will ensure the system is inaccessible when unattended.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Interactive logon: Smart card removal behavior' to 'Lock Workstation' or 'Force Logoff'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205912r991589\_rule

**STIG-ID** WN19-SO-000150

STIG-LEGACY SV-103375

STIG-LEGACY V-93287

SWIFT-CSCV1 2.3

**VULN-ID** V-205912

## **Assets**

#### live-malware

'0'

## WN19-SO-000160 - Windows Server 2019 setting Microsoft network client: Digitally sign communications (always) must be configured to Enabled.

#### Info

The server message block (SMB) protocol provides the basis for many network operations. Digitally signed SMB packets aid in preventing man-in-the-middle attacks. If this policy is enabled, the SMB client will only communicate with an SMB server that performs SMB packet signing.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Microsoft network client: Digitally sign communications (always)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

HIPAA 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

**NESA** T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205825r958908\_rule

**STIG-ID** WN19-SO-000160

STIG-LEGACY SV-103641

STIG-LEGACY V-93555

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205825

## Assets

## live-malware

0

## WN19-SO-000190 - Windows Server 2019 setting Microsoft network server: Digitally sign communications (always) must be configured to Enabled.

#### Info

The server message block (SMB) protocol provides the basis for many network operations. Digitally signed SMB packets aid in preventing man-in-the-middle attacks. If this policy is enabled, the SMB server will only communicate with an SMB client that performs SMB packet signing.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Microsoft network server: Digitally sign communications (always)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

HIPAA 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

**NESA** T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205827r958908\_rule

**STIG-ID** WN19-SO-000190

STIG-LEGACY SV-103645

STIG-LEGACY V-93559

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205827

## Assets

## live-malware

0

## WN19-SO-000200 - Windows Server 2019 setting Microsoft network server: Digitally sign communications (if client agrees) must be configured to Enabled.

#### Info

The server message block (SMB) protocol provides the basis for many network operations. Digitally signed SMB packets aid in preventing man-in-the-middle attacks. If this policy is enabled, the SMB server will negotiate SMB packet signing as requested by the client.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Microsoft network server: Digitally sign communications (if client agrees)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

HIPAA 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

**NESA** T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205828r958908\_rule

**STIG-ID** WN19-SO-000200

STIG-LEGACY SV-103647

STIG-LEGACY V-93561

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205828

## Assets

## live-malware

0

### WN19-SO-000230 - Windows Server 2019 must not allow anonymous enumeration of shares.

#### Info

Allowing anonymous logon users (null session connections) to list all account names and enumerate all shared resources can provide a map of potential points to attack the system.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Do not allow anonymous enumeration of SAM accounts and shares' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.13.4

**800-171R3** 03.13.04

**800-53** SC-4

**800-53R5** SC-4

CAT

CCI CCI-001090

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-4

ITSG-33 SC-4a.

**RULE-ID** SV-205724r958524\_rule

**STIG-ID** WN19-SO-000230

STIG-LEGACY SV-103623

STIG-LEGACY V-93537

**VULN-ID** V-205724

#### **Assets**

#### live-malware

0

# WN19-SO-000260 - Windows Server 2019 services using Local System that use Negotiate when reverting to NTLM authentication must use the computer identity instead of authenticating anonymously.

#### Info

Services using Local System that use Negotiate when reverting to NTLM authentication may gain unauthorized access if allowed to authenticate anonymously versus using the computer identity.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Allow Local System to use computer identity for NTLM' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205916r991589\_rule

**STIG-ID** WN19-SO-000260

STIG-LEGACY SV-103383

STIG-LEGACY V-93295

SWIFT-CSCV1 2.3

**VULN-ID** V-205916

#### **Assets**

live-malware

## WN19-SO-000270 - Windows Server 2019 must prevent NTLM from falling back to a Null session.

#### Info

NTLM sessions that are allowed to fall back to Null (unauthenticated) sessions may gain unauthorized access.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Allow LocalSystem NULL session fallback' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205917r991589\_rule

**STIG-ID** WN19-SO-000270

STIG-LEGACY SV-103385

STIG-LEGACY V-93297

SWIFT-CSCV1 2.3

**VULN-ID** V-205917

## **Assets**

#### live-malware

## WN19-SO-000280 - Windows Server 2019 must prevent PKU2U authentication using online identities.

#### Info

PKU2U is a peer-to-peer authentication protocol. This setting prevents online identities from authenticating to domain-joined systems. Authentication will be centrally managed with Windows user accounts.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Allow PKU2U authentication requests to this computer to use online identities' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205918r991589\_rule

**STIG-ID** WN19-SO-000280

STIG-LEGACY SV-103387

STIG-LEGACY V-93299

SWIFT-CSCV1 2.3

**VULN-ID** V-205918

#### **Assets**

#### live-malware

## WN19-SO-000290 - Windows Server 2019 Kerberos encryption types must be configured to prevent the use of DES and RC4 encryption suites.

#### Info

Certain encryption types are no longer considered secure. The DES and RC4 encryption suites must not be used for Kerberos encryption.

Note: Organizations with domain controllers running earlier versions of Windows where RC4 encryption is enabled, selecting 'The other domain supports Kerberos AES Encryption' on domain trusts, may be required to allow client communication across the trust relationship.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Configure encryption types allowed for Kerberos' to 'Enabled' with only the following selected:

AES128 HMAC SHA1 AES256 HMAC SHA1 Future encryption types

Note: Organizations with domain controllers running earlier versions of Windows where RC4 encryption is enabled, selecting 'The other domain supports Kerberos AES Encryption' on domain trusts, may be required to allow client communication across the trust relationship.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-53 IA-7 800-53R5 IA-7

CAT

CCI CCI-000803

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(d)

ITSG-33 IA-7

ITSG-33 IA-7a.

NESA M5.2.1

NESA M5.2.6

NESA M5.3.1

NESA T7.4.1

QCSC-V1 13.2

**RULE-ID** SV-205708r971535\_rule

**STIG-ID** WN19-SO-000290

STIG-LEGACY SV-103581

STIG-LEGACY V-93495

**VULN-ID** V-205708

### Assets

## live-malware

# WN19-SO-000310 - Windows Server 2019 LAN Manager authentication level must be configured to send NTLMv2 response only and to refuse LM and NTLM.

#### Info

The Kerberos v5 authentication protocol is the default for authentication of users who are logging on to domain accounts. NTLM, which is less secure, is retained in later Windows versions for compatibility with clients and servers that are running earlier versions of Windows or applications that still use it. It is also used to authenticate logons to standalone or nondomain-joined computers that are running later versions.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: LAN Manager authentication level' to 'Send NTLMv2 response only. Refuse LM & NTLM'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205919r991589\_rule

**STIG-ID** WN19-SO-000310

STIG-LEGACY SV-103389

STIG-LEGACY V-93301

SWIFT-CSCV1 2.3

**VULN-ID** V-205919

# **Assets**

# live-malware

NULL

# WN19-SO-000330 - Windows Server 2019 session security for NTLM SSP-based clients must be configured to require NTLMv2 session security and 128-bit encryption.

#### Info

Microsoft has implemented a variety of security support providers for use with Remote Procedure Call (RPC) sessions. All of the options must be enabled to ensure the maximum security level.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Minimum session security for NTLM SSP based (including secure RPC) clients' to 'Require NTLMv2 session security' and 'Require 128-bit encryption' (all options selected).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205921r991589\_rule

**STIG-ID** WN19-SO-000330

STIG-LEGACY SV-103393

STIG-LEGACY V-93305

SWIFT-CSCV1 2.3

**VULN-ID** V-205921

# **Assets**

live-malware

# WN19-SO-000340 - Windows Server 2019 session security for NTLM SSP-based servers must be configured to require NTLMv2 session security and 128-bit encryption.

#### Info

Microsoft has implemented a variety of security support providers for use with Remote Procedure Call (RPC) sessions. All of the options must be enabled to ensure the maximum security level.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Minimum session security for NTLM SSP based (including secure RPC) servers' to 'Require NTLMv2 session security' and 'Require 128-bit encryption' (all options selected).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205922r991589\_rule

**STIG-ID** WN19-SO-000340

STIG-LEGACY SV-103395

STIG-LEGACY V-93307

SWIFT-CSCV1 2.3

**VULN-ID** V-205922

# **Assets**

live-malware

# WN19-SO-000350 - Windows Server 2019 users must be required to enter a password to access private keys stored on the computer.

### Info

If the private key is discovered, an attacker can use the key to authenticate as an authorized user and gain access to the network infrastructure.

The cornerstone of the PKI is the private key used to encrypt or digitally sign information.

If the private key is stolen, this will lead to the compromise of the authentication and non-repudiation gained through PKI because the attacker can use the private key to digitally sign documents and pretend to be the authorized user. Both the holders of a digital certificate and the issuing authority must protect the computers, storage devices, or whatever they use to keep the private keys.

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'System cryptography: Force strong key protection for user keys stored on the computer' to 'User must enter a password each time they use a key'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**800-171** 3.5.2

**800-171R3** 03.05.12

**800-53** IA-5(2)(b)

**800-53R5** IA-5(2)(a)(1)

CAT

CCI CCI-000186

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(b)

NESA T5.2.3

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205651r958450\_rule

**STIG-ID** WN19-SO-000350

STIG-LEGACY SV-103579

STIG-LEGACY V-93493

**VULN-ID** V-205651

# **Assets**

# live-malware

NULL

# WN19-SO-000360 - Windows Server 2019 must be configured to use FIPS-compliant algorithms for encryption, hashing, and signing.

### Info

This setting ensures the system uses algorithms that are FIPS-compliant for encryption, hashing, and signing. FIPS-compliant algorithms meet specific standards established by the U.S. Government and must be the algorithms used for all OS encryption functions.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing' to 'Enabled'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171 3.13.11 800-171R3 03.13.11 800-53 SC-13

**800-53R5** SC-13b.

CAT

CCI CCI-002450

CSF PR.DS-5

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.a

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(2)(iv)

HIPAA 164.312(e)(2)(ii)

**ISO-27001-2022** A.8.24

ISO/IEC-27001 A.10.1.1

ITSG-33 SC-13

ITSG-33 SC-13a.

NESA M5.2.6

NESA T7.4.1

NIAV2 CY3

NIAV2 CY4

NIAV2 CY5b

NIAV2 CY5c

NIAV2 CY5d

NIAV2 CY7

NIAV2 NS5e

**QCSC-V1** 6.2

**RULE-ID** SV-205842r1028367\_rule

**STIG-ID** WN19-SO-000360

STIG-LEGACY SV-103597

STIG-LEGACY V-93511

**VULN-ID** V-205842

# Assets

# live-malware

0

# WN19-SO-000380 - Windows Server 2019 User Account Control approval mode for the built-in Administrator must be enabled.

### Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting configures the built-in Administrator account so that it runs in Admin Approval Mode.

Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Admin Approval Mode for the Built-in Administrator account' to 'Enabled'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

CCI CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(d)

**QCSC-V1** 13.2

**RULE-ID** SV-205811r1051083\_rule

**STIG-ID** WN19-SO-000380

STIG-LEGACY SV-103517

STIG-LEGACY V-93431

**VULN-ID** V-205811

#### **Assets**

### live-malware

NULL

# WN19-SO-000400 - Windows Server 2019 User Account Control must, at a minimum, prompt administrators for consent on the secure desktop.

### Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting configures the elevation requirements for logged-on administrators to complete a task that requires raised privileges.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Behavior of the elevation prompt for administrators in Admin Approval Mode' to 'Prompt for consent on the secure desktop'.

The more secure option for this setting, 'Prompt for credentials on the secure desktop', would also be acceptable.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ITSG-33** SC-3

ITSG-33 SC-3a.

NESA T3.4.1

**NESA** T4.3.1

NESA T4.3.2

**RULE-ID** SV-205717r958518\_rule

**STIG-ID** WN19-SO-000400

STIG-LEGACY SV-103609

STIG-LEGACY V-93523

**VULN-ID** V-205717

# Assets

# live-malware

5

# WN19-SO-000410 - Windows Server 2019 User Account Control must automatically deny standard user requests for elevation.

### Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting controls the behavior of elevation when requested by a standard user account.

Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Behavior of the elevation prompt for standard users' to 'Automatically deny elevation requests'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

CCI CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(d)

QCSC-V1 13.2

**RULE-ID** SV-205812r1051084\_rule

**STIG-ID** WN19-SO-000410

STIG-LEGACY SV-103519

STIG-LEGACY V-93433

**VULN-ID** V-205812

### Assets

### live-malware

3

# WN19-UR-000030 - Windows Server 2019 Allow log on locally user right must only be assigned to the Administrators group.

### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Allow log on locally' user right can log on interactively to a system.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Allow log on locally' to include only the following accounts or groups:

- Administrators

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.1.1

**800-171R3** 03.01.02

**800-53** AC-3

**800-53R5** AC-3

CAT

**CCI** CCI-000213

**CN-L3** 8.1.4.2(f)

**CN-L3** 8.1.4.11(b)

**CN-L3** 8.1.10.2(c)

**CN-L3** 8.5.3.1

**CN-L3** 8.5.4.1(a)

CSF PR.AC-4

CSF PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.3

ISO-27001-2022	A.8.18

**ISO-27001-2022** A.8.20

**ISO/IEC-27001** A.9.4.1

**ISO/IEC-27001** A.9.4.5

ITSG-33 AC-3

NESA T4.2.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205676r958472\_rule

**STIG-ID** WN19-UR-000030

STIG-LEGACY SV-103105

STIG-LEGACY V-93017

TBA-FIISB 31.1

**VULN-ID** V-205676

# Assets

# live-malware

<sup>&#</sup>x27;backup operators' && 'users' && 'administrators'

# WN19-UR-000040 - Windows Server 2019 Back up files and directories user right must only be assigned to the Administrators group.

### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Back up files and directories' user right can circumvent file and directory permissions and could allow access to sensitive data.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Back up files and directories' to include only the following accounts or groups:

- Administrators

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**NESA** 

**NESA** 

800-171 3.1.7 800-171R3 03.01.07a. 800-53 AC-6(10) 800-53R5 AC-6(10) **CAT** CCI CCI-002235 CN-L3 7.1.3.2(b) CN-L3 7.1.3.2(g) CN-L3 8.1.4.2(d) CN-L3 8.1.10.6(a) **CSF** PR.AC-4 CSF2.0 PR.AA-05 **DISA\_BENCHMARK** Windows\_Server\_2019\_STIG **GDPR** 32.1.b **HIPAA** 164.306(a)(1) **HIPAA** 164.312(a)(1) ISO-27001-2022 A.5.15 ISO-27001-2022 A.8.2 ISO-27001-2022 A.8.18 ITSG-33 AC-6 **NESA** T5.1.1

T5.2.2

T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205751r958726\_rule

**STIG-ID** WN19-UR-000040

STIG-LEGACY SV-103141

STIG-LEGACY V-93053

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205751

# Assets

# live-malware

'backup operators' && 'administrators'

# WN19-UR-000140 - Windows Server 2019 Increase scheduling priority: user right must only be assigned to the Administrators group.

# Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Increase scheduling priority' user right can change a scheduling priority, causing performance issues or a denial of service.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Increase scheduling priority' to include only the following accounts or groups:

- Administrators

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**NESA** 

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1

T5.2.2

T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205761r958726\_rule

**STIG-ID** WN19-UR-000140

STIG-LEGACY SV-103161

STIG-LEGACY V-93073

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205761

# Assets

# live-malware

<sup>&#</sup>x27;window manager group' && 'administrators'

# WN19-UR-000210 - Windows Server 2019 Restore files and directories user right must only be assigned to the Administrators group.

# Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Restore files and directories' user right can circumvent file and directory permissions and could allow access to sensitive data. It could also be used to overwrite more current data.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Restore files and directories' to include only the following accounts or groups:

- Administrators

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**NESA** 

References		
800-171	3.1.7	
800-171R3	03.01.07a.	
800-53	AC-6(10)	
800-53R5	AC-6(10)	
CAT	II	
CCI	CCI-002235	
CN-L3	7.1.3.2(b)	
CN-L3	7.1.3.2(g)	
CN-L3	8.1.4.2(d)	
CN-L3	8.1.10.6(a)	
CSF	PR.AC-4	
CSF2.0	PR.AA-05	
CSF2.0 DISA_BENCHMARK	PR.AA-05 Windows_Server_2019_STIG	
DISA_BENCHMARK	Windows_Server_2019_STIG	
DISA_BENCHMARK GDPR	Windows_Server_2019_STIG 32.1.b	
DISA_BENCHMARK GDPR HIPAA	Windows_Server_2019_STIG 32.1.b 164.306(a)(1)	
DISA_BENCHMARK GDPR HIPAA HIPAA	Windows_Server_2019_STIG 32.1.b 164.306(a)(1) 164.312(a)(1)	
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)  A.5.15	
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	Windows_Server_2019_STIG 32.1.b 164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2	
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	Windows_Server_2019_STIG 32.1.b 164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18	
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022 ISO-27001-2022 ISO-27001-2022 ITSG-33	Windows_Server_2019_STIG 32.1.b 164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18 AC-6	

T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205767r958726\_rule

**STIG-ID** WN19-UR-000210

STIG-LEGACY SV-103173

STIG-LEGACY V-93085

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205767

# Assets

# live-malware

'backup operators' && 'administrators'

# **Audits SKIPPED**

# Audits PASSED

# DISA\_Microsoft\_Windows\_Server\_2019\_STIG\_v3r4.audit from DISA Microsoft Windows Server 2019 STIG v3r4

Info

# **Solution**

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### **Assets**

# live-malware

All of the following must pass to satisfy this requirement:

-----
PASSED - Windows Server 2019 is installed:
Remote value: 'Windows Server 2019 Datacenter'
Policy value: '^[a-zA-Z0-9\(\)\s]\*2019[\s]\*[a-zA-Z0-9\(\)\s:]\*\$'

# WN19-00-000040 - Windows Server 2019 members of the Backup Operators group must have separate accounts for backup duties and normal operational tasks.

### Info

Backup Operators are able to read and write to any file in the system, regardless of the rights assigned to it. Backup and restore rights permit users to circumvent the file access restrictions present on NTFS disk drives for backup and restore purposes. Members of the Backup Operators group must have separate logon accounts for performing backup duties.

### Solution

Ensure each member of the Backup Operators group has separate accounts for backup functions and standard user functions.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205846r991589\_rule

**STIG-ID** WN19-00-000040

STIG-LEGACY SV-103295

STIG-LEGACY V-93207

SWIFT-CSCV1 2.3

**VULN-ID** V-205846

#### **Assets**

live-malware

All of the following must pass to satisfy this requirement:

\_\_\_\_\_

PASSED - Check if no accounts are members of the Backup Operators group.: Remote value: 'PASS: No accounts are part of the Backup Operators group.' Policy value: 'PASS: No accounts are part of the Backup Operators group.' WN19-00-000060 - Windows Server 2019 manually managed application account passwords must be changed at least annually or when a system administrator with knowledge of the password leaves the organization.

### Info

Setting application account passwords to expire may cause applications to stop functioning. However, not changing them on a regular basis exposes them to attack. If managed service accounts are used, this alleviates the need to manually change application account passwords.

### **Solution**

Change passwords for manually managed application/service accounts at least annually or when an administrator with knowledge of the password leaves the organization.

It is recommended that system-managed service accounts be used whenever possible.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205847r991589\_rule

**STIG-ID** WN19-00-000060

STIG-LEGACY SV-103297

STIG-LEGACY V-93209

SWIFT-CSCV1 2.3

**VULN-ID** V-205847

# **Assets**

# live-malware

'No service account with password older than 365 days'

# WN19-00-000090 - Windows Server 2019 domain-joined systems must have a Trusted Platform Module (TPM) enabled and ready for use.

### Info

Credential Guard uses virtualization-based security to protect data that could be used in credential theft attacks if compromised. A number of system requirements must be met in order for Credential Guard to be configured and enabled properly. Without a TPM enabled and ready for use, Credential Guard keys are stored in a less secure method using software.

### **Solution**

Ensure domain-joined systems have a TPM that is configured for use. (Versions 2.0 or 1.2 support Credential Guard.) The TPM must be enabled in the firmware.

Run 'tpm.msc' for configuration options in Windows.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205848r991589\_rule

**STIG-ID** WN19-00-000090

STIG-LEGACY SV-103301

STIG-LEGACY V-93213

SWIFT-CSCV1 2.3

**VULN-ID** V-205848

# **Assets**

# live-malware

PASSED

# WN19-00-000100 - Windows Server 2019 must be maintained at a supported servicing level.

# Info

Systems at unsupported servicing levels will not receive security updates for new vulnerabilities, which leave them subject to exploitation. Systems must be maintained at a servicing level supported by the vendor with new security updates.

# **Solution**

Update the system to a Version 1809 (Build 17763.xxx) or greater.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205849r991589\_rule

**STIG-ID** WN19-00-000100

STIG-LEGACY SV-103303

STIG-LEGACY V-93215

SWIFT-CSCV1 2.3

**VULN-ID** V-205849

# Assets

# live-malware

17763

# WN19-00-000130 - Windows Server 2019 local volumes must use a format that supports NTFS attributes.

# Info

The ability to set access permissions and auditing is critical to maintaining the security and proper access controls of a system. To support this, volumes must be formatted using a file system that supports NTFS attributes.

### **Solution**

Format volumes to use NTFS or ReFS.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.1.1

**800-171R3** 03.01.02

**800-53** AC-3

**800-53R5** AC-3

CAT

**CCI** CCI-000213

**CN-L3** 8.1.4.2(f)

**CN-L3** 8.1.4.11(b)

**CN-L3** 8.1.10.2(c)

**CN-L3** 8.5.3.1

**CN-L3** 8.5.4.1(a)

CSF PR.AC-4

CSF PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.3

**ISO-27001-2022** A.8.18

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.9.4.1

**ISO/IEC-27001** A.9.4.5

ITSG-33 AC-3

NESA T4.2.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205663r958472\_rule

**STIG-ID** WN19-00-000130

STIG-LEGACY SV-103079

STIG-LEGACY V-92991

TBA-FIISB 31.1

**VULN-ID** V-205663

# Assets

# live-malware

'None'

# WN19-00-000150 - Windows Server 2019 permissions for program file directories must conform to minimum requirements.

### Info

Changing the system's file and directory permissions allows the possibility of unauthorized and anonymous modification to the operating system and installed applications.

The default permissions are adequate when the Security Option 'Network access: Let Everyone permissions apply to anonymous users' is set to 'Disabled' (WN19-SO-000240).

Satisfies: SRG-OS-000312-GPOS-00122, SRG-OS-000312-GPOS-00123, SRG-OS-000312-GPOS-00124

### **Solution**

Maintain the default permissions for the program file directories and configure the Security Option 'Network access: Let Everyone permissions apply to anonymous users' to 'Disabled' (WN19-SO-000240). Default permissions:

\Program Files and \Program Files (x86) Type - 'Allow' for all Inherited from - 'None' for all Principal - Access - Applies to

TrustedInstaller - Full control - This folder and subfolders SYSTEM - Modify - This folder only SYSTEM - Full control - Subfolders and files only Administrators - Modify - This folder only Administrators - Full control - Subfolders and files only Users - Read & execute - This folder, subfolders, and files CREATOR OWNER - Full control - Subfolders and files only ALL APPLICATION PACKAGES - Read & execute - This folder, subfolders, and files ALL RESTRICTED APPLICATION PACKAGES - Read & execute - This folder, subfolders, and files

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

	of	Or	On	ces
п	ŒI	СI	GII	<b>CE3</b>

F	References	
	800-171	3.1.1
	800-171R3	03.01.02
	800-53	AC-3(4)
	800-53R5	AC-3(4)
	CAT	II
	CCI	CCI-002165
	CN-L3	8.1.4.2(f)
	CN-L3	8.1.4.11(b)
	CN-L3	8.1.10.2(c)
	CN-L3	8.5.3.1
	CN-L3	8.5.4.1(a)
	CSF	PR.AC-4
	CSF	PR.PT-3
	CSF2.0	PR.AA-05
	CSF2.0	PR.DS-10
	CSF2.0	PR.IR-01
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)

HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.5.33
ISO-27001-2022	A.8.3
ISO-27001-2022	A.8.18
ISO-27001-2022	A.8.20
ISO/IEC-27001	A.9.4.1
ISO/IEC-27001	A.9.4.5
ITSG-33	AC-3(4)
NESA	T4.2.1
NESA	T5.4.4
NESA	T5.4.5
NESA	T5.5.4
NESA	T5.6.1
NESA	T7.5.2
NESA	T7.5.3
NIAV2	AM3
NIAV2	SS29
QCSC-V1	3.2
QCSC-V1	5.2.2
QCSC-V1	13.2
RULE-ID	SV-205735r958702_rule
STIG-ID	WN19-00-000150
STIG-LEGACY	SV-103109
STIG-LEGACY	V-93021

# Assets live-malware

**TBA-FIISB** 

**VULN-ID** 

All of the following must pass to satisfy this requirement:

31.1

V-205735

PASSED - c:\program files:

Remote value: 'C:\Program Files NT SERVICE\TrustedInstaller:(F)

NT SERVICE\TrustedInstaller:(CI)(IO)(F)

NT AUTHORITY\SYSTEM:(M)

NT AUTHORITY\SYSTEM:(OI)(CI)(IO)(F)

```
BUILTIN\Administrators:(M)
                 BUILTIN\Administrators:(OI)(CI)(IO)(F)
                 BUILTIN\Users:(RX)
                 BUILTIN\Users:(OI)(CI)(IO)(GR,GE)
                 CREATOR OWNER: (OI)(CI)(IO)(F)
                 APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(RX)
                 APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(OI)(CI)(IO)(GR,GE)
                APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION PACKAGES:(RX)
                APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION PACKAGES:(OI)(CI)(IO)
(GR,GE)
Successfully processed 1 files; Failed processing 0 files
STATUS: PASSED'
Policy value: 'STATUS: PASSED'
PASSED - Program Files (x86) permissions:
Remote value: 'C:\Program Files (x86) NT SERVICE\TrustedInstaller:(F)
                       NT SERVICE\TrustedInstaller:(CI)(IO)(F)
                       NT AUTHORITY\SYSTEM:(M)
                       NT AUTHORITY\SYSTEM:(OI)(CI)(IO)(F)
                       BUILTIN\Administrators:(M)
                       BUILTIN\Administrators:(OI)(CI)(IO)(F)
                       BUILTIN\Users:(RX)
                       BUILTIN\Users:(OI)(CI)(IO)(GR,GE)
                       CREATOR OWNER: (OI)(CI)(IO)(F)
                       APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(RX)
                       APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(OI)(CI)(IO)(GR,GE)
                       APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION PACKAGES:(RX)
                       APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION [...]
```

# WN19-00-000160 - Windows Server 2019 permissions for the Windows installation directory must conform to minimum requirements.

#### Info

Changing the system's file and directory permissions allows the possibility of unauthorized and anonymous modification to the operating system and installed applications.

The default permissions are adequate when the Security Option 'Network access: Let Everyone permissions apply to anonymous users' is set to 'Disabled' (WN19-SO-000240).

Satisfies: SRG-OS-000312-GPOS-00122, SRG-OS-000312-GPOS-00123, SRG-OS-000312-GPOS-00124

#### **Solution**

Maintain the default file ACLs and configure the Security Option 'Network access: Let Everyone permissions apply to anonymous users' to 'Disabled' (WN19-SO-000240).

Default permissions:

Type - 'Allow' for all Inherited from - 'None' for all

Principal - Access - Applies to

TrustedInstaller - Full control - This folder and subfolders SYSTEM - Modify - This folder only SYSTEM - Full control - Subfolders and files only Administrators - Modify - This folder only Administrators - Full control - Subfolders and files only Users - Read & execute - This folder, subfolders, and files CREATOR OWNER - Full control - Subfolders and files only ALL APPLICATION PACKAGES - Read & execute - This folder, subfolders, and files ALL RESTRICTED APPLICATION PACKAGES - Read & execute - This folder, subfolders, and files

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

References				
	800-171	3.1.1		
	800-171R3	03.01.02		
	800-53	AC-3(4)		
	800-53R5	AC-3(4)		
	CAT	II		
	CCI	CCI-002165		
	CN-L3	8.1.4.2(f)		
	CN-L3	8.1.4.11(b)		
	CN-L3	8.1.10.2(c)		
	CN-L3	8.5.3.1		
	CN-L3	8.5.4.1(a)		
	CSF	PR.AC-4		
	CSF	PR.PT-3		
	CSF2.0	PR.AA-05		
	CSF2.0	PR.DS-10		
	CSF2.0	PR.IR-01		
	DISA_BENCHMARK	Windows_Server_2019_STIG		
	GDPR	32.1.b		
	HIPAA	164.306(a)(1)		

**HIPAA** 164.312(a)(1) ISO-27001-2022 A.5.15 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3(4) **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3 NIAV2 **SS29** QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 13.2 **RULE-ID** SV-205736r1016383\_rule STIG-ID WN19-00-000160

**STIG-LEGACY** SV-103111

**STIG-LEGACY** V-93023

**TBA-FIISB** 31.1

**VULN-ID** V-205736

## **Assets** live-malware

'C:\Windows NT SERVICE\TrustedInstaller:(F)

NT SERVICE\TrustedInstaller:(CI)(IO)(F)

NT AUTHORITY\SYSTEM:(M)

NT AUTHORITY\SYSTEM:(OI)(CI)(IO)(F)

BUILTIN\Administrators:(M)

BUILTIN\Administrators:(OI)(CI)(IO)(F)

BUILTIN\Users:(RX)

BUILTIN\Users:(OI)(CI)(IO)(GR,GE)

CREATOR OWNER: (OI)(CI)(IO)(F)

APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(RX)

 ${\tt APPLICATION\ PACKAGE\ AUTHORITY \setminus ALL\ APPLICATION\ PACKAGES: (OI)(CI)(IO)(GR,GE)}$ 

APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION PACKAGES:(RX)

APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION PACKAGES:(OI)(CI)(IO)(GR,GE)

Successfully processed 1 files: Failed processing 0 files

STATUS: PASSED'

# WN19-00-000170 - Windows Server 2019 default permissions for the HKEY\_LOCAL\_MACHINE registry hive must be maintained.

#### Info

The registry is integral to the function, security, and stability of the Windows system. Changing the system's registry permissions allows the possibility of unauthorized and anonymous modification to the operating system.

#### **Solution**

Maintain the default permissions for the HKEY LOCAL MACHINE registry hive.

The default permissions of the higher-level keys are noted below.

HKEY\_LOCAL\_MACHINE\SECURITY

Type - 'Allow' for all Inherited from - 'None' for all Principal - Access - Applies to SYSTEM - Full Control - This key and subkeys Administrators - Special - This key and subkeys

HKEY\_LOCAL\_MACHINE\SOFTWARE

Type - 'Allow' for all Inherited from - 'None' for all Principal - Access - Applies to Users - Read - This key and subkeys Administrators - Full Control - This key and subkeys SYSTEM - Full Control - This key and subkeys CREATOR OWNER - Full Control - This key and subkeys ALL APPLICATION PACKAGES - Read - This key and subkeys HKEY\_LOCAL\_MACHINE\SYSTEM

Type - 'Allow' for all Inherited from - 'None' for all Principal - Access - Applies to Users - Read - This key and subkeys Administrators - Full Control - This key and subkeys SYSTEM - Full Control - This key and subkeys CREATOR OWNER - Full Control - Subkeys only ALL APPLICATION PACKAGES - Read - This key and subkeys Server Operators - Read - This Key and subkeys (Domain controllers only)

Microsoft has also given Read permission to the SOFTWARE and SYSTEM registry keys in Windows Server 2019 to the following SID.

S-1-15-3-1024-1065365936-1281604716-3511738428-1654721687-432734479-3232135806-4053264122-3456934681

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

References			
	800-171	3.1.7	
	800-171R3	03.01.07a.	
	800-53	AC-6(10)	
	800-53R5	AC-6(10)	
	CAT	II	
	CCI	CCI-002235	
	CN-L3	7.1.3.2(b)	
	CN-L3	7.1.3.2(g)	
	CN-L3	8.1.4.2(d)	
	CN-L3	8.1.10.6(a)	
	CSF	PR.AC-4	
	CSF2.0	PR.AA-05	
	DISA_BENCHMARK	Windows_Server_2019_STIG	
	GDPR	32.1.b	
	HIPAA	164.306(a)(1)	
	HIPAA	164.312(a)(1)	
	ISO-27001-2022	A.5.15	

ISO-27001-2022 A.8.2 ISO-27001-2022 A.8.18 **ITSG-33** AC-6 **NESA** T5.1.1 **NESA** T5.2.2 **NESA** T5.4.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.3 NIAV2 AM1 NIAV2 AM23f NIAV2 SS13c NIAV2 SS15c PCI-DSSV3.2.1 7.1.2 PCI-DSSV4.0 7.2.1 PCI-DSSV4.0 7.2.2 QCSC-V1 5.2.2 QCSC-V1 6.2 **RULE-ID** SV-205737r958726\_rule STIG-ID WN19-00-000170

STIG-LEGACY SV-103113

STIG-LEGACY V-93025

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205737

## Assets

## live-malware

All of the following must pass to satisfy this requirement:

PASSED - HKEY\_LOCAL\_MACHINE\SOFTWARE:

Remote value:

```
+ Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
  |- Allow: 'enumerate subkeys' | 'notify' | 'query value' | 'read control'
 administrators:
 + Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
|- Allow: 'create link' | 'create subkey' | 'delete' | 'enumerate subkeys' | 'full control' | 'notify' | 'query value' | 'read control' | 'set value' | 'write dac' | 'write owner'
 all application packages:
 + Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
  - Allow: 'enumerate subkeys' | 'notify' | 'query value' | 'read control'
 creator owner:
 + Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
|- Allow: 'create link' | 'create subkey' | 'delete' | 'enumerate subkeys' | 'full control' | 'notify' | 'query value' | 'read control' | 'set value' | 'write dac' | 'write owner'
 system:
 + Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
  |- Allow: 'create link' | 'create subkey' | 'delete' | 'enumerate subkeys' | 'full control' |
'notify' | 'query value' | 'read control' | 'set value' | 'write dac' | 'write owner'
 users:
 + Apply To: 'this key and subkeys'
  |- Inheritance: 'not inherited'
  - Allow: 'enumerate subkeys' | [...]
```

## WN19-00-000200 - Windows Server 2019 accounts must require passwords.

## Info

The lack of password protection enables anyone to gain access to the information system, which opens a backdoor opportunity for intruders to compromise the system as well as other resources. Accounts on a system must require passwords.

## **Solution**

Configure all enabled accounts to require passwords.

The password required flag can be set by entering the following on a command line: 'Net user [username] / passwordreq:yes', substituting [username] with the name of the user account.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.1

**800-171R3** 03.05.01a.

**800-53** IA-2

**800-53R5** IA-2

CAT

CCI CCI-000764

**CN-L3** 7.1.3.1(a)

**CN-L3** 7.1.3.1(e)

**CN-L3** 8.1.4.1(a)

**CN-L3** 8.1.4.2(a)

**CN-L3** 8.5.4.1(a)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

ISO-27001-2022 A.5.16

ITSG-33 IA-2

ITSG-33 IA-2a.

NESA T2.3.8

NESA T5.3.1

**NESA** T5.4.2

NESA T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM2

NIAV2 AM8

NIAV2 AM14b

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205700r958482\_rule

**STIG-ID** WN19-00-000200

STIG-LEGACY SV-103525

STIG-LEGACY V-93439

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205700

## Assets

## live-malware

'All users require passwords'

## WN19-00-000210 - Windows Server 2019 passwords must be configured to expire.

## Info

Passwords that do not expire or are reused increase the exposure of a password with greater probability of being discovered or cracked.

#### **Solution**

Configure all enabled user account passwords to expire.

Uncheck 'Password never expires' for all enabled user accounts in Active Directory Users and Computers for domain accounts and Users in Computer Management for member servers and standalone or nondomain-joined systems. Document any exceptions with the ISSO.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.5.2

**800-171R3** 03.05.07d.

**800-53** IA-5(1)(d)

**800-53R5** IA-5(1)(h)

CAT

CCI CCI-000199

**CCI** CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ISO/IEC-27001 A.9.4.3

ITSG-33 IA-5(1)(d)

NESA T5.2.3

NIAV2 AM20

NIAV2 AM21

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205658r1051066\_rule

**STIG-ID** WN19-00-000210

STIG-LEGACY SV-103561

**STIG-LEGACY** V-93475

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.2

**VULN-ID** V-205658

## **Assets**

## live-malware

'All users passwords expire'

# WN19-00-000230 - Windows Server 2019 non-system-created file shares must limit access to groups that require it.

## Info

Shares on a system provide network access. To prevent exposing sensitive information, where shares are necessary, permissions must be reconfigured to give the minimum access to accounts that require it.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

#### **Solution**

If a non-system-created share is required on a system, configure the share and NTFS permissions to limit access to the specific groups or accounts that require it.

Remove any unnecessary non-system-created shares.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.13.4

**800-171R3** 03.13.04

**800-53** SC-4

**800-53R5** SC-4

CAT

CCI CCI-001090

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-4

ITSG-33 SC-4a.

**RULE-ID** SV-205721r958524\_rule

**STIG-ID** WN19-00-000230

STIG-LEGACY SV-103617

STIG-LEGACY V-93531

**VULN-ID** V-205721

#### **Assets**

#### live-malware

, ,

## WN19-00-000320 - Windows Server 2019 must not have the Fax Server role installed.

## Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption or may provide unauthorized access to the system.

## **Solution**

Uninstall the 'Fax Server' role.

Start 'Server Manager'.

Select the server with the role.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'Fax Server' on the 'Roles' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

**CCI** CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

**QCSC-V1** 3.2

**RULE-ID** SV-205678r958478\_rule

**STIG-ID** WN19-00-000320

STIG-LEGACY SV-103469

STIG-LEGACY V-93383

SWIFT-CSCV1 2.3

**VULN-ID** V-205678

## Assets

## live-malware

'HKLM\System\CurrentControlSet\Services\Fax\_registry\_does\_not\_exist'

# WN19-00-000330 - Windows Server 2019 must not have the Microsoft FTP service installed unless required by the organization.

#### Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption.

#### Solution

Uninstall the 'FTP Server' role.

Start 'Server Manager'.

Select the server with the role.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'FTP Server' under 'Web Server (IIS)' on the 'Roles' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06b.

**800-53** CM-7b.

**800-53R5** CM-7b.

CAT

CCI CCI-000382

**CN-L3** 7.1.3.5(c)

**CN-L3** 7.1.3.7(d)

**CN-L3** 8.1.4.4(b)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS13b

NIAV2 SS14a

NIAV2 SS14c

PCI-DSSV3.2.1 2.2.2

**PCI-DSSV4.0** 2.2.4

QCSC-V1 3.2

**RULE-ID** SV-205697r958480\_rule

**STIG-ID** WN19-00-000330

STIG-LEGACY SV-103507

STIG-LEGACY V-93421

SWIFT-CSCV1 2.3

**VULN-ID** V-205697

## **Assets**

## live-malware

<sup>&#</sup>x27;HKLM\System\CurrentControlSet\Services\FTPSVC\_registry\_does\_not\_exist'

## WN19-00-000340 - Windows Server 2019 must not have the Peer Name Resolution Protocol installed.

## Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption or may provide unauthorized access to the system.

#### **Solution**

Uninstall the 'Peer Name Resolution Protocol' feature.

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'Peer Name Resolution Protocol' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

**CCI** CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205679r958478\_rule

**STIG-ID** WN19-00-000340

STIG-LEGACY SV-103471

STIG-LEGACY V-93385

SWIFT-CSCV1 2.3

**VULN-ID** V-205679

## Assets

## live-malware

'HKLM\System\CurrentControlSet\Services\PNRPsvc\_registry\_does\_not\_exist'

## WN19-00-000350 - Windows Server 2019 must not have Simple TCP/IP Services installed.

## Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption or may provide unauthorized access to the system.

## **Solution**

Uninstall the 'Simple TCP/IP Services' feature.

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'Simple TCP/IP Services' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

**CCI** CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205680r958478\_rule

**STIG-ID** WN19-00-000350

STIG-LEGACY SV-103473

STIG-LEGACY V-93387

SWIFT-CSCV1 2.3

**VULN-ID** V-205680

# **Assets**

## live-malware

'HKLM\System\CurrentControlSet\Services\simptcp\_registry\_does\_not\_exist'

## WN19-00-000360 - Windows Server 2019 must not have the Telnet Client installed.

## Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption or may provide unauthorized access to the system.

## **Solution**

Uninstall the 'Telnet Client' feature.

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

03.04.06b.

Deselect 'Telnet Client' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

800-171R3

**800-171** 3.4.6

**800-171** 3.4.7

**800-53** CM-7b.

**800-53R5** CM-7b.

CAT

**CCI** CCI-000382

**CN-L3** 7.1.3.5(c)

**CN-L3** 7.1.3.7(d)

**CN-L3** 8.1.4.4(b)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS13b

NIAV2 SS14a

NIAV2 SS14c

**PCI-DSSV3.2.1** 2.2.2

**PCI-DSSV4.0** 2.2.4

QCSC-V1 3.2

**RULE-ID** SV-205698r958480\_rule

**STIG-ID** WN19-00-000360

STIG-LEGACY SV-103509

STIG-LEGACY V-93423

SWIFT-CSCV1 2.3

**VULN-ID** V-205698

## **Assets**

## live-malware

'InstallState : Available'

## WN19-00-000370 - Windows Server 2019 must not have the TFTP Client installed.

## Info

Unnecessary services increase the attack surface of a system. Some of these services may not support required levels of authentication or encryption or may provide unauthorized access to the system.

## **Solution**

Uninstall the 'TFTP Client' feature.

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'TFTP Client' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

**QCSC-V1** 3.2

**RULE-ID** SV-205681r958478\_rule

**STIG-ID** WN19-00-000370

STIG-LEGACY SV-103475

STIG-LEGACY V-93389

SWIFT-CSCV1 2.3

**VULN-ID** V-205681

## Assets

## live-malware

'InstallState : Available'

# WN19-00-000380 - Windows Server 2019 must not have the Server Message Block (SMB) v1 protocol installed.

## Info

SMBv1 is a legacy protocol that uses the MD5 algorithm as part of SMB. MD5 is known to be vulnerable to a number of attacks such as collision and preimage attacks and is not FIPS compliant.

#### Solution

Uninstall the SMBv1 protocol.

Open 'Windows PowerShell' with elevated privileges (run as administrator).

Enter 'Uninstall-WindowsFeature -Name FS-SMB1 -Restart'.

(Omit the Restart parameter if an immediate restart of the system cannot be done.)

Alternately:

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'SMB 1.0/CIFS File Sharing Support' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.4.6
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**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205682r958478\_rule

**STIG-ID** WN19-00-000380

STIG-LEGACY SV-103477

STIG-LEGACY V-93391

SWIFT-CSCV1 2.3

**VULN-ID** V-205682

## **Assets**

## live-malware

'InstallState : Removed'

## WN19-00-000410 - Windows Server 2019 must not have Windows PowerShell 2.0 installed.

## Info

Windows PowerShell 5.x added advanced logging features that can provide additional detail when malware has been run on a system. Disabling the Windows PowerShell 2.0 mitigates against a downgrade attack that evades the Windows PowerShell 5.x script block logging feature.

## **Solution**

Uninstall the 'Windows PowerShell 2.0 Engine'.

Start 'Server Manager'.

Select the server with the feature.

Scroll down to 'ROLES AND FEATURES' in the right pane.

Select 'Remove Roles and Features' from the drop-down 'TASKS' list.

Select the appropriate server on the 'Server Selection' page and click 'Next'.

Deselect 'Windows PowerShell 2.0 Engine' under 'Windows PowerShell' on the 'Features' page.

Click 'Next' and 'Remove' as prompted.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205685r958478\_rule

**STIG-ID** WN19-00-000410

STIG-LEGACY SV-103483

STIG-LEGACY V-93397

SWIFT-CSCV1 2.3

**VULN-ID** V-205685

## Assets

# live-malware

'InstallState : Removed'

# WN19-00-000440 - The Windows Server 2019 time service must synchronize with an appropriate DOD time source.

#### Info

The Windows Time Service controls time synchronization settings. Time synchronization is essential for authentication and auditing purposes. If the Windows Time Service is used, it must synchronize with a secure, authorized time source. Domain-joined systems are automatically configured to synchronize with domain controllers. If an NTP server is configured, it must synchronize with a secure, authorized time source.

#### Solution

Configure the system to synchronize time with an appropriate DOD time source.

Domain-joined systems use NT5DS to synchronize time from other systems in the domain by default.

If the system needs to be configured to an NTP server, configure the system to point to an authorized time server by setting the policy value for Computer Configuration >> Administrative Templates >> System >> Windows Time Service >> Time Providers >> 'Configure Windows NTP Client' to 'Enabled', and configure the 'NtpServer' field to point to an appropriate DOD time server.

The US Naval Observatory operates stratum 1 time servers, which are identified at:

https://www.cnmoc.usff.navy.mil/Our-Commands/United-States-Naval-Observatory/Precise-Time-Department/Network-Time-Protocol-NTP/

Time synchronization will occur through a hierarchy of time servers down to the local level. Clients and lower-level servers will synchronize with an authorized time server in the hierarchy.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.3.7

**800-171R3** 03.03.07

**800-53** AU-8(1)(a)

**800-53R5** SC-45(1)(a)

CAT

CCI CCI-001891

CCI CCI-004923

**CN-L3** 8.1.4.3(b)

CSF PR.PT-1

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.17

ISO/IEC-27001 A.12.4.4

**ITSG-33** AU-8(1)

**NESA** T3.6.7

NIAV2 NS44

NIAV2 NS45

NIAV2 NS46

NIAV2 NS47

**PCI-DSSV3.2.1** 10.4

**PCI-DSSV3.2.1** 10.4.1

**PCI-DSSV3.2.1** 10.4.3

**PCI-DSSV4.0** 10.6

**PCI-DSSV4.0** 10.6.1

PCI-DSSV4.0 10.6.2

PCI-DSSV4.0 10.6.3

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205800r1051077\_rule

**STIG-ID** WN19-00-000440

STIG-LEGACY SV-103275

STIG-LEGACY V-93187

TBA-FIISB 37.4

**VULN-ID** V-205800

## Assets

## live-malware

'NtpServer: time.windows.com,0x8 (Local) NtpServer (Local)'

# WN19-00-000460 - Windows Server 2019 systems must have Unified Extensible Firmware Interface (UEFI) firmware and be configured to run in UEFI mode, not Legacy BIOS.

#### Info

UEFI provides additional security features in comparison to legacy BIOS firmware, including Secure Boot. UEFI is required to support additional security features in Windows, including Virtualization Based Security and Credential Guard. Systems with UEFI that are operating in 'Legacy BIOS' mode will not support these security features.

#### **Solution**

Configure UEFI firmware to run in 'UEFI' mode, not 'Legacy BIOS' mode.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205856r991589\_rule

**STIG-ID** WN19-00-000460

STIG-LEGACY SV-103317

STIG-LEGACY V-93229

SWIFT-CSCV1 2.3

**VULN-ID** V-205856

#### **Assets**

#### live-malware

'path \Windows\system32\winload.efi'

## WN19-00-000470 - Windows Server 2019 must have Secure Boot enabled.

## Info

Secure Boot is a standard that ensures systems boot only to a trusted operating system. Secure Boot is required to support additional security features in Windows, including Virtualization Based Security and Credential Guard. If Secure Boot is turned off, these security features will not function.

## **Solution**

Enable Secure Boot in the system firmware.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205857r991589\_rule

**STIG-ID** WN19-00-000470

STIG-LEGACY SV-103319

STIG-LEGACY V-93231

SWIFT-CSCV1 2.3

**VULN-ID** V-205857

## Assets

#### live-malware

'True'

# WN19-AC-000050 - Windows Server 2019 maximum password age must be configured to 60 days or less.

#### Info

The longer a password is in use, the greater the opportunity for someone to gain unauthorized knowledge of the passwords. Scheduled changing of passwords hinders the ability of unauthorized system users to crack passwords and gain access to a system.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Maximum password age' to '60' days or less (excluding '0', which is unacceptable).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.2

**800-171R3** 03.05.07d.

**800-53** IA-5(1)(d)

**800-53R5** IA-5(1)(h)

CAT

**CCI** CCI-000199

CCI CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ISO/IEC-27001 A.9.4.3

ITSG-33 IA-5(1)(d)

NESA T5.2.3

NIAV2 AM20

NIAV2 AM21

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205659r1051067\_rule

**STIG-ID** WN19-AC-000050

STIG-LEGACY SV-103563

STIG-LEGACY V-93477

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.2

**VULN-ID** V-205659

## **Assets**

## live-malware

42

# WN19-AC-000080 - Windows Server 2019 must have the built-in Windows password complexity policy enabled.

#### Info

The use of complex passwords increases their strength against attack. The built-in Windows password complexity policy requires passwords to contain at least three of the four types of characters (numbers, uppercase and lowercase letters, and special characters) and prevents the inclusion of user names or parts of user names. Satisfies: SRG-OS-000069-GPOS-00037, SRG-OS-000070-GPOS-00038, SRG-OS-000071-GPOS-00039, SRG-OS-000266-GPOS-00101

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Password must meet complexity requirements' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.7

**800-171R3** 03.05.07a.

**800-53** IA-5(1)(a)

**800-53R5** IA-5(1)(h)

CAT

CCI CCI-000192

**CCI** CCI-000193

CCI CCI-000194

CCI CCI-001619

CCI CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

32.1.b

**GDPR** 

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

ISO-27001-2022 A.5.16

ISO-27001-2022 A.5.17

**ISO/IEC-27001** A.9.4.3

ITSG-33 IA-5(1)(a)

NESA T5.2.3

NIAV2 AM19a

NIAV2 AM19b

NIAV2 AM19c

NIAV2 AM19d

NIAV2 AM22a

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205652r1051061\_rule

**STIG-ID** WN19-AC-000080

STIG-LEGACY SV-103545

STIG-LEGACY V-93459

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.1

**TBA-FIISB** 26.2.4

**VULN-ID** V-205652

#### Assets

## live-malware

'enabled'

# WN19-AC-000090 - Windows Server 2019 reversible password encryption must be disabled.

## Info

Storing passwords using reversible encryption is essentially the same as storing clear-text versions of the passwords, which are easily compromised. For this reason, this policy must never be enabled.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Password Policy >> 'Store passwords using reversible encryption' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.10

**800-171R3** 03.05.07c.

**800-53** IA-5(1)(c)

**800-53R5** IA-5(1)(d)

CAT

CCI CCI-000196

CCI CCI-004062

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(1)(c)

NESA T5.2.3

NIAV2 CY6

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205653r1051062\_rule

**STIG-ID** WN19-AC-000090

STIG-LEGACY SV-103551

STIG-LEGACY V-93465

SWIFT-CSCV1 4.1

TBA-FIISB 26.1

**VULN-ID** V-205653

# Assets

# live-malware

'disabled'

# WN19-AU-000030 - Windows Server 2019 permissions for the Application event log must prevent access by non-privileged accounts.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. The Application event log may be susceptible to tampering if proper permissions are not applied.

Satisfies: SRG-OS-000057-GPOS-00027, SRG-OS-000058-GPOS-00028, SRG-OS-000059-GPOS-00029

### Solution

Configure the permissions on the Application event log file (Application.evtx) to prevent access by non-privileged accounts. The default permissions listed below satisfy this requirement:

Eventlog - Full Control SYSTEM - Full Control Administrators - Full Control

The default location is the '%SystemRoot%\System32\winevt\Logs' folder.

If the location of the logs has been changed, when adding Eventlog to the permissions, it must be entered as 'NT Service\Eventlog'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.3.8

**800-171R3** 03.03.08

**800-53** AU-9

**800-53R5** AU-9a.

CAT

CCI CCI-000162

**CCI** CCI-000163

CCI CCI-000164

**CN-L3** 7.1.2.3(d)

**CN-L3** 7.1.3.3(f)

**CN-L3** 8.1.3.5(c)

**CN-L3** 8.1.4.3(c)

CSF PR.PT-1

CSF2.0 PR.DS-10

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.33

ISO-27001-2022 A.8.15

ISO/IEC-27001 A.12.4.2

ITSG-33 AU-9

NESA M5.2.3

NESA M5.5.2

**NESA** T3.6.4

NESA T8.2.9

NIAV2 SM5

NIAV2 SM6

**PCI-DSSV3.2.1** 10.5

**PCI-DSSV3.2.1** 10.5.2

PCI-DSSV4.0 10.3.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205640r958434\_rule

**STIG-ID** WN19-AU-000030

STIG-LEGACY SV-103277

STIG-LEGACY V-93189

**VULN-ID** V-205640

### **Assets**

### live-malware

'C:\Windows\System32\winevt\Logs\Application.evtx NT SERVICE\EventLog:(I)(F)

NT AUTHORITY\SYSTEM:(I)(F)

BUILTIN\Administrators:(I)(F)

Successfully processed 1 files; Failed processing 0 files

STATUS: PASSED'

# WN19-AU-000040 - Windows Server 2019 permissions for the Security event log must prevent access by non-privileged accounts.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. The Security event log may disclose sensitive information or be susceptible to tampering if proper permissions are not applied.

Satisfies: SRG-OS-000057-GPOS-00027, SRG-OS-000058-GPOS-00028, SRG-OS-000059-GPOS-00029

### Solution

Configure the permissions on the Security event log file (Security.evtx) to prevent access by non-privileged accounts. The default permissions listed below satisfy this requirement:

Eventlog - Full Control SYSTEM - Full Control Administrators - Full Control

The default location is the '%SystemRoot%\System32\winevt\Logs' folder.

If the location of the logs has been changed, when adding Eventlog to the permissions, it must be entered as 'NT Service\Eventlog'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.3.8
000-171	3.3.0

**800-171R3** 03.03.08

**800-53** AU-9

**800-53R5** AU-9a.

CAT

CCI CCI-000162

**CCI** CCI-000163

CCI CCI-000164

**CN-L3** 7.1.2.3(d)

**CN-L3** 7.1.3.3(f)

**CN-L3** 8.1.3.5(c)

**CN-L3** 8.1.4.3(c)

CSF PR.PT-1

CSF2.0 PR.DS-10

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.33

ISO-27001-2022 A.8.15

**ISO/IEC-27001** A.12.4.2

ITSG-33 AU-9

NESA M5.2.3

NESA M5.5.2

NESA T3.6.4

NESA T8.2.9

NIAV2 SM5

NIAV2 SM6

**PCI-DSSV3.2.1** 10.5

**PCI-DSSV3.2.1** 10.5.2

PCI-DSSV4.0 10.3.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205641r958434\_rule

**STIG-ID** WN19-AU-000040

STIG-LEGACY SV-103279

STIG-LEGACY V-93191

**VULN-ID** V-205641

### Assets

### live-malware

BUILTIN\Administrators:(I)(F)

Successfully processed 1 files; Failed processing 0 files

STATUS: PASSED'

# WN19-AU-000050 - Windows Server 2019 permissions for the System event log must prevent access by non-privileged accounts.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. The System event log may be susceptible to tampering if proper permissions are not applied.

Satisfies: SRG-OS-000057-GPOS-00027, SRG-OS-000058-GPOS-00028, SRG-OS-000059-GPOS-00029

#### Solution

Configure the permissions on the System event log file (System.evtx) to prevent access by non-privileged accounts. The default permissions listed below satisfy this requirement:

Eventlog - Full Control SYSTEM - Full Control Administrators - Full Control

The default location is the '%SystemRoot%\System32\winevt\Logs' folder.

If the location of the logs has been changed, when adding Eventlog to the permissions, it must be entered as 'NT Service\Eventlog'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.3.8

**800-171R3** 03.03.08

**800-53** AU-9

**800-53R5** AU-9a.

CAT

CCI CCI-000162

**CCI** CCI-000163

CCI CCI-000164

**CN-L3** 7.1.2.3(d)

**CN-L3** 7.1.3.3(f)

**CN-L3** 8.1.3.5(c)

**CN-L3** 8.1.4.3(c)

CSF PR.PT-1

CSF2.0 PR.DS-10

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.5.33

ISO-27001-2022 A.8.15

ISO/IEC-27001 A.12.4.2

ITSG-33 AU-9

NESA M5.2.3

NESA M5.5.2

NESA T3.6.4

NESA T8.2.9

NIAV2 SM5

NIAV2 SM6

**PCI-DSSV3.2.1** 10.5

**PCI-DSSV3.2.1** 10.5.2

PCI-DSSV4.0 10.3.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205642r958434\_rule

**STIG-ID** WN19-AU-000050

STIG-LEGACY SV-103281

STIG-LEGACY V-93193

**VULN-ID** V-205642

### Assets

### live-malware

BUILTIN\Administrators:(I)(F)

Successfully processed 1 files; Failed processing 0 files

STATUS: PASSED'

# WN19-AU-000060 - Windows Server 2019 Event Viewer must be protected from unauthorized modification and deletion.

### Info

Protecting audit information also includes identifying and protecting the tools used to view and manipulate log data. Therefore, protecting audit tools is necessary to prevent unauthorized operation on audit information.

Operating systems providing tools to interface with audit information will leverage user permissions and roles identifying the user accessing the tools and the corresponding rights the user enjoys in order to make access decisions regarding the modification or deletion of audit tools.

Satisfies: SRG-OS-000257-GPOS-00098, SRG-OS-000258-GPOS-00099

### Solution

Configure the permissions on the 'Eventvwr.exe' file to prevent modification by any groups or accounts other than TrustedInstaller. The default permissions listed below satisfy this requirement:

TrustedInstaller - Full Control Administrators, SYSTEM, Users, ALL APPLICATION PACKAGES, ALL RESTRICTED APPLICATION PACKAGES - Read & Execute

The default location is the '%SystemRoot%\System32' folder.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.3.8

**800-171R3** 03.03.08

**800-53** AU-9

**800-53R5** AU-9

CAT

CCI CCI-001494

**CCI** CCI-001495

**CN-L3** 7.1.2.3(d)

**CN-L3** 7.1.3.3(f)

**CN-L3** 8.1.3.5(c)

**CN-L3** 8.1.4.3(c)

CSF PR.PT-1

CSF2.0 PR.DS-10

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.5.33

ISO-27001-2022 A.8.15

ISO/IEC-27001 A.12.4.2

ITSG-33 AU-9

NESA M5.2.3

NESA M5.5.2

NESA T3.6.4

NESA T8.2.9

NIAV2 SM5

NIAV2 SM6

**PCI-DSSV3.2.1** 10.5

PCI-DSSV3.2.1 10.5.2

PCI-DSSV4.0 10.3.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205731r991558\_rule

**STIG-ID** WN19-AU-000060

STIG-LEGACY SV-103283

STIG-LEGACY V-93195

**VULN-ID** V-205731

### Assets

# live-malware

'C:\Windows\System32\Eventvwr.exe NT SERVICE\TrustedInstaller:(F)

BUILTIN\Administrators:(RX)
NT AUTHORITY\SYSTEM:(RX)

BUILTIN\Users:(RX)

APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(RX)
APPLICATION PACKAGE AUTHORITY\ALL RESTRICTED APPLICATION

PACKAGES: (RX)

Successfully processed 1 files; Failed processing 0 files

STATUS: PASSED'

## WN19-AU-000070 - Windows Server 2019 must be configured to audit Account Logon - Credential Validation successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Credential Validation records events related to validation tests on credentials for a user account logon.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Logon >> 'Audit Credential Validation' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**DISA\_BENCHMARK** 

Re	ferences	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

NESA T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205832r991578\_rule

**STIG-ID** WN19-AU-000070

STIG-LEGACY SV-103241

STIG-LEGACY V-93153

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205832

## **Assets**

### live-malware

'success'

# WN19-AU-000090 - Windows Server 2019 must be configured to audit Account Management - Other Account Management Events successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Other Account Management Events records events such as the access of a password hash or the Password Policy Checking API being called.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000064-GPOS-00033, SRG-OS-000462-GPOS-00206, SRG-OS-000466-GPOS-00210

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Management >> 'Audit Other Account Management Events' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

https://di.dod.cyber.htm/wp-content/upioads/stigs/zip/o_ivi3_vvindows_3erver_zo19_v3k4_31tigs/zip				
References				
800-171	3.1.7			
800-171	3.3.1			
800-171	3.3.2			
800-171R3	03.01.07b.			
800-171R3	03.03.03a.			
800-53	AC-6(9)			
800-53	AU-12c.			
800-53R5	AC-6(9)			
800-53R5	AU-12c.			
CAT	II			
CCI	CCI-000172			
CCI	CCI-002234			
CN-L3	7.1.3.2(b)			
CN-L3	7.1.3.2(g)			
CN-L3	7.1.3.3(a)			
CN-L3	7.1.3.3(b)			
CN-L3	7.1.3.3(c)			
CN-L3	8.1.3.5(a)			
CN-L3	8.1.3.5(b)			
CN-L3	8.1.4.2(d)			

**CN-L3** 8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

ISO/IEC-27001 A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

NESA T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205769r958732\_rule

**STIG-ID** WN19-AU-000090

STIG-LEGACY SV-103177

STIG-LEGACY V-93089

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205769

### Assets

### live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000100 - Windows Server 2019 must be configured to audit Account Management - Security Group Management successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Security Group Management records events such as creating, deleting, or changing security groups, including changes in group members.

Satisfies: SRG-OS-000004-GPOS-00004, SRG-OS-000239-GPOS-00089, SRG-OS-000240-GPOS-00090, SRG-OS-000241-GPOS-00091, SRG-OS-000303-GPOS-00120, SRG-OS-000476-GPOS-00221

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Management >> 'Audit Security Group Management' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/LL.MS. Windows, Server, 2019, V3R4, STIG zip

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U_MS_Windows_Server_2019_V3R4_STIG.zip					
References					
800-171	3.1.1				
800-171	3.3.1				
800-171	3.3.2				
800-171R3	03.01.01				
800-171R3	03.03.03a.				
800-53	AC-2(4)				
800-53	AU-12c.				
800-53R5	AC-2(4)				
800-53R5	AU-12c.				
CAT	II				
CCI	CCI-000018				
CCI	CCI-000172				
CCI	CCI-001403				
CCI	CCI-001404				
CCI	CCI-001405				
CCI	CCI-002130				
CN-L3	7.1.3.2(d)				
CN-L3	7.1.3.3(a)				
CN-L3	7.1.3.3(b)				
CN-L3	7.1.3.3(c)				

**CN-L3** 8.1.3.5(a)

**CN-L3** 8.1.3.5(b)

**CN-L3** 8.1.4.3(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-1

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-01

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO/IEC-27001** A.9.2.1

**ISO/IEC-27001** A.12.4.1

**ITSG-33** AC-2(4)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.2.2

NIAV2 AM9a

NIAV2 AM9b

NIAV2 AM9c

NIAV2 AM9d

NIAV2 AM9e

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205625r958368\_rule

**STIG-ID** WN19-AU-000100

STIG-LEGACY SV-103067

STIG-LEGACY V-92979

SWIFT-CSCV1 6.4

**TBA-FIISB** 36.2.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205625

# Assets

# live-malware

'success, failure'

# WN19-AU-000110 - Windows Server 2019 must be configured to audit Account Management - User Account Management successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

User Account Management records events such as creating, changing, deleting, renaming, disabling, or enabling user accounts.

Satisfies: SRG-OS-000004-GPOS-00004, SRG-OS-000239-GPOS-00089, SRG-OS-000240-GPOS-00090, SRG-OS-000241-GPOS-00091, SRG-OS-000303-GPOS-00120, SRG-OS-000476-GPOS-00221

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Management >> 'Audit User Account Management' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/LL.MS. Windows, Server, 2019, V3R4, STIG zip

	https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U_MS_Windows_Server_2019_V3R4_STIG.zip					
R	References					
	800-171	3.1.1				
	800-171	3.3.1				
	800-171	3.3.2				
	800-171R3	03.01.01				
	800-171R3	03.03.03a.				
	800-53	AC-2(4)				
	800-53	AU-12c.				
	800-53R5	AC-2(4)				
	800-53R5	AU-12c.				
	CAT	II				
	CCI	CCI-000018				
	CCI	CCI-000172				
	CCI	CCI-001403				
	CCI	CCI-001404				
	CCI	CCI-001405				
	CCI	CCI-002130				
	CN-L3	7.1.3.2(d)				
	CN-L3	7.1.3.3(a)				
	CN-L3	7.1.3.3(b)				
	CN-L3	7.1.3.3(c)				

**CN-L3** 8.1.3.5(a)

**CN-L3** 8.1.3.5(b)

**CN-L3** 8.1.4.3(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-1

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-01

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO/IEC-27001** A.9.2.1

**ISO/IEC-27001** A.12.4.1

**ITSG-33** AC-2(4)

**ITSG-33** AU-12c.

NESA T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.2.2

NIAV2 AM9a

NIAV2 AM9b

NIAV2 AM9c

NIAV2 AM9d

NIAV2 AM9e

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205626r958368\_rule

**STIG-ID** WN19-AU-000110

STIG-LEGACY SV-103069

STIG-LEGACY V-92981

SWIFT-CSCV1 6.4

**TBA-FIISB** 36.2.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205626

# Assets

# live-malware

'success, failure'

# WN19-AU-000120 - Windows Server 2019 must be configured to audit Account Management - User Account Management failures.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

User Account Management records events such as creating, changing, deleting, renaming, disabling, or enabling user accounts.

Satisfies: SRG-OS-000004-GPOS-00004, SRG-OS-000239-GPOS-00089, SRG-OS-000240-GPOS-00090, SRG-OS-000241-GPOS-00091, SRG-OS-000303-GPOS-00120, SRG-OS-000476-GPOS-00221

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Management >> 'Audit User Account Management' with 'Failure' selected.

### See Also

CN-L3

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

References	
800-171	3.1.1
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.01
800-171R3	03.03.03a.
800-53	AC-2(4)
800-53	AU-12c.
800-53R5	AC-2(4)
800-53R5	AU-12c.
CAT	II
CAT	II CCI-000018
CCI	CCI-000018
CCI	CCI-000018 CCI-000172
CCI CCI	CCI-000018 CCI-000172 CCI-001403
CCI CCI CCI	CCI-000018 CCI-000172 CCI-001403 CCI-001404
CCI CCI CCI	CCI-000018 CCI-000172 CCI-001403 CCI-001404 CCI-001405
CCI CCI CCI CCI	CCI-000018 CCI-000172 CCI-001403 CCI-001404 CCI-001405 CCI-002130

7.1.3.3(c)

**CN-L3** 8.1.3.5(a)

**CN-L3** 8.1.3.5(b)

**CN-L3** 8.1.4.3(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-1

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-01

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO/IEC-27001** A.9.2.1

**ISO/IEC-27001** A.12.4.1

**ITSG-33** AC-2(4)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.2.2

NIAV2 AM9a

NIAV2 AM9b

NIAV2 AM9c

NIAV2 AM9d

NIAV2 AM9e

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205627r958368\_rule

**STIG-ID** WN19-AU-000120

STIG-LEGACY SV-103071

STIG-LEGACY V-92983

SWIFT-CSCV1 6.4

**TBA-FIISB** 36.2.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205627

# Assets

# live-malware

'success, failure'

# WN19-AU-000130 - Windows Server 2019 must be configured to audit Detailed Tracking - Plug and Play Events successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Plug and Play activity records events related to the successful connection of external devices.

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Detailed Tracking >> 'Audit PNP Activity' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**DISA\_BENCHMARK** 

 10101011000	
800-171	3.3.1
800-171	3.3.2
800-171R3	03.03.03a.
800-53	AU-12c.
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.3(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205839r991583\_rule

**STIG-ID** WN19-AU-000130

STIG-LEGACY SV-103245

STIG-LEGACY V-93157

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205839

## Assets

# live-malware

<sup>&#</sup>x27;success, failure'

## WN19-AU-000160 - Windows Server 2019 must be configured to audit Logon/Logoff - Account Lockout failures.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Account Lockout events can be used to identify potentially malicious logon attempts.

Satisfies: SRG-OS-000240-GPOS-00090, SRG-OS-000470-GPOS-00214

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Account Lockout' with 'Failure' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

Δf			

**CSF** 

References	
800-171	3.1.1
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.01
800-171R3	03.03.03a.
800-53	AC-2(4)
800-53	AU-12c.
800-53R5	AC-2(4)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-001404
CN-L3	7.1.3.2(d)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.3(a)
CSF	DE.CM-1
CSF	DE.CM-3

DE.CM-7

CSF PR.AC-1

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-01

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO/IEC-27001** A.9.2.1

ISO/IEC-27001 A.12.4.1

ITSG-33 AC-2(4)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

NESA T3.6.6

NESA T5.2.2

NIAV2 AM9a

NIAV2 AM9b

NIAV2 AM9c

NIAV2 AM9d

NIAV2 AM9e

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

**QCSC-V1** 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205730r991552\_rule

**STIG-ID** WN19-AU-000160

STIG-LEGACY SV-103077

STIG-LEGACY V-92989

SWIFT-CSCV1 6.4

**TBA-FIISB** 36.2.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205730

### Assets

# live-malware

<sup>&#</sup>x27;success, failure'

## WN19-AU-000180 - Windows Server 2019 must be configured to audit logoff successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Logoff records user logoffs. If this is an interactive logoff, it is recorded on the local system. If it is to a network share, it is recorded on the system accessed.

Satisfies: SRG-OS-000472-GPOS-00217, SRG-OS-000480-GPOS-00227

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Logoff' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**CSF** 

**CSF** 

References	
800-171	3.3.1
800-171	3.3.2
800-171	3.4.2
800-171R3	03.03.03a.
800-171R3	03.04.02a.
800-53	AU-12c.
800-53	CM-6b.
800-53R5	AU-12c.
800-53R5	CM-6b.
CAT	II
CCI	CCI-000172
CCI	CCI-000366
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(d)
CSF	DE.CM-1

DE.CM-3

DE.CM-7

CSF PR.IP-1

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.9

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

**ITSG-33** AU-12c.

ITSG-33 CM-6b.

NESA T3.2.1

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

**QCSC-V1** 6.2

**QCSC-V1** 8.2.1

**QCSC-V1** 13.2

**RULE-ID** SV-205838r991581\_rule

**STIG-ID** WN19-AU-000180

STIG-LEGACY SV-103259

STIG-LEGACY V-93171

SWIFT-CSCV1 2.3

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205838

# **Assets**

# live-malware

'success'

## WN19-AU-000190 - Windows Server 2019 must be configured to audit logon successes.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Logon records user logons. If this is an interactive logon, it is recorded on the local system. If it is to a network share, it is recorded on the system accessed.

Satisfies: SRG-OS-000032-GPOS-00013, SRG-OS-000470-GPOS-00214, SRG-OS-000472-GPOS-00217, SRG-OS-000473-GPOS-00218, SRG-OS-000475-GPOS-00220

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Logon' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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h	References	
	800-171	3.1.12
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.12
	800-171R3	03.03.03a.
	800-53	AC-17(1)
	800-53	AU-12c.
	800-53R5	AC-17(1)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000067
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CN-L3	8.1.4.4(c)
	CN-L3	8.1.10.6(i)
	CSF	DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-3

CSF PR.PT-1

CSF PR.PT-4

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.16

ISO/IEC-27001 A.6.2.2

ISO/IEC-27001 A.12.4.1

**ITSG-33** AC-17(1)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.4.4

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

**QCSC-V1** 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

**QCSC-V1** 13.2

**RULE-ID** SV-205634r958406\_rule

**STIG-ID** WN19-AU-000190

STIG-LEGACY SV-103055

STIG-LEGACY V-92967

SWIFT-CSCV1 2.6

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205634

### **Assets**

## live-malware

'success, failure'

## WN19-AU-000200 - Windows Server 2019 must be configured to audit logon failures.

### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Logon records user logons. If this is an interactive logon, it is recorded on the local system. If it is to a network share, it is recorded on the system accessed.

Satisfies: SRG-OS-000032-GPOS-00013, SRG-OS-000470-GPOS-00214, SRG-OS-000472-GPOS-00217, SRG-OS-000473-GPOS-00218, SRG-OS-000475-GPOS-00220

### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Logon' with 'Failure' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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Г	references	
	800-171	3.1.12
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.12
	800-171R3	03.03.03a.
	800-53	AC-17(1)
	800-53	AU-12c.
	800-53R5	AC-17(1)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000067
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CN-L3	8.1.4.4(c)
	CN-L3	8.1.10.6(i)
	CSF	DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-3

CSF PR.PT-1

CSF PR.PT-4

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.16

ISO/IEC-27001 A.6.2.2

ISO/IEC-27001 A.12.4.1

**ITSG-33** AC-17(1)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.4.4

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

**QCSC-V1** 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

**QCSC-V1** 13.2

**RULE-ID** SV-205635r958406\_rule

**STIG-ID** WN19-AU-000200

STIG-LEGACY SV-103057

STIG-LEGACY V-92969

SWIFT-CSCV1 2.6

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205635

# **Assets**

# live-malware

'success, failure'

# WN19-AU-000210 - Windows Server 2019 must be configured to audit Logon/Logoff - Special Logon successes.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Special Logon records special logons that have administrative privileges and can be used to elevate processes. Satisfies: SRG-OS-000470-GPOS-00214, SRG-OS-000472-GPOS-00217, SRG-OS-000473-GPOS-00218, SRG-OS-000475-GPOS-00220

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Logon/Logoff >> 'Audit Special Logon' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

K	references	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

**ITSG-33** AU-12c.

NESA T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205835r991578\_rule

**STIG-ID** WN19-AU-000210

STIG-LEGACY SV-103249

STIG-LEGACY V-93161

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205835

# **Assets**

# live-malware

'success'

# WN19-AU-000220 - Windows Server 2019 must be configured to audit Object Access - Other Object Access Events successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Auditing for other object access records events related to the management of task scheduler jobs and COM+ objects.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Object Access >> 'Audit Other Object Access Events' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**DISA\_BENCHMARK** 

R	eferences	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

NESA T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205836r991578\_rule

**STIG-ID** WN19-AU-000220

STIG-LEGACY SV-103251

STIG-LEGACY V-93163

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205836

# Assets

# live-malware

'success, failure'

# WN19-AU-000230 - Windows Server 2019 must be configured to audit Object Access - Other Object Access Events failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Auditing for other object access records events related to the management of task scheduler jobs and COM+ objects.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Object Access >> 'Audit Other Object Access Events' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**DISA\_BENCHMARK** 

R	eferences	
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.03.03a.
	800-53	AU-12c.
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.3(a)
	CSF	DE.CM-1
	CSF	DE.CM-3
	CSF	DE.CM-7
	CSF	PR.PT-1
	CSF2.0	DE.CM-01
	CSF2.0	DE.CM-03
	CSF2.0	DE.CM-09
	CSF2.0	PR.PS-04

Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.1

ITSG-33 AU-12c.

NESA T3.6.2

NESA T3.6.5

NESA T3.6.6

NIAV2 SM8

PCI-DSSV3.2.1 10.1

QCSC-V1 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205837r991578\_rule

**STIG-ID** WN19-AU-000230

STIG-LEGACY SV-103253

STIG-LEGACY V-93165

SWIFT-CSCV1 6.4

**TBA-FIISB** 45.1.1

**VULN-ID** V-205837

# Assets

# live-malware

'success, failure'

# WN19-AU-000260 - Windows Server 2019 must be configured to audit Policy Change - Audit Policy Change successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Policy Change records events related to changes in audit policy.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Policy Change >> 'Audit Audit Policy Change' with 'Success' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

CN-L3

References		
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205771r958732\_rule

**STIG-ID** WN19-AU-000260

STIG-LEGACY SV-103181

STIG-LEGACY V-93093

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205771

# Assets

# live-malware

'success, failure'

# WN19-AU-000270 - Windows Server 2019 must be configured to audit Policy Change - Audit Policy Change failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Policy Change records events related to changes in audit policy.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Policy Change >> 'Audit Audit Policy Change' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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	<b>C</b> I	_				

CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205772r958732\_rule

**STIG-ID** WN19-AU-000270

STIG-LEGACY SV-103183

STIG-LEGACY V-93095

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205772

# Assets

# live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000280 - Windows Server 2019 must be configured to audit Policy Change - Authentication Policy Change successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Authentication Policy Change records events related to changes in authentication policy, including Kerberos policy and Trust changes.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000064-GPOS-00033, SRG-OS-000462-GPOS-00206, SRG-OS-000466-GPOS-00210

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Policy Change >> 'Audit Authentication Policy Change' with 'Success' selected.

#### See Also

CN-L3

CN-L3

CN-L3

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

TO CO	
800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)

8.1.3.5(a)

8.1.3.5(b)

8.1.4.2(d)

**CN-L3** 8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

ISO/IEC-27001 A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205773r958732\_rule

**STIG-ID** WN19-AU-000280

STIG-LEGACY SV-103185

STIG-LEGACY V-93097

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205773

# Assets

#### live-malware

<sup>&#</sup>x27;success'

# WN19-AU-000340 - Windows Server 2019 must be configured to audit System - Other System Events successes.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Other System Events records information related to cryptographic key operations and the Windows Firewall

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit Other System Events' with 'Success' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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CN-L3

F	References	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

**NESA** T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205779r958732\_rule

**STIG-ID** WN19-AU-000340

STIG-LEGACY SV-103197

STIG-LEGACY V-93109

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205779

# Assets

# live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000350 - Windows Server 2019 must be configured to audit System - Other System Events failures.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Other System Events records information related to cryptographic key operations and the Windows Firewall

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit Other System Events' with 'Failure' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

CN-L3

References		
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

**NESA** T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205780r958732\_rule

**STIG-ID** WN19-AU-000350

STIG-LEGACY SV-103199

STIG-LEGACY V-93111

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205780

# Assets

# live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000360 - Windows Server 2019 must be configured to audit System - Security State Change successes.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Security State Change records events related to changes in the security state, such as startup and shutdown of the

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-00207, SRG OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit Security State Change' with 'Success' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

CN-L3

References		
800-171	3.1.7	
800-171	3.3.1	
800-171	3.3.2	
800-171R3	03.01.07b.	
800-171R3	03.03.03a.	
800-53	AC-6(9)	
800-53	AU-12c.	
800-53R5	AC-6(9)	
800-53R5	AU-12c.	
CAT	II	
CCI	CCI-000172	
CCI	CCI-002234	
CN-L3	7.1.3.2(b)	
CN-L3	7.1.3.2(g)	
CN-L3	7.1.3.3(a)	
CN-L3	7.1.3.3(b)	
CN-L3	7.1.3.3(c)	
CN-L3	8.1.3.5(a)	
CN-L3	8.1.3.5(b)	
CN-L3	8.1.4.2(d)	

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205781r958732\_rule

**STIG-ID** WN19-AU-000360

STIG-LEGACY SV-103201

STIG-LEGACY V-93113

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205781

# Assets

# live-malware

'success'

# WN19-AU-000370 - Windows Server 2019 must be configured to audit System - Security System Extension successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Security System Extension records events related to extension code being loaded by the security subsystem. Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit Security System Extension' with 'Success' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

CN-L3

References				
800-171	3.1.7			
800-171	3.3.1			
800-171	3.3.2			
800-171R3	03.01.07b.			
800-171R3	03.03.03a.			
800-53	AC-6(9)			
800-53	AU-12c.			
800-53R5	AC-6(9)			
800-53R5	AU-12c.			
CAT	II			
CCI	CCI-000172			
CCI	CCI-002234			
CN-L3	7.1.3.2(b)			
CN-L3	7.1.3.2(g)			
CN-L3	7.1.3.3(a)			
CN-L3	7.1.3.3(b)			
CN-L3	7.1.3.3(c)			
CN-L3	8.1.3.5(a)			
CN-L3	8.1.3.5(b)			
CN-L3	8.1.4.2(d)			

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205782r958732\_rule

**STIG-ID** WN19-AU-000370

STIG-LEGACY SV-103203

STIG-LEGACY V-93115

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205782

# Assets

# live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000380 - Windows Server 2019 must be configured to audit System - System Integrity successes.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

System Integrity records events related to violations of integrity to the security subsystem.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000471-GPOS-00215, SRG-OS-000471-GPOS-00216, SRG-OS-000477-GPOS-00222

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit System Integrity' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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CN-L3

References				
	800-171	3.1.7		
	800-171	3.3.1		
	800-171	3.3.2		
	800-171R3	03.01.07b.		
	800-171R3	03.03.03a.		
	800-53	AC-6(9)		
	800-53	AU-12c.		
	800-53R5	AC-6(9)		
	800-53R5	AU-12c.		
	CAT	II		
	CCI	CCI-000172		
	CCI	CCI-002234		
	CN-L3	7.1.3.2(b)		
	CN-L3	7.1.3.2(g)		
	CN-L3	7.1.3.3(a)		
	CN-L3	7.1.3.3(b)		
	CN-L3	7.1.3.3(c)		
	CN-L3	8.1.3.5(a)		
	CN-L3	8.1.3.5(b)		
	CN-L3	8.1.4.2(d)		

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205783r958732\_rule

**STIG-ID** WN19-AU-000380

STIG-LEGACY SV-103205

STIG-LEGACY V-93117

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205783

# Assets

# live-malware

<sup>&#</sup>x27;success, failure'

# WN19-AU-000390 - Windows Server 2019 must be configured to audit System - System Integrity failures.

# Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

System Integrity records events related to violations of integrity to the security subsystem.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000471-GPOS-00215, SRG-OS-000471-GPOS-00216, SRG-OS-000477-GPOS-00222

# **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> System >> 'Audit System Integrity' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

P	ef	Δ	ro	n	00	26
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CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205784r958732\_rule

**STIG-ID** WN19-AU-000390

STIG-LEGACY SV-103207

STIG-LEGACY V-93119

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205784

# Assets

# live-malware

'success, failure'

# WN19-CC-000110 - Windows Server 2019 virtualization-based security must be enabled with the platform security level configured to Secure Boot or Secure Boot with DMA Protection.

#### Info

Virtualization-based security (VBS) provides the platform for the additional security features Credential Guard and virtualization-based protection of code integrity. Secure Boot is the minimum security level, with DMA protection providing additional memory protection. DMA Protection requires a CPU that supports input/output memory management unit (IOMMU).

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Device Guard >> 'Turn On Virtualization Based Security' to 'Enabled' with 'Secure Boot' or 'Secure Boot and DMA Protection' selected. A Microsoft TechNet article on Credential Guard, including system requirement details, can be found at the following link:

https://technet.microsoft.com/itpro/windows/keep-secure/credential-guard

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

**CSF2.0** DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205864r991589\_rule

**STIG-ID** WN19-CC-000110

STIG-LEGACY SV-103333

STIG-LEGACY V-93245

SWIFT-CSCV1 2.3

**VULN-ID** V-205864

# Assets

# live-malware

PASSED

# WN19-CC-000130 - Windows Server 2019 Early Launch Antimalware, Boot-Start Driver Initialization Policy must prevent boot drivers identified as bad.

### Info

Compromised boot drivers can introduce malware prior to protection mechanisms that load after initialization. The Early Launch Antimalware driver can limit allowed drivers based on classifications determined by the malware protection application. At a minimum, drivers determined to be bad must not be allowed.

### Solution

The default behavior is for Early Launch Antimalware - Boot-Start Driver Initialization policy to enforce 'Good, unknown and bad but critical' (preventing 'bad').

If this needs to be corrected or a more secure setting is desired, configure the policy value for Computer Configuration >> Administrative Templates >> System >> Early Launch Antimalware >> 'Boot-Start Driver Initialization Policy' to 'Not Configured' or 'Enabled' with any option other than 'All' selected.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205865r991589\_rule

**STIG-ID** WN19-CC-000130

STIG-LEGACY SV-103337

STIG-LEGACY V-93249

SWIFT-CSCV1 2.3

**VULN-ID** V-205865

# Assets

# live-malware

NULL

# WN19-CC-000310 - Windows Server 2019 Explorer Data Execution Prevention must be enabled.

# Info

Data Execution Prevention provides additional protection by performing checks on memory to help prevent malicious code from running. This setting will prevent Data Execution Prevention from being turned off for File Explorer.

# **Solution**

The default behavior is for data execution prevention to be turned on for File Explorer.

If this needs to be corrected, configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> File Explorer >> 'Turn off Data Execution Prevention for Explorer' to 'Not Configured' or 'Disabled'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**800-53** SI-16

**800-53R5** SI-16

CAT

CCI CCI-002824

CSF2.0 PR.DS-10

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ITSG-33** SI-16

**RULE-ID** SV-205830r958928\_rule

**STIG-ID** WN19-CC-000310

STIG-LEGACY SV-103649

STIG-LEGACY V-93563

**VULN-ID** V-205830

# **Assets**

# live-malware

NULL

# WN19-CC-000320 - Windows Server 2019 Turning off File Explorer heap termination on corruption must be disabled.

## Info

Legacy plug-in applications may continue to function when a File Explorer session has become corrupt. Disabling this feature will prevent this.

### Solution

The default behavior is for File Explorer heap termination on corruption to be disabled.

If this needs to be corrected, configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> File Explorer >> 'Turn off heap termination on corruption' to 'Not Configured' or 'Disabled'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205871r991589\_rule

**STIG-ID** WN19-CC-000320

STIG-LEGACY SV-103349

STIG-LEGACY V-93261

SWIFT-CSCV1 2.3

**VULN-ID** V-205871

# **Assets**

live-malware

# WN19-CC-000330 - Windows Server 2019 File Explorer shell protocol must run in protected mode.

# Info

The shell protocol will limit the set of folders that applications can open when run in protected mode. Restricting files an application can open to a limited set of folders increases the security of Windows.

# **Solution**

The default behavior is for shell protected mode to be turned on for File Explorer.

If this needs to be corrected, configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> File Explorer >> 'Turn off shell protocol protected mode' to 'Not Configured' or 'Disabled'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205872r991589\_rule

**STIG-ID** WN19-CC-000330

STIG-LEGACY SV-103351

STIG-LEGACY V-93263

SWIFT-CSCV1 2.3

**VULN-ID** V-205872

### **Assets**

# live-malware

NULL

# WN19-CC-000400 - Windows Server 2019 must disable Basic authentication for RSS feeds over HTTP.

## Info

Basic authentication uses plain-text passwords that could be used to compromise a system. Disabling Basic authentication will reduce this potential.

### Solution

The default behavior is for the Windows RSS platform to not use Basic authentication over HTTP connections. If this needs to be corrected, configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> RSS Feeds >> 'Turn on Basic feed authentication over HTTP' to 'Not Configured' or 'Disabled'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205693r958478\_rule

**STIG-ID** WN19-CC-000400

STIG-LEGACY SV-103499

STIG-LEGACY V-93413

SWIFT-CSCV1 2.3

**VULN-ID** V-205693

# **Assets**

# live-malware

NULL

# WN19-CC-000440 - Windows Server 2019 users must be notified if a web-based program attempts to install software.

## Info

Web-based programs may attempt to install malicious software on a system. Ensuring users are notified if a web-based program attempts to install software allows them to refuse the installation.

### Solution

The default behavior is for Internet Explorer to warn users and select whether to allow or refuse installation when a web-based program attempts to install software on the system.

If this needs to be corrected, configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Installer >> 'Prevent Internet Explorer security prompt for Windows Installer scripts' to 'Not Configured' or 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205874r991589\_rule

**STIG-ID** WN19-CC-000440

STIG-LEGACY SV-103355

STIG-LEGACY V-93267

SWIFT-CSCV1 2.3

**VULN-ID** V-205874

## **Assets**

# live-malware

NULL

# WN19-CC-000450 - Windows Server 2019 must disable automatically signing in the last interactive user after a system-initiated restart.

## Info

Windows can be configured to automatically sign the user back in after a Windows Update restart. Some protections are in place to help ensure this is done in a secure fashion; however, disabling this will prevent the caching of credentials for this purpose and also ensure the user is aware of the restart.

### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> Windows Components >> Windows Logon Options >> 'Sign-in last interactive user automatically after a system-initiated restart' to 'Disabled'.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205925r991591\_rule

**STIG-ID** WN19-CC-000450

STIG-LEGACY SV-103357

STIG-LEGACY V-93269

SWIFT-CSCV1 2.3

**VULN-ID** V-205925

# **Assets**

live-malware

# WN19-DC-000010 - Windows Server 2019 must only allow administrators responsible for the domain controller to have Administrator rights on the system.

## Info

An account that does not have Administrator duties must not have Administrator rights. Such rights would allow the account to bypass or modify required security restrictions on that machine and make it vulnerable to attack. System administrators must log on to systems using only accounts with the minimum level of authority necessary. Standard user accounts must not be members of the built-in Administrators group.

## **Solution**

Configure the Administrators group to include only administrator groups or accounts that are responsible for the system.

Remove any standard user accounts.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.1.7 **800-171R3** 03.01.07a.

**800-53** AC-6(10)

**800-53R5** AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

ISO-27001-2022 A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205738r958726\_rule

**STIG-ID** WN19-DC-000010

STIG-LEGACY SV-103115

STIG-LEGACY V-93027

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205738

# Assets

# live-malware

# WN19-DC-000020 - Windows Server 2019 Kerberos user logon restrictions must be enforced.

# Info

This policy setting determines whether the Kerberos Key Distribution Center (KDC) validates every request for a session ticket against the user rights policy of the target computer. The policy is enabled by default, which is the most secure setting for validating that access to target resources is not circumvented.

Satisfies: SRG-OS-000112-GPOS-00057, SRG-OS-000113-GPOS-00058

# **Solution**

Configure the policy value in the Default Domain Policy for Computer Configuration >> Policies >> Windows Settings >> Security Settings >> Account Policies >> Kerberos Policy >> 'Enforce user logon restrictions' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

References							
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**800-171** 3.5.4 **800-171R3** 03.05.04

**800-53** IA-2(9)

**800-53R5** IA-2(8)

CAT

CCI CCI-001942

**CN-L3** 7.1.3.1(a)

**CN-L3** 7.1.3.1(e)

**CN-L3** 8.1.4.1(a)

**CN-L3** 8.1.4.2(a)

**CN-L3** 8.5.4.1(a)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

ITSG-33 IA-2(9)

NESA T2.3.8

NESA T5.3.1

NESA T5.4.2

NESA T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM18

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205702r1051071\_rule

**STIG-ID** WN19-DC-000020

STIG-LEGACY SV-103529

STIG-LEGACY V-93443

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205702

# **Assets**

# live-malware

# WN19-DC-000030 - Windows Server 2019 Kerberos service ticket maximum lifetime must be limited to 600 minutes or less.

## Info

This setting determines the maximum amount of time (in minutes) that a granted session ticket can be used to access a particular service. Session tickets are used only to authenticate new connections with servers. Ongoing operations are not interrupted if the session ticket used to authenticate the connection expires during the connection. Satisfies: SRG-OS-000112-GPOS-00057, SRG-OS-000113-GPOS-00058

## **Solution**

Configure the policy value in the Default Domain Policy for Computer Configuration >> Policies >> Windows Settings >> Security Settings >> Account Policies >> Kerberos Policy >> 'Maximum lifetime for service ticket' to a maximum of '600' minutes, but not '0', which equates to 'Ticket doesn't expire'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

ISO-27001-2022

800-171	3.5.4
800-171R3	03.05.04
800-53	IA-2(8)
800-53	IA-2(9)
800-53R5	IA-2(8)
CAT	II
CCI	CCI-001941
CCI	CCI-001942
CN-L3	7.1.3.1(a)
CN-L3	7.1.3.1(e)
CN-L3	8.1.4.1(a)
CN-L3	8.1.4.2(a)
CN-L3	8.5.4.1(a)
CSF	PR.AC-1
CSF2.0	PR.AA-01
CSF2.0	PR.AA-03
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(2)(i)
HIPAA	164.312(d)

A.5.16

ITSG-33 IA-2(8)

ITSG-33 IA-2(9)

NESA T2.3.8

NESA T5.3.1

NESA T5.4.2

**NESA** T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM18

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205703r1051072\_rule

**STIG-ID** WN19-DC-000030

STIG-LEGACY SV-103531

STIG-LEGACY V-93445

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205703

# **Assets**

# live-malware

# WN19-DC-000040 - Windows Server 2019 Kerberos user ticket lifetime must be limited to 10 hours or less.

# Info

In Kerberos, there are two types of tickets: Ticket Granting Tickets (TGTs) and Service Tickets. Kerberos tickets have a limited lifetime so the time an attacker has to implement an attack is limited. This policy controls how long TGTs can be renewed. With Kerberos, the user's initial authentication to the domain controller results in a TGT, which is then used to request Service Tickets to resources. Upon startup, each computer gets a TGT before requesting a service ticket to the domain controller and any other computers it needs to access. For services that start up under a specified user account, users must always get a TGT first and then get Service Tickets to all computers and services accessed. Satisfies: SRG-OS-000112-GPOS-00057, SRG-OS-000113-GPOS-00058

# **Solution**

Configure the policy value in the Default Domain Policy for Computer Configuration >> Policies >> Windows Settings >> Security Settings >> Account Policies >> Kerberos Policy >> 'Maximum lifetime for user ticket' to a maximum of '10' hours but not '0', which equates to 'Ticket doesn't expire'.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**HIPAA** 

ш	(CICICIICCS	
	800-171	3.5.4
	800-171R3	03.05.04
	800-53	IA-2(8)
	800-53	IA-2(9)
	800-53R5	IA-2(8)
	CAT	II
	CCI	CCI-001941
	CCI	CCI-001942
	CN-L3	7.1.3.1(a)
	CN-L3	7.1.3.1(e)
	CN-L3	8.1.4.1(a)
	CN-L3	8.1.4.2(a)
	CN-L3	8.5.4.1(a)
	CSF	PR.AC-1
	CSF2.0	PR.AA-01
	CSF2.0	PR.AA-03
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(2)(i)
		101010(1)

164.312(d)

**ISO-27001-2022** A.5.16

ITSG-33 IA-2(8)

ITSG-33 IA-2(9)

NESA T2.3.8

NESA T5.3.1

NESA T5.4.2

NESA T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM18

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205704r1051073\_rule

**STIG-ID** WN19-DC-000040

STIG-LEGACY SV-103533

STIG-LEGACY V-93447

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205704

## Assets

# live-malware

# WN19-DC-000050 - Windows Server 2019 Kerberos policy user ticket renewal maximum lifetime must be limited to seven days or less.

# Info

This setting determines the period of time (in days) during which a user's TGT may be renewed. This security configuration limits the amount of time an attacker has to crack the TGT and gain access. Satisfies: SRG-OS-000112-GPOS-00057, SRG-OS-000113-GPOS-00058

## **Solution**

Configure the policy value in the Default Domain Policy for Computer Configuration >> Policies >> Windows Settings >> Security Settings >> Account Policies >> Kerberos Policy >> 'Maximum lifetime for user ticket renewal' to a maximum of '7' days or less.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

ITSG-33

References	
800-171	3.5.4
800-171R3	03.05.04
800-53	IA-2(8)
800-53	IA-2(9)
800-53R5	IA-2(8)
CAT	II
CCI	CCI-001941
CCI	CCI-001942
CN-L3	7.1.3.1(a)
CN-L3	7.1.3.1(e)
CN-L3	8.1.4.1(a)
CN-L3	8.1.4.2(a)
CN-L3	8.5.4.1(a)
CSF	PR.AC-1
CSF2.0	PR.AA-01
CSF2.0	PR.AA-03
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(2)(i)
HIPAA	164.312(d)
ISO-27001-2022	A.5.16

IA-2(8)

ITSG-33 IA-2(9)

NESA T2.3.8

NESA T5.3.1

NESA T5.4.2

NESA T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM18

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205705r1051074\_rule

**STIG-ID** WN19-DC-000050

STIG-LEGACY SV-103535

STIG-LEGACY V-93449

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205705

## Assets

# live-malware

# WN19-DC-000060 - Windows Server 2019 computer clock synchronization tolerance must be limited to five minutes or less.

## Info

This setting determines the maximum time difference (in minutes) that Kerberos will tolerate between the time on a client's clock and the time on a server's clock while still considering the two clocks synchronous. To prevent replay attacks, Kerberos uses timestamps as part of its protocol definition. For timestamps to work properly, the clocks of the client and the server need to be in sync as much as possible.

Satisfies: SRG-OS-000112-GPOS-00057, SRG-OS-000113-GPOS-00058

# **Solution**

Configure the policy value in the Default Domain Policy for Computer Configuration >> Windows Settings >> Security Settings >> Account Policies >> Kerberos Policy >> 'Maximum tolerance for computer clock synchronization' to a maximum of '5' minutes or less.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

ISO-27001-2022

IVEIGI GIICGS	
800-171	3.5.4
800-171R3	03.05.04
800-53	IA-2(8)
800-53	IA-2(9)
800-53R5	IA-2(8)
CAT	II
CCI	CCI-001941
CCI	CCI-001942
CN-L3	7.1.3.1(a)
CN-L3	7.1.3.1(e)
CN-L3	8.1.4.1(a)
CN-L3	8.1.4.2(a)
CN-L3	8.5.4.1(a)
CSF	PR.AC-1
CSF2.0	PR.AA-01
CSF2.0	PR.AA-03
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(2)(i)
HIPAA	164.312(d)

A.5.16

ITSG-33 IA-2(8)

ITSG-33 IA-2(9)

NESA T2.3.8

NESA T5.3.1

**NESA** T5.4.2

**NESA** T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM18

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205706r1051075\_rule

**STIG-ID** WN19-DC-000060

STIG-LEGACY SV-103537

STIG-LEGACY V-93451

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205706

# **Assets**

# live-malware

# WN19-DC-000070 - Windows Server 2019 permissions on the Active Directory data files must only allow System and Administrators access.

## Info

Improper access permissions for directory data-related files could allow unauthorized users to read, modify, or delete directory data or audit trails.

# **Solution**

 $\label{eq:maintain} \mbox{ Maintain the permissions on NTDS database and log files as follows:}$ 

NT AUTHORITY\SYSTEM:(I)(F) BUILTIN\Administrators:(I)(F)

(I) - permission inherited from parent container (F) - full access

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**800-171** 3.1.7

**800-171R3** 03.01.07a.

**800-53** AC-6(10)

**800-53R5** AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205739r958726\_rule

**STIG-ID** WN19-DC-000070

STIG-LEGACY SV-103117

STIG-LEGACY V-93029

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205739

# Assets

# live-malware

# WN19-DC-000080 - Windows Server 2019 Active Directory SYSVOL directory must have the proper access control permissions.

## Info

Improper access permissions for directory data files could allow unauthorized users to read, modify, or delete directory data.

The SYSVOL directory contains public files (to the domain) such as policies and logon scripts. Data in shared subdirectories are replicated to all domain controllers in a domain.

### **Solution**

Maintain the permissions on the SYSVOL directory. Do not allow greater than 'Read & execute' permissions for standard user accounts or groups. The defaults below meet this requirement:

C:\Windows\SYSVOL Type - 'Allow' for all Inherited from - 'None' for all

Principal - Access - Applies to

Authenticated Users - Read & execute - This folder, subfolder, and files Server Operators - Read & execute - This folder, subfolder, and files Administrators - Special - This folder only (Special = Basic Permissions: all selected except Full control) CREATOR OWNER - Full control - Subfolders and files only Administrators - Full control - Subfolders and files only SYSTEM - Full control - This folder, subfolders, and files

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

References		
800-171		3.1.7
800-171R3		03.01.07a.
800-53		AC-6(10)
800-53R5		AC-6(10)
CAT		I .
CCI		CCI-002235
CN-L3		7.1.3.2(b)
CN-L3		7.1.3.2(g)
CN-L3		8.1.4.2(d)
CN-L3		8.1.10.6(a)
CSF		PR.AC-4
CSF2.0		PR.AA-05
DISA_BENCH	IMARK	Windows_Server_2019_STIG
GDPR		32.1.b
HIPAA		164.306(a)(1)
HIPAA		164.312(a)(1)
ISO-27001-20	22	A.5.15
ISO-27001-20	22	A.8.2
ISO-27001-20	22	A.8.18
ITSG-33		AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205740r958726\_rule

**STIG-ID** WN19-DC-000080

STIG-LEGACY SV-103119

STIG-LEGACY V-93031

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205740

# Assets

## live-malware

# WN19-DC-000090 - Windows Server 2019 Active Directory Group Policy objects must have proper access control permissions.

## Info

When directory service database objects do not have appropriate access control permissions, it may be possible for malicious users to create, read, update, or delete the objects and degrade or destroy the integrity of the data. When the directory service is used for identification, authentication, or authorization functions, a compromise of the database objects could lead to a compromise of all systems relying on the directory service.

For Active Directory (AD), the Group Policy objects require special attention. In a distributed administration model (i.e., help desk), Group Policy objects are more likely to have access permissions changed from the secure defaults. If inappropriate access permissions are defined for Group Policy objects, this could allow an intruder to change the security policy applied to all domain client computers (workstations and servers).

## **Solution**

Maintain the permissions on Group Policy objects to not allow greater than 'Read' and 'Apply group policy' for standard user accounts or groups. The default permissions below meet this requirement:

Authenticated Users - Read, Apply group policy, Special permissions

The special permissions for Authenticated Users are for Read-type Properties.

CREATOR OWNER - Special permissions SYSTEM - Read, Write, Create all child objects, Delete all child objects, Special permissions Domain Admins - Read, Write, Create all child objects, Delete all child objects, Special permissions Enterprise Admins - Read, Write, Create all child objects, Delete all child objects, Special permissions ENTERPRISE DOMAIN CONTROLLERS - Read, Special permissions

Document any other access permissions that allow the objects to be updated with the ISSO.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	1
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2

ISO-27001-2022 A.8.18 ITSG-33 AC-6 **NESA** T5.1.1 **NESA** T5.2.2 **NESA** T5.4.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.3 NIAV2 AM1 NIAV2 AM23f NIAV2 SS13c NIAV2 SS15c PCI-DSSV3.2.1 7.1.2 PCI-DSSV4.0 7.2.1 PCI-DSSV4.0 7.2.2 QCSC-V1 5.2.2 QCSC-V1 6.2 **RULE-ID** SV-205741r1081998\_rule STIG-ID WN19-DC-000090 **STIG-LEGACY** SV-103121 V-93033

**STIG-LEGACY** 

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205741

# **Assets**

# live-malware

# WN19-DC-000100 - Windows Server 2019 Active Directory Domain Controllers Organizational Unit (OU) object must have the proper access control permissions.

#### Info

When Active Directory objects do not have appropriate access control permissions, it may be possible for malicious users to create, read, update, or delete the objects and degrade or destroy the integrity of the data. When the directory service is used for identification, authentication, or authorization functions, a compromise of the database objects could lead to a compromise of all systems that rely on the directory service.

The Domain Controllers OU object requires special attention as the Domain Controllers are central to the configuration and management of the domain. Inappropriate access permissions defined for the Domain Controllers OU could allow an intruder or unauthorized personnel to make changes that could lead to the compromise of the domain.

## **Solution**

Limit the permissions on the Domain Controllers OU to restrict changes to System, Domain Admins, Enterprise Admins and Administrators.

The default permissions listed below satisfy this requirement.

Domains supporting Microsoft Exchange will have additional Exchange related permissions on the Domain Controllers OU. These may include some change related permissions.

**CREATOR OWNER - Special permissions** 

SELF - Special permissions

Authenticated Users - Read, Special permissions

The special permissions for Authenticated Users are Read types.

SYSTEM - Full Control

Domain Admins - Read, Write, Create all child objects, Generate resultant set of policy (logging), Generate resultant set of policy (planning), Special permissions

Enterprise Admins - Full Control

Key Admins - Special permissions

Enterprise Key Admins - Special permissions

Administrators - Read, Write, Create all child objects, Generate resultant set of policy (logging), Generate resultant set of policy (planning), Special permissions

Pre-Windows 2000 Compatible Access - Special permissions

The special permissions for Pre-Windows 2000 Compatible Access are Read types.

ENTERPRISE DOMAIN CONTROLLERS - Read, Special permissions

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	1
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

**QCSC-V1** 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205742r958726\_rule

**STIG-ID** WN19-DC-000100

STIG-LEGACY SV-103123

STIG-LEGACY V-93035

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205742

# Assets

# live-malware

# WN19-DC-000110 - Windows Server 2019 organization created Active Directory Organizational Unit (OU) objects must have proper access control permissions.

#### Info

When directory service database objects do not have appropriate access control permissions, it may be possible for malicious users to create, read, update, or delete the objects and degrade or destroy the integrity of the data. When the directory service is used for identification, authentication, or authorization functions, a compromise of the database objects could lead to a compromise of all systems that rely on the directory service.

For Active Directory, the OU objects require special attention. In a distributed administration model (i.e., help desk), OU objects are more likely to have access permissions changed from the secure defaults. If inappropriate access permissions are defined for OU objects, it could allow an intruder to add or delete users in the OU. This could result in unauthorized access to data or a denial of service (DoS) to authorized users.

## Solution

Maintain the Allow type permissions on domain-defined OUs to be at least as restrictive as the defaults below. Document any additional permissions above Read with the ISSO if an approved distributed administration model (help desk or other user support staff) is implemented.

**CREATOR OWNER - Special permissions** 

Self - Special permissions

Authenticated Users - Read, Special permissions

The special permissions for Authenticated Users are Read type.

SYSTEM - Full Control

Domain Admins - Full Control

Enterprise Admins - Full Control

Key Admins - Special permissions

Enterprise Key Admins - Special permissions

Administrators - Read, Write, Create all child objects, Generate resultant set of policy (logging), Generate resultant set of policy (planning), Special permissions

Pre-Windows 2000 Compatible Access - Special permissions

The special permissions for Pre-Windows 2000 Compatible Access are for Read types.

ENTERPRISE DOMAIN CONTROLLERS - Read, Special permissions

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	1
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

**QCSC-V1** 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205743r958726\_rule

**STIG-ID** WN19-DC-000110

STIG-LEGACY SV-103125

STIG-LEGACY V-93037

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205743

**Assets** 

# live-malware

# WN19-DC-000120 - Windows Server 2019 data files owned by users must be on a different logical partition from the directory server data files.

#### Info

When directory service data files, especially for directories used for identification, authentication, or authorization, reside on the same logical partition as user-owned files, the directory service data may be more vulnerable to unauthorized access or other availability compromises. Directory service and user-owned data files sharing a partition may be configured with less restrictive permissions in order to allow access to the user data.

The directory service may be vulnerable to a denial of service attack when user-owned files on a common partition are expanded to an extent preventing the directory service from acquiring more space for directory or audit data.

#### **Solution**

Move shares used to store files owned by users to a different logical partition than the directory server data files.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

**800-171** 3.13.4

**800-171R3** 03.13.04

**800-53** SC-4

**800-53R5** SC-4

CAT

CCI CCI-001090

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-4

ITSG-33 SC-4a.

**RULE-ID** SV-205723r958524\_rule

**STIG-ID** WN19-DC-000120

STIG-LEGACY SV-103621

STIG-LEGACY V-93535

**VULN-ID** V-205723

#### **Assets**

#### live-malware

# WN19-DC-000130 - Windows Server 2019 domain controllers must run on a machine dedicated to that function.

## Info

Executing application servers on the same host machine with a directory server may substantially weaken the security of the directory server. Web or database server applications usually require the addition of many programs and accounts, increasing the attack surface of the computer.

Some applications require the addition of privileged accounts, providing potential sources of compromise. Some applications (such as Microsoft Exchange) may require the use of network ports or services conflicting with the directory server. In this case, non-standard ports might be selected, and this could interfere with intrusion detection or prevention services.

#### **Solution**

Remove additional roles or applications such as web, database, and email from the domain controller.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

**PCI-DSSV4.0** 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205695r958478\_rule

**STIG-ID** WN19-DC-000130

STIG-LEGACY SV-103503

STIG-LEGACY V-93417

SWIFT-CSCV1 2.3

**VULN-ID** V-205695

# **Assets**

# live-malware

WN19-DC-000140 - Windows Server 2019 must use separate, NSA-approved (Type 1) cryptography to protect the directory data in transit for directory service implementations at a classified confidentiality level when replication data traverses a network cleared to a lower level than the data.

#### Info

Directory data that is not appropriately encrypted is subject to compromise. Commercial-grade encryption does not provide adequate protection when the classification level of directory data in transit is higher than the level of the network.

#### Solution

Configure NSA-approved (Type 1) cryptography to protect the directory data in transit for directory service implementations at a classified confidentiality level that transfer replication data through a network cleared to a lower level than the data.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.13.11

**800-171R3** 03.13.11

**800-53** SC-13

**800-53R5** SC-13b.

CAT

CCI CCI-002450

CSF PR.DS-5

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.a

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(iv)

HIPAA 164.312(e)(2)(ii)

ISO-27001-2022 A.8.24

ISO/IEC-27001 A.10.1.1

**ITSG-33** SC-13

**ITSG-33** SC-13a.

NESA M5.2.6

NESA T7.4.1

NIAV2 CY3

NIAV2 CY4

NIAV2 CY5b

NIAV2 CY5c

NIAV2 CY5d

NIAV2 CY7

NIAV2 NS5e

QCSC-V1 6.2

**RULE-ID** SV-205818r987791\_rule

**STIG-ID** WN19-DC-000140

STIG-LEGACY SV-103599

STIG-LEGACY V-93513

**VULN-ID** V-205818

## Assets

# live-malware

# WN19-DC-000150 - Windows Server 2019 directory data (outside the root DSE) of a non-public directory must be configured to prevent anonymous access.

#### Info

To the extent that anonymous access to directory data (outside the root DSE) is permitted, read access control of the data is effectively disabled. If other means of controlling access (such as network restrictions) are compromised, there may be nothing else to protect the confidentiality of sensitive directory data.

#### Solution

Configure directory data (outside the root DSE) of a non-public directory to prevent anonymous access. For AD, there are multiple configuration items that could enable anonymous access.

Changing the access permissions on the domain naming context object (from the secure defaults) could enable anonymous access. If the check procedures indicate this is the cause, the process that was used to change the permissions should be reversed. This could have been through the Windows Support Tools ADSI Edit console (adsiedit.msc).

The dsHeuristics option is used. This is addressed in check V-8555 in the AD Forest STIG.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205875r991589\_rule

**STIG-ID** WN19-DC-000150

STIG-LEGACY SV-103359

STIG-LEGACY V-93271

SWIFT-CSCV1 2.3

**VULN-ID** V-205875

# Assets

# live-malware

# WN19-DC-000160 - Windows Server 2019 directory service must be configured to terminate LDAP-based network connections to the directory server after five minutes of inactivity.

#### Info

The failure to terminate inactive network connections increases the risk of a successful attack on the directory server. The longer an established session is in progress, the more time an attacker has to hijack the session, implement a means to passively intercept data, or compromise any protections on client access. For example, if an attacker gains control of a client computer, an existing (already authenticated) session with the directory server could allow access to the directory. The lack of confidentiality protection in LDAP-based sessions increases exposure to this vulnerability.

#### Solution

Configure the directory service to terminate LDAP-based network connections to the directory server after 5 minutes of inactivity.

Open an elevated 'Command prompt' (run as administrator).

Enter 'ntdsutil'.

At the 'ntdsutil:' prompt, enter 'LDAP policies'.

At the 'Idap policy:' prompt, enter 'connections'.

At the 'server connections:' prompt, enter 'connect to server [host-name]' (where [host-name] is the computer name of the domain controller).

At the 'server connections:' prompt, enter 'q'.

At the 'Idap policy:' prompt, enter 'Set MaxConnIdleTime to 300'.

Enter 'Commit Changes' to save.

Enter 'Show values' to verify changes.

Enter 'q' at the 'ldap policy:' and 'ntdsutil:' prompts to exit.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.13.9
800-171R3	03.13.09
800-53	SC-10
800-53R5	SC-10
CAT	Ш

**CCI** CCI-001133

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ISO-27001-2022 A.8.20

**ITSG-33** SC-10

ITSG-33 SC-10a.

NESA T2.3.8

NESA T4.5.1

NESA T5.5.1

**RULE-ID** SV-205726r970703\_rule

**STIG-ID** WN19-DC-000160

STIG-LEGACY SV-103595

STIG-LEGACY V-93509

SWIFT-CSCV1 2.6

**VULN-ID** V-205726

# **Assets**

# live-malware

# WN19-DC-000170 - Windows Server 2019 Active Directory Group Policy objects must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes Group Policy objects. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the audit settings for Group Policy objects to include the following:

This can be done at the Policy level in Active Directory to apply to all group policies.

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Select 'Advanced Features' from the 'View' Menu.

Navigate to [Domain] >> System >> Policies in the left panel.

Right click 'Policies', select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button.

Select the 'Auditing' tab.

Type - Fail Principal - Everyone Access - Full Control Applies to - This object and all descendant objects or Descendant groupPolicyContainer objects

The three Success types listed below are defaults inherited from the Parent Object. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference.

Type - Success Principal - Everyone Access - Special (Permissions: Write all properties, Modify permissions; Properties: all 'Write' type selected) Inherited from - Parent Object Applies to - Descendant groupPolicyContainer objects

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - blank (Permissions: none selected; Properties: one instance - Write gPLink, one instance - Write gPOptions) Inherited from - Parent Object Applies to - Descendant Organization Unit Objects

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172

CCI	CCI-002234
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1

ISO/IEC-27001 A.12.4.3 ITSG-33 AC-6 **ITSG-33** AU-12c. **NESA** T3.6.2 **NESA** T3.6.5 **NESA** T3.6.6 **NESA** T5.1.1 **NESA** T5.2.2 **NESA** T5.5.4 **NESA** T7.5.3 NIAV2 AM1 NIAV2 AM23f NIAV2 SM8 NIAV2 SS13c NIAV2 SS15c PCI-DSSV3.2.1 7.1.2 PCI-DSSV3.2.1 10.1 PCI-DSSV4.0 7.2.1 PCI-DSSV4.0 7.2.2 QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 6.2 QCSC-V1 8.2.1 QCSC-V1 13.2 **RULE-ID** SV-205785r958732\_rule STIG-ID WN19-DC-000170 STIG-LEGACY SV-103209 STIG-LEGACY V-93121

 SWIFT-CSCV1
 5.1

 SWIFT-CSCV1
 6.4

 TBA-FIISB
 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205785

## **Assets**

# live-malware

# WN19-DC-000180 - Windows Server 2019 Active Directory Domain object must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes the Domain object. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Ensure 'Advanced Features' is selected in the 'View' menu.

Select the domain being reviewed in the left pane.

Right-click the domain name and select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button and then the 'Auditing' tab.

Configure the audit settings for Domain object to include the following:

Type - Fail Principal - Everyone Access - Full Control Inherited from - None Applies to - This object only

The success types listed below are defaults. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference. Various Properties selections may also exist by default.

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - (blank) Inherited from - None Applies to - Special

Type - Success Principal - Domain Users Access - All extended rights Inherited from - None Applies to - This object only

Type - Success Principal - Administrators Access - All extended rights Inherited from - None Applies to - This object only

Type - Success Principal - Everyone Access - Special Inherited from - None Applies to - This object only (Access - Special = Permissions: Write all properties, Modify permissions, Modify owner.)

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172

CCI	CCI-002234
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1

ISO/IEC-27001 A.12.4.3 ITSG-33 AC-6 **ITSG-33** AU-12c. **NESA** T3.6.2 **NESA** T3.6.5 **NESA** T3.6.6 **NESA** T5.1.1 **NESA** T5.2.2 **NESA** T5.5.4 **NESA** T7.5.3 NIAV2 AM1 NIAV2 AM23f NIAV2 SM8 NIAV2 SS13c NIAV2 SS15c PCI-DSSV3.2.1 7.1.2 PCI-DSSV3.2.1 10.1 PCI-DSSV4.0 7.2.1 PCI-DSSV4.0 7.2.2 QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 6.2

**RULE-ID** SV-205786r958732\_rule

8.2.1

13.2

**STIG-ID** WN19-DC-000180

STIG-LEGACY SV-103211

STIG-LEGACY V-93123

SWIFT-CSCV1 5.1

QCSC-V1

QCSC-V1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205786

# **Assets**

# live-malware

# WN19-DC-000190 - Windows Server 2019 Active Directory Infrastructure object must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes the Infrastructure object. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Ensure 'Advanced Features' is selected in the 'View' menu.

Select the domain being reviewed in the left pane.

Right-click the 'Infrastructure' object in the right pane and select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button and then the 'Auditing' tab.

Configure the audit settings for Infrastructure object to include the following:

Type - Fail Principal - Everyone Access - Full Control Inherited from - None

The success types listed below are defaults. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference. Various Properties selections may also exist by default.

Type - Success Principal - Everyone Access - Special Inherited from - None (Access - Special = Permissions: Write all properties, All extended rights, Change infrastructure master)

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - (blank) Inherited from - (CN of domain)

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234
CN-L3	7.1.3.2(b)

CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1
ISO/IEC-27001	A.12.4.3
ITO 0 00	400

AC-6

ITSG-33

ITSG-33	AU-12c.
NESA	T3.6.2
NESA	T3.6.5
NESA	T3.6.6
NESA	T5.1.1
NESA	T5.2.2
NESA	T5.5.4
NESA	T7.5.3
NIAV2	AM1
NIAV2	AM23f
NIAV2	SM8
NIAV2	SS13c
NIAV2	SS15c
PCI-DSSV3.2.1	7.1.2
PCI-DSSV3.2.1	10.1
PCI-DSSV4.0	7.2.1
PCI-DSSV4.0	7.2.2
QCSC-V1	3.2
QCSC-V1	5.2.2
QCSC-V1	6.2
QCSC-V1	8.2.1
QCSC-V1	13.2
RULE-ID	SV-205787r958732_rule
STIG-ID	WN19-DC-000190
STIG-LEGACY	SV-103213
STIG-LEGACY	V-93125
SWIFT-CSCV1	5.1
SWIFT-CSCV1	6.4
TBA-FIISB	31.4.2
TBA-FIISB	31.4.3
TD 4 TUOD	45.4.4

45.1.1

TBA-FIISB

**VULN-ID** V-205787

# Assets

# live-malware

# WN19-DC-000200 - Windows Server 2019 Active Directory Domain Controllers Organizational Unit (OU) object must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes the Domain Controller OU object. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Ensure 'Advanced Features' is selected in the 'View' menu.

Select the 'Domain Controllers OU' under the domain being reviewed in the left pane.

Right-click the 'Domain Controllers OU' object and select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button and then the 'Auditing' tab.

Configure the audit settings for Domain Controllers OU object to include the following:

Type - Fail Principal - Everyone Access - Full Control Inherited from - None

The success types listed below are defaults. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference. Various Properties selections may also exist by default.

Type - Success Principal - Everyone Access - Special Inherited from - None Applies to - This object only (Access - Special = Permissions: all create, delete and modify permissions)

Type - Success Principal - Everyone Access - Write all properties Inherited from - None Applies to - This object and all descendant objects

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - (blank) Inherited from - (CN of domain) Applies to - Descendant Organizational Unit objects

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234

CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1
ISO/IEC-27001	A.12.4.3

ITSG-33 AC-6 ITSG-33 AU-12c. **NESA** T3.6.2 **NESA** T3.6.5 **NESA** T3.6.6 **NESA** T5.1.1 **NESA** T5.2.2 **NESA** T5.5.4 **NESA** T7.5.3 NIAV2 AM1 NIAV2 AM23f NIAV2 SM8 NIAV2 SS13c NIAV2 SS15c PCI-DSSV3.2.1 7.1.2 PCI-DSSV3.2.1 10.1 PCI-DSSV4.0 7.2.1 PCI-DSSV4.0 7.2.2 QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 6.2 QCSC-V1 8.2.1 QCSC-V1 13.2 **RULE-ID** SV-205788r958732\_rule STIG-ID WN19-DC-000200 STIG-LEGACY SV-103215 STIG-LEGACY V-93127 SWIFT-CSCV1 5.1

 SWIFT-CSCV1
 6.4

 TBA-FIISB
 31.4.2

 TBA-FIISB
 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205788

## Assets

# live-malware

# WN19-DC-000210 - Windows Server 2019 Active Directory AdminSDHolder object must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes the AdminSDHolder object. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Ensure 'Advanced Features' is selected in the 'View' menu.

Select 'System' under the domain being reviewed in the left pane.

Right-click the 'AdminSDHolder' object in the right pane and select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button and then the 'Auditing' tab.

Configure the audit settings for AdminSDHolder object to include the following:

Type - Fail Principal - Everyone Access - Full Control Inherited from - None Applies to - This object only

The success types listed below are defaults. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference. Various Properties selections may also exist by default.

Type - Success Principal - Everyone Access - Special Inherited from - None Applies to - This object only (Access - Special = Write all properties, Modify permissions, Modify owner)

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - (blank) Inherited from - (CN of domain) Applies to - Descendant Organizational Unit objects

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.1.7
800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234
CN-L3	7.1.3.2(b)

CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1
ISO/IEC-27001	A.12.4.3
1700.00	100

AC-6

ITSG-33

ITSG-33	AU-12c.
NESA	T3.6.2
NESA	T3.6.5
NESA	T3.6.6
NESA	T5.1.1
NESA	T5.2.2
NESA	T5.5.4
NESA	T7.5.3
NIAV2	AM1
NIAV2	AM23f
NIAV2	SM8
NIAV2	SS13c
NIAV2	SS15c
PCI-DSSV3.2.1	7.1.2
PCI-DSSV3.2.1	10.1
PCI-DSSV4.0	7.2.1
PCI-DSSV4.0	7.2.2
QCSC-V1	3.2
QCSC-V1	5.2.2
QCSC-V1	6.2
QCSC-V1	8.2.1
QCSC-V1	13.2
RULE-ID	SV-205789r958732_rule
STIG-ID	WN19-DC-000210
STIG-LEGACY	SV-103217
STIG-LEGACY	V-93129
SWIFT-CSCV1	5.1
SWIFT-CSCV1	6.4
TBA-FIISB	31.4.2
TBA-FIISB	31.4.3
TBA-FIISB	45.1.1

**VULN-ID** V-205789

# Assets

# live-malware

# WN19-DC-000220 - Windows Server 2019 Active Directory RID Manager\$ object must be configured with proper audit settings.

#### Info

When inappropriate audit settings are configured for directory service database objects, it may be possible for a user or process to update the data without generating any tracking data. The impact of missing audit data is related to the type of object. A failure to capture audit data for objects used by identification, authentication, or authorization functions could degrade or eliminate the ability to track changes to access policy for systems or data.

For Active Directory (AD), there are a number of critical object types in the domain naming context of the AD database for which auditing is essential. This includes the RID Manager\$ object. Because changes to these objects can significantly impact access controls or the availability of systems, the absence of auditing data makes it impossible to identify the source of changes that impact the confidentiality, integrity, and availability of data and systems throughout an AD domain. The lack of proper auditing can result in insufficient forensic evidence needed to investigate an incident and prosecute the intruder.

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

### **Solution**

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Ensure 'Advanced Features' is selected in the 'View' menu.

Select 'System' under the domain being reviewed in the left pane.

Right-click the 'RID Manager\$' object in the right pane and select 'Properties'.

Select the 'Security' tab.

Select the 'Advanced' button and then the 'Auditing' tab.

Configure the audit settings for RID Manager\$ object to include the following:

Type - Fail Principal - Everyone Access - Full Control Inherited from - None

The success types listed below are defaults. Where Special is listed in the summary screens for Access, detailed Permissions are provided for reference. Various Properties selections may also exist by default.

Type - Success Principal - Everyone Access - Special Inherited from - None (Access - Special = Write all properties, All extended rights, Change RID master)

Two instances with the following summary information will be listed:

Type - Success Principal - Everyone Access - (blank) Inherited from - (CN of domain)

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

### References

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800-171	3.3.1
800-171	3.3.2
800-171R3	03.01.07b.
800-171R3	03.03.03a.
800-53	AC-6(9)
800-53	AU-12c.
800-53R5	AC-6(9)
800-53R5	AU-12c.
CAT	II
CCI	CCI-000172
CCI	CCI-002234
CN-L3	7.1.3.2(b)

CN-L3	7.1.3.2(g)
CN-L3	7.1.3.3(a)
CN-L3	7.1.3.3(b)
CN-L3	7.1.3.3(c)
CN-L3	8.1.3.5(a)
CN-L3	8.1.3.5(b)
CN-L3	8.1.4.2(d)
CN-L3	8.1.4.3(a)
CN-L3	8.1.10.6(a)
CSF	DE.CM-1
CSF	DE.CM-3
CSF	DE.CM-7
CSF	PR.AC-4
CSF	PR.PT-1
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	DE.CM-09
CSF2.0	PR.AA-05
CSF2.0	PR.PS-04
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
HIPAA	164.312(b)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.15
ISO-27001-2022	A.8.18
ISO/IEC-27001	A.12.4.1
ISO/IEC-27001	A.12.4.3
ITO 0 00	400

AC-6

ITSG-33

ITSG-33	AU-12c.
NESA	T3.6.2
NESA	T3.6.5
NESA	T3.6.6
NESA	T5.1.1
NESA	T5.2.2
NESA	T5.5.4
NESA	T7.5.3
NIAV2	AM1
NIAV2	AM23f
NIAV2	SM8
NIAV2	SS13c
NIAV2	SS15c
PCI-DSSV3.2.1	7.1.2
PCI-DSSV3.2.1	10.1
PCI-DSSV4.0	7.2.1
PCI-DSSV4.0	7.2.2
QCSC-V1	3.2
QCSC-V1	5.2.2
QCSC-V1	6.2
QCSC-V1	8.2.1
QCSC-V1	13.2
RULE-ID	SV-205790r958732_rule
STIG-ID	WN19-DC-000220
STIG-LEGACY	SV-103219
STIG-LEGACY	V-93131
SWIFT-CSCV1	5.1
SWIFT-CSCV1	6.4
TBA-FIISB	31.4.2
TBA-FIISB	31.4.3
TD 4 TUOD	45.4.4

45.1.1

**TBA-FIISB** 

**VULN-ID** V-205790

# Assets

# live-malware

# WN19-DC-000230 - Windows Server 2019 must be configured to audit Account Management - Computer Account Management successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Computer Account Management records events such as creating, changing, deleting, renaming, disabling, or enabling computer accounts.

Satisfies: SRG-OS-000004-GPOS-00004, SRG-OS-000239-GPOS-00089, SRG-OS-000240-GPOS-00090, SRG-OS-000241-GPOS-00091, SRG-OS-000303-GPOS-00120, SRG-OS-000476-GPOS-00221

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> Account Management >> 'Audit Computer Account Management' with 'Success' selected.

### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U MS Windows Server 2019 V3R4 STIG.zip

	https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U_MS_Windows_Server_2019_V3R4_STIG.zip				
References					
	800-171	3.1.1			
	800-171	3.3.1			
	800-171	3.3.2			
	800-171R3	03.01.01			
	800-171R3	03.03.03a.			
	800-53	AC-2(4)			
	800-53	AU-12c.			
	800-53R5	AC-2(4)			
	800-53R5	AU-12c.			
	CAT	II			
	CCI	CCI-000018			
	CCI	CCI-000172			
	CCI	CCI-001403			
	CCI	CCI-001404			
	CCI	CCI-001405			
	CCI	CCI-002130			
	CN-L3	7.1.3.2(d)			
	CN-L3	7.1.3.3(a)			
	CN-L3	7.1.3.3(b)			
	CN-L3	7.1.3.3(c)			

**CN-L3** 8.1.3.5(a)

**CN-L3** 8.1.3.5(b)

**CN-L3** 8.1.4.3(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-1

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-01

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO/IEC-27001** A.9.2.1

**ISO/IEC-27001** A.12.4.1

**ITSG-33** AC-2(4)

**ITSG-33** AU-12c.

**NESA** T3.6.2

**NESA** T3.6.5

**NESA** T3.6.6

NESA T5.2.2

NIAV2 AM9a

NIAV2 AM9b

NIAV2 AM9c

NIAV2 AM9d

NIAV2 AM9e

NIAV2 SM8

**PCI-DSSV3.2.1** 10.1

QCSC-V1 3.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205628r958368\_rule

**STIG-ID** WN19-DC-000230

STIG-LEGACY SV-103073

STIG-LEGACY V-92985

SWIFT-CSCV1 6.4

**TBA-FIISB** 36.2.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205628

## Assets

# live-malware

# WN19-DC-000240 - Windows Server 2019 must be configured to audit DS Access - Directory Service Access successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Directory Service Access records events related to users accessing an Active Directory object. Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> DS Access >> 'Directory Service Access' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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R	ef	r	۵	n	•	Δ	9

CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)
	ONLO	0.4.4.0(-)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

**NESA** T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV4.0** 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205791r958732\_rule

**STIG-ID** WN19-DC-000240

STIG-LEGACY SV-103221

STIG-LEGACY V-93133

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205791

#### Assets

### live-malware

# WN19-DC-000250 - Windows Server 2019 must be configured to audit DS Access - Directory Service Access failures.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Directory Service Access records events related to users accessing an Active Directory object. Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> DS Access >> 'Directory Service Access' with 'Failure' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

CN-L3

R	eferences	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205792r958732\_rule

**STIG-ID** WN19-DC-000250

STIG-LEGACY SV-103223

STIG-LEGACY V-93135

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205792

#### Assets

### live-malware

#### WN19-DC-000260 - Windows Server 2019 must be configured to audit DS Access - Directory Service Changes successes.

#### Info

Maintaining an audit trail of system activity logs can help identify configuration errors, troubleshoot service disruptions, and analyze compromises that have occurred, as well as detect attacks. Audit logs are necessary to provide a trail of evidence in case the system or network is compromised. Collecting this data is essential for analyzing the security of information assets and detecting signs of suspicious and unexpected behavior.

Audit Directory Service Changes records events related to changes made to objects in Active Directory Domain

Satisfies: SRG-OS-000327-GPOS-00127, SRG-OS-000458-GPOS-00203, SRG-OS-000463-GPOS-00207, SRG-OS-000468-GPOS-00212

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Advanced Audit Policy Configuration >> System Audit Policies >> DS Access >> 'Directory Service Changes' with 'Success' selected.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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CN-L3

F	References	
	800-171	3.1.7
	800-171	3.3.1
	800-171	3.3.2
	800-171R3	03.01.07b.
	800-171R3	03.03.03a.
	800-53	AC-6(9)
	800-53	AU-12c.
	800-53R5	AC-6(9)
	800-53R5	AU-12c.
	CAT	II
	CCI	CCI-000172
	CCI	CCI-002234
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	7.1.3.3(a)
	CN-L3	7.1.3.3(b)
	CN-L3	7.1.3.3(c)
	CN-L3	8.1.3.5(a)
	CN-L3	8.1.3.5(b)
	CN-L3	8.1.4.2(d)

8.1.4.3(a)

**CN-L3** 8.1.10.6(a)

CSF DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.AC-4

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.AA-05

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.15

**ISO-27001-2022** A.8.18

ISO/IEC-27001 A.12.4.1

**ISO/IEC-27001** A.12.4.3

ITSG-33 AC-6

**ITSG-33** AU-12c.

**NESA** T3.6.2

NESA T3.6.5

**NESA** T3.6.6

NESA T5.1.1

NESA T5.2.2

NESA T5.5.4

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SM8

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV3.2.1** 10.1

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 3.2

QCSC-V1 5.2.2

QCSC-V1 6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205793r958732\_rule

**STIG-ID** WN19-DC-000260

STIG-LEGACY SV-103225

STIG-LEGACY V-93137

SWIFT-CSCV1 5.1

SWIFT-CSCV1 6.4

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**TBA-FIISB** 45.1.1

**VULN-ID** V-205793

#### Assets

### live-malware

#### WN19-DC-000280 - Windows Server 2019 domain controllers must have a PKI server certificate.

#### Info

Domain controllers are part of the chain of trust for PKI authentications. Without the appropriate certificate, the authenticity of the domain controller cannot be verified. Domain controllers must have a server certificate to establish authenticity as part of PKI authentications in the domain.

#### **Solution**

Obtain a server certificate for the domain controller.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.2

**800-171R3** 03.05.12

**800-53** IA-5(2)(a)

**800-53R5** IA-5(2)(b)(1)

CAT

CCI CCI-000185

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(a)

NESA T5.2.3

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205645r958448\_rule

**STIG-ID** WN19-DC-000280

STIG-LEGACY SV-103567

STIG-LEGACY V-93481

**VULN-ID** V-205645

### Assets

### live-malware

# WN19-DC-000290 - Windows Server 2019 domain Controller PKI certificates must be issued by the DoD PKI or an approved External Certificate Authority (ECA).

#### Info

A PKI implementation depends on the practices established by the Certificate Authority (CA) to ensure the implementation is secure. Without proper practices, the certificates issued by a CA have limited value in authentication functions. The use of multiple CAs from separate PKI implementations results in interoperability issues. If servers and clients do not have a common set of root CA certificates, they are not able to authenticate each other.

#### **Solution**

Obtain a server certificate for the domain controller issued by the DoD PKI or an approved ECA.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.2

**800-171R3** 03.05.12

**800-53** IA-5(2)(a)

**800-53R5** IA-5(2)(b)(1)

CAT

CCI CCI-000185

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(a)

NESA T5.2.3

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205646r958448\_rule

**STIG-ID** WN19-DC-000290

STIG-LEGACY SV-103569

STIG-LEGACY V-93483

**VULN-ID** V-205646

#### Assets

### live-malware

# WN19-DC-000300 - Windows Server 2019 PKI certificates associated with user accounts must be issued by a DoD PKI or an approved External Certificate Authority (ECA).

#### Info

A PKI implementation depends on the practices established by the Certificate Authority (CA) to ensure the implementation is secure. Without proper practices, the certificates issued by a CA have limited value in authentication functions.

#### Solution

Map user accounts to PKI certificates using the appropriate User Principal Name (UPN) for the network. See PKE documentation for details.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.2

**800-171R3** 03.05.12

**800-53** IA-5(2)(a)

**800-53R5** IA-5(2)(b)(1)

CAT

CCI CCI-000185

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(2)(a)

NESA T5.2.3

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205647r958448\_rule

**STIG-ID** WN19-DC-000300

STIG-LEGACY SV-103571

STIG-LEGACY V-93485

**VULN-ID** V-205647

#### Assets

### live-malware

WN19-DC-000310 - Windows Server 2019 Active Directory user accounts, including administrators, must be configured to require the use of a Common Access Card (CAC), Personal Identity Verification (PIV)-compliant hardware token, or Alternate Logon Token (ALT) for user authentication.

#### Info

Smart cards such as the CAC support a two-factor authentication technique. This provides a higher level of trust in the asserted identity than use of the username and password for authentication.

Satisfies: SRG-OS-000105-GPOS-00052, SRG-OS-000106-GPOS-00053, SRG-OS-000107-GPOS-00054, SRG-OS-000108-GPOS-00055, SRG-OS-000375-GPOS-00160

#### Solution

Configure all user accounts, including administrator accounts, in Active Directory to enable the option 'Smart card is required for interactive logon'.

Run 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc'):

Select the OU where the user accounts are located. (By default this is the Users node; however, accounts may be under other organization-defined OUs.)

Right-click the user account and select 'Properties'.

Select the 'Account' tab.

Check 'Smart card is required for interactive logon' in the 'Account Options' area.

3.5.1

7.1.3.1(e)

8.1.4.1(a)

8.1.4.1(d)

8.1.4.2(a)

#### See Also

References 800-171

CN-L3

CN-L3

CN-L3

CN-L3

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### 800-171 3.5.3 800-171R3 03.05.01a. 800-171R3 03.05.03 800-53 IA-2(3) 800-53 IA-2(4) 800-53 IA-2(11) 800-53R5 IA-2(1) 800-53R5 IA-2(2) 800-53R5 IA-2(6) CAT Ш CCI-000767 CCI CCI CCI-000768 CCI CCI-001948 CN-L3 7.1.3.1(a)

**CN-L3** 8.5.4.1(a)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

ITSG-33 IA-2(3)

ITSG-33 IA-2(4)

ITSG-33 IA-2(100)

NESA T2.3.8

NESA T5.3.1

NESA T5.4.2

NESA T5.5.1

**NESA** T5.5.2

**NESA** T5.5.3

NIAV2 AM2

NIAV2 AM8

NIAV2 AM14b

**PCI-DSSV3.2.1** 8.3

**PCI-DSSV3.2.1** 8.3.1

**PCI-DSSV3.2.1** 8.3.2

**PCI-DSSV4.0** 8.4.1

**PCI-DSSV4.0** 8.4.3

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205701r1051070\_rule

**STIG-ID** WN19-DC-000310

STIG-LEGACY SV-103527

STIG-LEGACY V-93441

SWIFT-CSCV1 1.2

SWIFT-CSCV1 4.2

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205701

### **Assets**

## live-malware

## WN19-DC-000320 - Windows Server 2019 domain controllers must require LDAP access signing.

Info

Unsigned network traffic is susceptible to man-in-the-middle attacks, where an intruder captures packets between the server and the client and modifies them before forwarding them to the client. In the case of an LDAP server, this means that an attacker could cause a client to make decisions based on false records from the LDAP directory. The risk of an attacker pulling this off can be decreased by implementing strong physical security measures to protect the network infrastructure. Furthermore, implementing Internet Protocol security (IPsec) authentication header mode (AH), which performs mutual authentication and packet integrity for Internet Protocol (IP) traffic, can make all types of manin-the-middle attacks extremely difficult.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain controller: LDAP server signing requirements' to 'Require signing'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**GDPR** 

3.13.8
03.13.08
SC-8
SC-8(1)
SC-8
SC-8(1)
II
CCI-002418
CCI-002421
8.1.2.2(a)
8.1.2.2(b)
8.1.4.7(a)
8.1.4.8(a)
8.2.4.5(c)
8.2.4.5(d)
8.5.2.2
PR.DS-2
PR.DS-5
PR.DS-02
Windows_Server_2019_STIG

32.1.a

**GDPR** 32.1.b **HIPAA** 164.306(a)(1) **HIPAA** 164.312(e)(1) **HIPAA** 164.312(e)(2)(i) ISO-27001-2022 A.5.10 ISO-27001-2022 A.5.14 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.10.1.1 ISO/IEC-27001 A.13.2.3 **ITSG-33** SC-8 ITSG-33 SC-8a. **ITSG-33** SC-8(1) **NESA** T4.3.1 **NESA** T4.3.2 **NESA** T4.5.1 **NESA** T4.5.2 **NESA** T7.3.3 **NESA** T7.4.1 NIAV2 IE8 NIAV2 IE9 NIAV2 IE12 NIAV2 NS5d NIAV2 NS6b NIAV2 **NS29** NIAV2 **SS24** 

PCI-DSSV3.2.1

PCI-DSSV3.2.1

PCI-DSSV4.0

PCI-DSSV4.0

QCSC-V1

2.3

4.1

2.2.7

4.2.1

5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205820r958908\_rule

**STIG-ID** WN19-DC-000320

STIG-LEGACY SV-103631

STIG-LEGACY V-93545

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205820

#### **Assets**

### live-malware

# WN19-DC-000330 - Windows Server 2019 domain controllers must be configured to allow reset of machine account passwords.

#### Info

Enabling this setting on all domain controllers in a domain prevents domain members from changing their computer account passwords. If these passwords are weak or compromised, the inability to change them may leave these computers vulnerable.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain controller: Refuse machine account password changes' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205876r991589\_rule

**STIG-ID** WN19-DC-000330

STIG-LEGACY SV-103361

STIG-LEGACY V-93273

SWIFT-CSCV1 2.3

**VULN-ID** V-205876

#### **Assets**

live-malware

WN19-DC-000340 - Windows Server 2019 Access this computer from the network user right must only be assigned to the Administrators, Authenticated Users, and Enterprise Domain Controllers groups on domain controllers.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Access this computer from the network' right may access resources on the system, and this right must be limited to those requiring it.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Access this computer from the network' to include only the following accounts or groups:

- Administrators
- Authenticated Users
- Enterprise Domain Controllers

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

8.1.4.11(b)

### References

CN-L3

800-171	3.1.1
800-171R3	03.01.02
800-53	AC-3
800-53R5	AC-3
CAT	II

CCI	CCI-000213

CN-L3	8.1.4.2(f)

CN-L3	8.1.10.2(c)	

CN-L3	8.5.3.1

**CN-L3** 8.5.4.1(a)

CSF PR.AC-4

CSF PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3

SS29 NIAV2

3.2 QCSC-V1

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205665r958472\_rule

STIG-ID WN19-DC-000340

STIG-LEGACY SV-103083

**STIG-LEGACY** V-92995

**TBA-FIISB** 31.1

**VULN-ID** V-205665

#### Assets

#### live-malware

# WN19-DC-000350 - Windows Server 2019 Add workstations to domain user right must only be assigned to the Administrators group on domain controllers.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Add workstations to domain' right may add computers to a domain. This could result in unapproved or incorrectly configured systems being added to a domain.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Add workstations to domain' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
CSF2.0 DISA_BENCHMARK	PR.AA-05 Windows_Server_2019_STIG
DISA_BENCHMARK	Windows_Server_2019_STIG
DISA_BENCHMARK GDPR	Windows_Server_2019_STIG 32.1.b
DISA_BENCHMARK GDPR HIPAA	Windows_Server_2019_STIG 32.1.b 164.306(a)(1)
DISA_BENCHMARK GDPR HIPAA HIPAA	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)  A.5.15
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)  A.5.15  A.8.2
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)  A.5.15  A.8.2  A.8.18
DISA_BENCHMARK GDPR HIPAA HIPAA ISO-27001-2022 ISO-27001-2022 ISO-27001-2022 ITSG-33	Windows_Server_2019_STIG  32.1.b  164.306(a)(1)  164.312(a)(1)  A.5.15  A.8.2  A.8.18  AC-6

T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205744r958726\_rule

**STIG-ID** WN19-DC-000350

STIG-LEGACY SV-103127

STIG-LEGACY V-93039

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205744

#### Assets

### live-malware

#### WN19-DC-000360 - Windows Server 2019 Allow log on through Remote Desktop Services user right must only be assigned to the Administrators group on domain controllers.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Allow log on through Remote Desktop Services' user right can access a system through Remote Desktop.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Allow log on through Remote Desktop Services' to include only the following accounts or

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171 3.1.1

800-171R3 03.01.02

800-53 AC-3

800-53R5 AC-3

CAT Ш

CCI CCI-000213

CN-L3 8.1.4.2(f)

CN-L3 8.1.4.11(b)

CN-L3 8.1.10.2(c)

CN-L3 8.5.3.1

CN-L3 8.5.4.1(a)

**CSF** PR.AC-4

**CSF** PR.PT-3

**CSF2.0** PR.AA-05

CSF2.0 PR.DS-10

**CSF2.0** PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

164.306(a)(1)

164.312(a)(1)

A.5.15

A.5.33

**GDPR** 32.1.b

**HIPAA** 

ISO-27001-2022

HIPAA

ISO-27001-2022

ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205666r958472\_rule

**STIG-ID** WN19-DC-000360

STIG-LEGACY SV-103085

STIG-LEGACY V-92997

TBA-FIISB 31.1

**VULN-ID** V-205666

#### Assets

### live-malware

# WN19-DC-000370 - Windows Server 2019 Deny access to this computer from the network user right on domain controllers must be configured to prevent unauthenticated access.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities.

The 'Deny access to this computer from the network' user right defines the accounts that are prevented from logging on from the network.

The Guests group must be assigned this right to prevent unauthenticated access.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny access to this computer from the network' to include the following:

- Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.1

**800-171R3** 03.01.02

**800-53** AC-3

**800-53R5** AC-3

CAT

CCI CCI-000213

**CN-L3** 8.1.4.2(f)

**CN-L3** 8.1.4.11(b)

**CN-L3** 8.1.10.2(c)

**CN-L3** 8.5.3.1

**CN-L3** 8.5.4.1(a)

CSF PR.AC-4

CSF PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

164.312(a)(1)

A.5.15

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

. , , ,

HIPAA

ISO-27001-2022

ISO-27001-2022 A.5.33

ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2

......

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205667r958472\_rule

**STIG-ID** WN19-DC-000370

STIG-LEGACY SV-103087

STIG-LEGACY V-92999

TBA-FIISB 31.1

**VULN-ID** V-205667

#### Assets

### live-malware

#### WN19-DC-000380 - Windows Server 2019 Deny log on as a batch job user right on domain controllers must be configured to prevent unauthenticated access.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on as a batch job' user right defines accounts that are prevented from logging on to the system as a batch job, such as Task Scheduler.

The Guests group must be assigned to prevent unauthenticated access.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on as a batch job' to include the following:

- Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

800-171 3.1.1

800-171R3 03.01.02

800-53 AC-3

800-53R5 AC-3

CAT Ш

CCI CCI-000213

CN-L3 8.1.4.2(f)

CN-L3 8.1.4.11(b)

CN-L3 8.1.10.2(c)

CN-L3 8.5.3.1

CN-L3 8.5.4.1(a)

**CSF** PR.AC-4

**CSF** PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

**CSF2.0** PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

164.312(a)(1)

A.5.15

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ISO-27001-2022

HIPAA

ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205668r958472\_rule

**STIG-ID** WN19-DC-000380

STIG-LEGACY SV-103089

STIG-LEGACY V-93001

TBA-FIISB 31.1

**VULN-ID** V-205668

#### Assets

### live-malware

# WN19-DC-000390 - Windows Server 2019 Deny log on as a service user right must be configured to include no accounts or groups (blank) on domain controllers.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on as a service' user right defines accounts that are denied logon as a service. Incorrect configurations could prevent services from starting and result in a denial of service.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on as a service' to include no entries (blank).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

CSF2.0

800-171 3.1.1 800-171R3 03.01.02 800-53 AC-3 800-53R5 AC-3 **CAT** Ш CCI CCI-000213 CN-L3 8.1.4.2(f) CN-L3 8.1.4.11(b) CN-L3 8.1.10.2(c) CN-L3 8.5.3.1 CN-L3 8.5.4.1(a) **CSF** PR.AC-4 **CSF** PR.PT-3 **CSF2.0** PR.AA-05 CSF2.0 PR.DS-10

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

PR.IR-01

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.3

ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205669r958472\_rule

**STIG-ID** WN19-DC-000390

STIG-LEGACY SV-103091

STIG-LEGACY V-93003

TBA-FIISB 31.1

**VULN-ID** V-205669

#### Assets

### live-malware

#### WN19-DC-000391 - Windows Server 2019 must be configured for certificate-based authentication for domain controllers.

#### Info

Active Directory domain services elevation of privilege vulnerability could allow a user rights to the system, such as administrative and other high-level capabilities.

#### **Solution**

Configure the registry value.

Registry Hive: HKEY\_LOCAL\_MACHINE Registry Path: SYSTEM\CurrentControlSet\Services\Kdc

Value Name: StrongCertificateBindingEnforcement

Value Type: REG\_DWORD Value: 0x00000001 (1) or 0x00000002 (2)

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**CSF2.0** 

**GDPR** 

**HIPAA** 

**DISA\_BENCHMARK** 

800-171	3.1.1
800-171	3

800-171R3 03.01.02

800-53 AC-3

800-53R5 AC-3

CAT Ш

CCI CCI-000213

CN-L3 8.1.4.2(f)

CN-L3 8.1.4.11(b)

CN-L3 8.1.10.2(c)

CN-L3 8.5.3.1

CN-L3 8.5.4.1(a)

**CSF** PR.AC-4

**CSF** PR.PT-3

CSF2.0 PR.AA-05

CSF2.0

Windows\_Server\_2019\_STIG

PR.DS-10

PR.IR-01

32.1.b

164.306(a)(1)

**HIPAA** 164.312(a)(1)

ISO-27001-2022 A.5.15

ISO-27001-2022 A.5.33

ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-271428r1059563\_rule

**STIG-ID** WN19-DC-000391

TBA-FIISB 31.1

**VULN-ID** V-271428

#### Assets

#### live-malware

### WN19-DC-000400 - Windows Server 2019 Deny log on locally user right on domain controllers must be configured to prevent unauthenticated access.

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on locally' user right defines accounts that are prevented from logging on interactively. The Guests group must be assigned this right to prevent unauthenticated access.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on locally' to include the following: - Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171 3.1.1

800-171R3 03.01.02

800-53 AC-3

800-53R5 AC-3

**CAT** Ш

CCI CCI-000213

CN-L3 8.1.4.2(f)

CN-L3 8.1.4.11(b)

CN-L3 8.1.10.2(c)

CN-L3 8.5.3.1

CN-L3 8.5.4.1(a)

**CSF** PR.AC-4

**CSF** PR.PT-3

CSF2.0 PR.AA-05

**CSF2.0** PR.DS-10

**CSF2.0** PR.IR-01

Windows\_Server\_2019\_STIG **DISA\_BENCHMARK** 

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(1)

ISO-27001-2022 A.5.15

ISO-27001-2022 A.5.33

ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4

**NESA** T5.6.1

**NESA** T7.5.2

**NESA** T7.5.3

NIAV2 AM3

NIAV2 SS29

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205670r958472\_rule

**STIG-ID** WN19-DC-000400

STIG-LEGACY SV-103093

STIG-LEGACY V-93005

TBA-FIISB 31.1

**VULN-ID** V-205670

#### Assets

### live-malware

# WN19-DC-000401 - Windows Server 2019 must be configured for named-based strong mappings for certificates.

#### Info

Weak mappings give rise to security vulnerabilities and demand hardening measures. Certificate names must be correctly mapped to the intended user account in Active Directory. A lack of strong name-based mappings allows certain weak certificate mappings, such as Issuer/Subject AltSecID and User Principal Names (UPN) mappings, to be treated as strong mappings.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Template >> System >> KDC >> Allow name-based strong mappings for certificates to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip References

3.1.1

CCI-000213

## 800-171

CCI

**800-171R3** 03.01.02

**800-53** AC-3

**800-53R5** AC-3

CAT

**CN-L3** 8.1.4.2(f)

**CN-L3** 8.1.4.11(b)

**CN-L3** 8.1.10.2(c)

CN-L3 8.5.3.1

**CN-L3** 8.5.4.1(a)

CSF PR.AC-4

CSF PR.PT-3

CSF2.0 PR.AA-05

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.3

ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3 NIAV2 **SS29** 

**QCSC-V1** 3.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-271429r1059566\_rule

**STIG-ID** WN19-DC-000401

TBA-FIISB 31.1

**VULN-ID** V-271429

#### Assets

#### live-malware

## WN19-DC-000410 - Windows Server 2019 Deny log on through Remote Desktop Services user right on domain controllers must be configured to prevent unauthenticated access.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Deny log on through Remote Desktop Services' user right defines the accounts that are prevented from logging on using Remote Desktop Services.

The Guests group must be assigned this right to prevent unauthenticated access.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on through Remote Desktop Services' to include the following:

- Guests Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.12 **800-171R3** 03.01.12 **800-53** AC-17(1)

**800-53R5** AC-17(1)

CAT

CCI CCI-002314

**CN-L3** 8.1.4.4(c)

**CN-L3** 8.1.10.6(i)

CSF PR.AC-3

CSF PR.PT-4

CSF2.0 PR.AA-05

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.8.16

ISO/IEC-27001 A.6.2.2

**ITSG-33** AC-17(1)

NESA T5.4.4

QCSC-V1 3.2

QCSC-V1 5.2.1

QCSC-V1 5.2.2

**RULE-ID** SV-205732r958672\_rule

**STIG-ID** WN19-DC-000410

STIG-LEGACY SV-103051

STIG-LEGACY V-92963

SWIFT-CSCV1 2.6

**VULN-ID** V-205732

#### **Assets**

## live-malware

## WN19-DC-000420 - Windows Server 2019 Enable computer and user accounts to be trusted for delegation user right must only be assigned to the Administrators group on domain controllers.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Enable computer and user accounts to be trusted for delegation' user right allows the 'Trusted for Delegation' setting to be changed. This could allow unauthorized users to impersonate other users.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Enable computer and user accounts to be trusted for delegation' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-1713.1.7800-171R303.01.07a.800-53AC-6(10)800-53R5AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

ISO-27001-2022 A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205745r958726\_rule

**STIG-ID** WN19-DC-000420

STIG-LEGACY SV-103129

STIG-LEGACY V-93041

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205745

### Assets

### live-malware

## WN19-DC-000430 - The password for the krbtgt account on a domain must be reset at least every 180 days.

#### Info

The krbtgt account acts as a service account for the Kerberos Key Distribution Center (KDC) service. The account and password are created when a domain is created and the password is typically not changed. If the krbtgt account is compromised, attackers can create valid Kerberos Ticket Granting Tickets (TGT).

The password must be changed twice to effectively remove the password history. Changing once, waiting for replication to complete and the amount of time equal to or greater than the maximum Kerberos ticket lifetime, and changing again reduces the risk of issues.

#### **Solution**

Reset the password for the krbtgt account a least every 180 days. The password must be changed twice to effectively remove the password history. Changing once, waiting for replication to complete and changing again reduces the risk of issues. Changing twice in rapid succession forces clients to reauthenticate (including application services) but is desired if a compromise is suspected.

PowerShell scripts are available to accomplish this such as at the following link:

https://docs.microsoft.com/en-us/answers/questions/97108/resetting-the-krbtgt-account-password-in-a-domain.html All scripts should be tested.

Open 'Active Directory Users and Computers' (available from various menus or run 'dsa.msc').

Select 'Advanced Features' in the 'View' menu if not previously selected.

Select the 'Users' node.

Right-click on the krbtgt account and select 'Reset password'.

Enter a password that meets password complexity requirements.

Clear the 'User must change password at next logon' check box.

The system will automatically change this to a system-generated complex password.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U MS Windows Server 2019 V3R4 STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ISO-27001-2022 A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205877r991589\_rule

**STIG-ID** WN19-DC-000430

STIG-LEGACY SV-103299

STIG-LEGACY V-93211

SWIFT-CSCV1 2.3

**VULN-ID** V-205877

#### **Assets**

## live-malware

WN19-MS-000020 - Windows Server 2019 local administrator accounts must have their privileged token filtered to prevent elevated privileges from being used over the network on domain-joined member servers.

#### Info

A compromised local administrator account can provide means for an attacker to move laterally between domain systems.

With User Account Control enabled, filtering the privileged token for local administrator accounts will prevent the elevated privileges of these accounts from being used over the network.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> MS Security Guide >> 'Apply UAC restrictions to local accounts on network logons' to 'Enabled'.

This policy setting requires the installation of the SecGuide custom templates included with the STIG package.

'SecGuide.admx' and 'SecGuide.adml' must be copied to the \Windows\PolicyDefinitions and \Windows

\PolicyDefinitions\en-US directories respectively.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-3

**ITSG-33** SC-3a.

NESA T3.4.1

NESA T4.3.1

**NESA** T4.3.2

**RULE-ID** SV-205715r958518\_rule

**STIG-ID** WN19-MS-000020

STIG-LEGACY SV-103605

STIG-LEGACY V-93519

**VULN-ID** V-205715

#### **Assets**

#### live-malware

## WN19-MS-000030 - Windows Server 2019 local users on domain-joined member servers must not be enumerated.

#### Info

The username is one part of logon credentials that could be used to gain access to a system. Preventing the enumeration of users limits this information to authorized personnel.

#### **Solution**

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Logon >> 'Enumerate local users on domain-joined computers' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205696r958478\_rule

**STIG-ID** WN19-MS-000030

STIG-LEGACY SV-103505

STIG-LEGACY V-93419

SWIFT-CSCV1 2.3

**VULN-ID** V-205696

#### Assets

## live-malware

## WN19-MS-000050 - Windows Server 2019 must limit the caching of logon credentials to four or less on domain-joined member servers.

#### Info

The default Windows configuration caches the last logon credentials for users who log on interactively to a system. This feature is provided for system availability reasons, such as the user's machine being disconnected from the network or domain controllers being unavailable. Even though the credential cache is well protected, if a system is attacked, an unauthorized individual may isolate the password to a domain user account using a password-cracking program and gain access to the domain.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Interactive Logon: Number of previous logons to cache (in case Domain Controller is not available)' to '4' logons or less.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205906r991589\_rule

**STIG-ID** WN19-MS-000050

STIG-LEGACY SV-103363

STIG-LEGACY V-93275

SWIFT-CSCV1 2.3

**VULN-ID** V-205906

#### Assets

## live-malware

WN19-MS-000100 - Windows Server 2019 'Deny log on as a service' user right on domain-joined member servers must be configured to prevent access from highly privileged domain accounts. No other groups or accounts must be assigned this right.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities.

The 'Deny log on as a service' user right defines accounts that are denied logon as a service.

In an Active Directory Domain, denying logons to the Enterprise Admins and Domain Admins groups on lower-trust systems helps mitigate the risk of privilege escalation from credential theft attacks, which could lead to the compromise of an entire domain.

Incorrect configurations could prevent services from starting and result in a denial of service.

#### Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Deny log on as a service' to include the following:

Domain systems:

- Enterprise Admins Group
- Domain Admins Group

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

References			
	800-171	3.1.1	
	800-171R3	03.01.02	
	800-53	AC-3	
	800-53R5	AC-3	
	CAT	II	
	CCI	CCI-000213	
	CN-L3	8.1.4.2(f)	
	CN-L3	8.1.4.11(b)	
	CN-L3	8.1.10.2(c)	
	CN-L3	8.5.3.1	
	CN-L3	8.5.4.1(a)	
	CSF	PR.AC-4	
	CSF	PR.PT-3	
	CSF2.0	PR.AA-05	
	CSF2.0	PR.DS-10	
	CSF2.0	PR.IR-01	
	DISA_BENCHMARK	Windows_Server_2019_STIG	
	GDPR	32.1.b	
	HIPAA	164.306(a)(1)	
	HIPAA	164.312(a)(1)	

ISO-27001-2022 A.5.15 ISO-27001-2022 A.5.33 ISO-27001-2022 A.8.3 ISO-27001-2022 A.8.18 ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3 SS29 NIAV2 QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 13.2 **RULE-ID** SV-205674r958472\_rule

WN19-MS-000100

SV-103101

V-93013

V-205674

31.1

## Assets live-malware

**VULN-ID** 

STIG-ID

**STIG-LEGACY** 

STIG-LEGACY

**TBA-FIISB** 

WN19-MS-000130 - Windows Server 2019 'Enable computer and user accounts to be trusted for delegation' user right must not be assigned to any groups or accounts on domain-joined member servers and standalone or nondomain-joined systems.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Enable computer and user accounts to be trusted for delegation' user right allows the 'Trusted for Delegation' setting to be changed. This could allow unauthorized users to impersonate other users.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Enable computer and user accounts to be trusted for delegation' to be defined but containing no entries (blank).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

CN-L3

CN-L3

CN-L3

**CSF2.0** 

 800-171
 3.1.7

 800-171R3
 03.01.07a.

 800-53
 AC-6(10)

 800-53R5
 AC-6(10)

 CAT
 II

CCI CCI-002235

**CN-L3** 7.1.3.2(g)

(6)

CSF PR.AC-4

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

7.1.3.2(b)

8.1.4.2(d)

8.1.10.6(a)

PR.AA-05

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205748r958726\_rule

**STIG-ID** WN19-MS-000130

STIG-LEGACY SV-103135

STIG-LEGACY V-93047

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205748

### Assets

### live-malware

NULL

## WN19-MS-000140 - Windows Server 2019 must be running Credential Guard on domain-joined member servers.

#### Info

Credential Guard uses virtualization-based security to protect data that could be used in credential theft attacks if compromised. This authentication information, which was stored in the Local Security Authority (LSA) in previous versions of Windows, is isolated from the rest of operating system and can only be accessed by privileged system software.

#### Solution

Configure the policy value for Computer Configuration >> Administrative Templates >> System >> Device Guard >> 'Turn On Virtualization Based Security' to 'Enabled' with 'Enabled with UEFI lock' selected for 'Credential Guard Configuration'.

A Microsoft article on Credential Guard system requirement can be found at the following link:

https://docs.microsoft.com/en-us/windows/security/identity-protection/credential-guard/credential-guard-requirements Severity Override Guidance: The AO can allow the severity override if they have reviewed the overall protection provided to the affected servers that are not capable of complying with the Credential Guard requirement. Items that should be reviewed/considered for compliance or mitigation for non-Credential Guard compliance are:

The use of Microsoft Local Administrator Password Solution (LAPS) or similar products to control different local administrative passwords for all affected servers. This is to include a strict password change requirement (60 days or less).

....

Strict separation of roles and duties. Server administrator credentials cannot be used on Windows 10 desktop to administer it. Documentation of all exceptions should be supplied.

...

Use of a Privileged Access Workstation (PAW) and adherence to the Clean Source principle for administering affected servers.

. . . .

Boundary Protection that is currently in place to protect from vulnerabilities in the network/servers.

....

Windows Defender rule block credential stealing from LSASS.exe is applied. This rule can only be applied if Windows Defender is in use.

• • • •

The overall number of vulnerabilities that are unmitigated on the network/servers.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U MS Windows Server 2019 V3R4 STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205907r991589\_rule

**STIG-ID** WN19-MS-000140

STIG-LEGACY SV-103365

STIG-LEGACY V-93277

SWIFT-CSCV1 2.3

**VULN-ID** V-205907

#### **Assets**

#### live-malware

#### WN19-SO-000010 - Windows Server 2019 must have the built-in guest account disabled.

#### Info

A system faces an increased vulnerability threat if the built-in guest account is not disabled. This is a known account that exists on all Windows systems and cannot be deleted. This account is initialized during the installation of the operating system with no password assigned.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Accounts: Guest account status' to 'Disabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** IA-8

**800-53R5** IA-8

CAT

CCI CCI-000804

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

ISO-27001-2022 A.5.16

ITSG-33 IA-8

ITSG-33 IA-8a.

**NESA** T4.3.1

**NESA** T5.4.2

NESA T5.5.1

NESA T5.5.2

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205709r958504\_rule

**STIG-ID** WN19-SO-000010

STIG-LEGACY SV-103583

STIG-LEGACY V-93497

SWIFT-CSCV1 2.8

**VULN-ID** V-205709

### Assets

### live-malware

'disabled'

## WN19-SO-000020 - Windows Server 2019 must prevent local accounts with blank passwords from being used from the network.

#### Info

An account without a password can allow unauthorized access to a system as only the username would be required. Password policies should prevent accounts with blank passwords from existing on a system. However, if a local account with a blank password does exist, enabling this setting will prevent network access, limiting the account to local console logon only.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Accounts: Limit local account use of blank passwords to console logon only' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205908r991589\_rule

**STIG-ID** WN19-SO-000020

STIG-LEGACY SV-103367

STIG-LEGACY V-93279

SWIFT-CSCV1 2.3

**VULN-ID** V-205908

#### **Assets**

live-malware

#### WN19-SO-000030 - Windows Server 2019 built-in administrator account must be renamed.

#### Info

The built-in administrator account is a well-known account subject to attack. Renaming this account to an unidentified name improves the protection of this account and the system.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Accounts: Rename administrator account' to a name other than 'Administrator'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205909r991589\_rule

**STIG-ID** WN19-SO-000030

STIG-LEGACY SV-103369

STIG-LEGACY V-93281

SWIFT-CSCV1 2.3

**VULN-ID** V-205909

#### Assets

#### live-malware

<sup>&#</sup>x27;admintest'

## WN19-SO-000060 - Windows Server 2019 setting Domain member: Digitally encrypt or sign secure channel data (always) must be configured to Enabled.

#### Info

Requests sent on the secure channel are authenticated, and sensitive information (such as passwords) is encrypted, but not all information is encrypted. If this policy is enabled, outgoing secure channel traffic will be encrypted and signed.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Digitally encrypt or sign secure channel data (always)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b
HIPAA	164.306(a)(1)

**HIPAA** 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

NESA T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205821r958908\_rule

**STIG-ID** WN19-SO-000060

STIG-LEGACY SV-103633

STIG-LEGACY V-93547

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205821

### Assets

## live-malware

1

## WN19-SO-000070 - Windows Server 2019 setting Domain member: Digitally encrypt secure channel data (when possible) must be configured to enabled.

#### Info

Requests sent on the secure channel are authenticated, and sensitive information (such as passwords) is encrypted, but not all information is encrypted. If this policy is enabled, outgoing secure channel traffic will be encrypted. Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Digitally encrypt secure channel data (when possible)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

**HIPAA** 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

NESA T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

NESA T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205822r958908\_rule

**STIG-ID** WN19-SO-000070

STIG-LEGACY SV-103635

STIG-LEGACY V-93549

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205822

### Assets

## live-malware

1

## WN19-SO-000080 - Windows Server 2019 setting Domain member: Digitally sign secure channel data (when possible) must be configured to Enabled.

#### Info

Requests sent on the secure channel are authenticated, and sensitive information (such as passwords) is encrypted, but the channel is not integrity checked. If this policy is enabled, outgoing secure channel traffic will be signed. Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Digitally sign secure channel data (when possible)' to 'Enabled'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

HIPAA 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

NESA T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205823r958908\_rule

**STIG-ID** WN19-SO-000080

STIG-LEGACY SV-103637

STIG-LEGACY V-93551

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205823

### Assets

## live-malware

1

# WN19-SO-000090 - Windows Server 2019 computer account password must not be prevented from being reset.

## Info

Computer account passwords are changed automatically on a regular basis. Disabling automatic password changes can make the system more vulnerable to malicious access. Frequent password changes can be a significant safeguard for the system. A new password for the computer account will be generated every 30 days.

## Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Disable machine account password changes' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171R3** 03.05.02

**800-53** IA-3(1)

**800-53R5** IA-3(1)

CAT

**CCI** CCI-001967

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

ITSG-33 IA-3(1)

**NESA** T5.4.3

QCSC-V1 13.2

**RULE-ID** SV-205815r971545\_rule

**STIG-ID** WN19-SO-000090

STIG-LEGACY SV-103541

STIG-LEGACY V-93455

TBA-FIISB 27.1

**VULN-ID** V-205815

## **Assets**

live-malware

# WN19-SO-000100 - Windows Server 2019 maximum age for machine account passwords must be configured to 30 days or less.

## Info

Computer account passwords are changed automatically on a regular basis. This setting controls the maximum password age that a machine account may have. This must be set to no more than 30 days, ensuring the machine changes its password monthly.

## Solution

This is the default configuration for this setting (30 days).

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Maximum machine account password age' to '30' or less (excluding '0', which is unacceptable).

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205911r991589\_rule

**STIG-ID** WN19-SO-000100

STIG-LEGACY SV-103373

STIG-LEGACY V-93285

SWIFT-CSCV1 2.3

**VULN-ID** V-205911

## **Assets**

# live-malware

# WN19-SO-000110 - Windows Server 2019 must be configured to require a strong session key.

## Info

A computer connecting to a domain controller will establish a secure channel. The secure channel connection may be subject to compromise, such as hijacking or eavesdropping, if strong session keys are not used to establish the connection. Requiring strong session keys enforces 128-bit encryption between systems. Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Domain member: Require strong (Windows 2000 or Later) session key' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

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HIPAA

800-171 3.13.8 800-171R3 03.13.08 800-53 SC-8 800-53 SC-8(1) 800-53R5 SC-8 800-53R5 SC-8(1) CAT Ш CCI CCI-002418 CCI CCI-002421 CN-L3 8.1.2.2(a) CN-L3 8.1.2.2(b) CN-L3 8.1.4.7(a) CN-L3 8.1.4.8(a) CN-L3 8.2.4.5(c) CN-L3 8.2.4.5(d) CN-L3 8.5.2.2 PR.DS-2 **CSF CSF** PR.DS-5 **CSF2.0** PR.DS-02 **DISA BENCHMARK** Windows Server 2019 STIG **GDPR** 32.1.a **GDPR** 32.1.b

164.306(a)(1)

**HIPAA** 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

NESA T4.3.1

**NESA** T4.3.2

NESA T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205824r958908\_rule

**STIG-ID** WN19-SO-000110

STIG-LEGACY SV-103639

STIG-LEGACY V-93553

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205824

# Assets

# live-malware

# WN19-SO-000170 - Windows Server 2019 setting Microsoft network client: Digitally sign communications (if server agrees) must be configured to Enabled.

## Info

The server message block (SMB) protocol provides the basis for many network operations. If this policy is enabled, the SMB client will request packet signing when communicating with an SMB server that is enabled or required to perform SMB packet signing.

Satisfies: SRG-OS-000423-GPOS-00187, SRG-OS-000424-GPOS-00188

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Microsoft network client: Digitally sign communications (if server agrees)' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**HIPAA** 

800-171	3.13.8
800-171R3	03.13.08
800-53	SC-8
800-53	SC-8(1)
800-53R5	SC-8
800-53R5	SC-8(1)
CAT	II
CCI	CCI-002418
CCI	CCI-002421
CN-L3	8.1.2.2(a)
CN-L3	8.1.2.2(b)
CN-L3	8.1.4.7(a)
CN-L3	8.1.4.8(a)
CN-L3	8.2.4.5(c)
CN-L3	8.2.4.5(d)
CN-L3	8.5.2.2
CSF	PR.DS-2
CSF	PR.DS-5
CSF2.0	PR.DS-02
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.a
GDPR	32.1.b

164.306(a)(1)

HIPAA 164.312(e)(1)

HIPAA 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ISO/IEC-27001 A.10.1.1

ISO/IEC-27001 A.13.2.3

ITSG-33 SC-8

ITSG-33 SC-8a.

ITSG-33 SC-8(1)

NESA T4.3.1

**NESA** T4.3.2

**NESA** T4.5.1

**NESA** T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2 IE8

NIAV2 IE9

NIAV2 IE12

NIAV2 NS5d

NIAV2 NS6b

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

**PCI-DSSV3.2.1** 4.1

**PCI-DSSV4.0** 2.2.7

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205826r958908\_rule

**STIG-ID** WN19-SO-000170

**STIG-LEGACY** SV-103643

STIG-LEGACY V-93557

SWIFT-CSCV1 2.1

TBA-FIISB 29.1

**VULN-ID** V-205826

# Assets

# live-malware

# WN19-SO-000180 - Windows Server 2019 unencrypted passwords must not be sent to third-party Server Message Block (SMB) servers.

## Info

Some non-Microsoft SMB servers only support unencrypted (plain-text) password authentication. Sending plain-text passwords across the network when authenticating to an SMB server reduces the overall security of the environment. Check with the vendor of the SMB server to determine if there is a way to support encrypted password authentication.

## Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Microsoft Network Client: Send unencrypted password to third-party SMB servers' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.5.10

**800-171R3** 03.05.07c.

**800-53** IA-5(1)(c)

**800-53R5** IA-5(1)(c)

CAT

CCI CCI-000197

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(1)(c)

NESA T5.2.3

NIAV2 CY6

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205655r987796\_rule

**STIG-ID** WN19-SO-000180

STIG-LEGACY SV-103555

STIG-LEGACY V-93469

SWIFT-CSCV1 4.1

TBA-FIISB 26.1

**VULN-ID** V-205655

# Assets

# live-malware

## WN19-SO-000210 - Windows Server 2019 must not allow anonymous SID/Name translation.

## Info

Allowing anonymous SID/Name translation can provide sensitive information for accessing a system. Only authorized users must be able to perform such translations.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Allow anonymous SID/Name translation' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205913r991589\_rule

**STIG-ID** WN19-SO-000210

STIG-LEGACY SV-103377

STIG-LEGACY V-93289

SWIFT-CSCV1 2.3

**VULN-ID** V-205913

## Assets

## live-malware

'disabled'

# WN19-SO-000220 - Windows Server 2019 must not allow anonymous enumeration of Security Account Manager (SAM) accounts.

## Info

Anonymous enumeration of SAM accounts allows anonymous logon users (null session connections) to list all accounts names, thus providing a list of potential points to attack the system.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Do not allow anonymous enumeration of SAM accounts' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205914r991589\_rule

**STIG-ID** WN19-SO-000220

STIG-LEGACY SV-103379

STIG-LEGACY V-93291

SWIFT-CSCV1 2.3

**VULN-ID** V-205914

## **Assets**

## live-malware

# WN19-SO-000240 - Windows Server 2019 must be configured to prevent anonymous users from having the same permissions as the Everyone group.

## Info

Access by anonymous users must be restricted. If this setting is enabled, anonymous users have the same rights and permissions as the built-in Everyone group. Anonymous users must not have these permissions or rights.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Let Everyone permissions apply to anonymous users' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205915r991589\_rule

**STIG-ID** WN19-SO-000240

STIG-LEGACY SV-103381

STIG-LEGACY V-93293

SWIFT-CSCV1 2.3

**VULN-ID** V-205915

## **Assets**

## live-malware

# WN19-SO-000250 - Windows Server 2019 must restrict anonymous access to Named Pipes and Shares.

## Info

Allowing anonymous access to named pipes or shares provides the potential for unauthorized system access. This setting restricts access to those defined in 'Network access: Named Pipes that can be accessed anonymously' and 'Network access: Shares that can be accessed anonymously', both of which must be blank under other requirements.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network access: Restrict anonymous access to Named Pipes and Shares' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.13.4

**800-171R3** 03.13.04

**800-53** SC-4

**800-53R5** SC-4

CAT

CCI CCI-001090

CSF2.0 PR.DS-01

CSF2.0 PR.DS-02

CSF2.0 PR.DS-10

CSF2.0 PR.IR-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ITSG-33 SC-4

ITSG-33 SC-4a.

**RULE-ID** SV-205725r958524\_rule

**STIG-ID** WN19-SO-000250

STIG-LEGACY SV-103625

STIG-LEGACY V-93539

**VULN-ID** V-205725

## Assets

## live-malware

# WN19-SO-000300 - Windows Server 2019 must be configured to prevent the storage of the LAN Manager hash of passwords.

## Info

The LAN Manager hash uses a weak encryption algorithm and there are several tools available that use this hash to retrieve account passwords. This setting controls whether a LAN Manager hash of the password is stored in the SAM the next time the password is changed.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: Do not store LAN Manager hash value on next password change' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.5.10

**800-171R3** 03.05.07c.

**800-53** IA-5(1)(c)

**800-53R5** IA-5(1)(d)

CAT

CCI CCI-000196

CCI CCI-004062

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

ITSG-33 IA-5(1)(c)

NESA T5.2.3

NIAV2 CY6

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205654r1051063\_rule

**STIG-ID** WN19-SO-000300

**STIG-LEGACY** SV-103553

STIG-LEGACY V-93467

SWIFT-CSCV1 4.1

TBA-FIISB 26.1

**VULN-ID** V-205654

# Assets

# live-malware

# WN19-SO-000320 - Windows Server 2019 must be configured to at least negotiate signing for LDAP client signing.

## Info

This setting controls the signing requirements for LDAP clients. This must be set to 'Negotiate signing' or 'Require signing', depending on the environment and type of LDAP server in use.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'Network security: LDAP client signing requirements' to 'Negotiate signing' at a minimum.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205920r991589\_rule

**STIG-ID** WN19-SO-000320

STIG-LEGACY SV-103391

STIG-LEGACY V-93303

SWIFT-CSCV1 2.3

**VULN-ID** V-205920

## **Assets**

## live-malware

# WN19-SO-000370 - Windows Server 2019 default permissions of global system objects must be strengthened.

## Info

Windows systems maintain a global list of shared system resources such as DOS device names, mutexes, and semaphores. Each type of object is created with a default Discretionary Access Control List (DACL) that specifies who can access the objects with what permissions. When this policy is enabled, the default DACL is stronger, allowing non-administrative users to read shared objects but not to modify shared objects they did not create.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'System objects: Strengthen default permissions of internal system objects (e.g., Symbolic Links)' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ITSG-33** CM-6b.

NESA T3.2.1

**RULE-ID** SV-205923r991589\_rule

**STIG-ID** WN19-SO-000370

STIG-LEGACY SV-103397

STIG-LEGACY V-93309

SWIFT-CSCV1 2.3

**VULN-ID** V-205923

## **Assets**

# live-malware

# WN19-SO-000390 - Windows Server 2019 UIAccess applications must not be allowed to prompt for elevation without using the secure desktop.

#### Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting prevents User Interface Accessibility programs from disabling the secure desktop for elevation prompts.

## Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Allow UIAccess applications to prompt for elevation without using the secure desktop' to 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-53** SC-3

**800-53R5** SC-3

CAT

**CCI** CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ITSG-33 SC-3

ITSG-33 SC-3a.

NESA T3.4.1

NESA T4.3.1

**NESA** T4.3.2

**RULE-ID** SV-205716r958518\_rule

**STIG-ID** WN19-SO-000390

STIG-LEGACY SV-103607

STIG-LEGACY V-93521

**VULN-ID** V-205716

## **Assets**

## live-malware

# WN19-SO-000420 - Windows Server 2019 User Account Control must be configured to detect application installations and prompt for elevation.

## Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting requires Windows to respond to application installation requests by prompting for credentials.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Detect application installations and prompt for elevation' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ITSG-33** SC-3

ITSG-33 SC-3a.

NESA T3.4.1

NESA T4.3.1

**NESA** T4.3.2

**RULE-ID** SV-205718r958518\_rule

**STIG-ID** WN19-SO-000420

STIG-LEGACY SV-103611

STIG-LEGACY V-93525

**VULN-ID** V-205718

## **Assets**

## live-malware

# WN19-SO-000430 - Windows Server 2019 User Account Control (UAC) must only elevate UIAccess applications that are installed in secure locations.

## Info

UAC is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting configures Windows to only allow applications installed in a secure location on the file system, such as the Program Files or the Windows\System32 folders, to run with elevated privileges.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Only elevate UIAccess applications that are installed in secure locations' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

ITSG-33 SC-3

ITSG-33 SC-3a.

NESA T3.4.1

**NESA** T4.3.1

NESA T4.3.2

**RULE-ID** SV-205719r958518\_rule

**STIG-ID** WN19-SO-000430

STIG-LEGACY SV-103613

STIG-LEGACY V-93527

**VULN-ID** V-205719

## **Assets**

## live-malware

# WN19-SO-000440 - Windows Server 2019 User Account Control must run all administrators in Admin Approval Mode, enabling UAC.

## Info

User Account Control (UAC) is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting enables UAC.

Satisfies: SRG-OS-000373-GPOS-00157, SRG-OS-000373-GPOS-00156

## Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Run all administrators in Admin Approval Mode' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171R3** 03.05.01b.

**800-53** IA-11

**800-53R5** IA-11

CAT

**CCI** CCI-002038

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(d)

QCSC-V1 13.2

**RULE-ID** SV-205813r1051085\_rule

**STIG-ID** WN19-SO-000440

STIG-LEGACY SV-103521

STIG-LEGACY V-93435

**VULN-ID** V-205813

## **Assets**

## live-malware

# WN19-SO-000450 - Windows Server 2019 User Account Control (UAC) must virtualize file and registry write failures to per-user locations.

## Info

UAC is a security mechanism for limiting the elevation of privileges, including administrative accounts, unless authorized. This setting configures non-UAC-compliant applications to run in virtualized file and registry entries in peruser locations, allowing them to run.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> Security Options >> 'User Account Control: Virtualize file and registry write failures to per-user locations' to 'Enabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-53** SC-3

**800-53R5** SC-3

CAT

CCI CCI-001084

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ITSG-33** SC-3

**ITSG-33** SC-3a.

NESA T3.4.1

NESA T4.3.1

**NESA** T4.3.2

**RULE-ID** SV-205720r958518\_rule

**STIG-ID** WN19-SO-000450

STIG-LEGACY SV-103615

STIG-LEGACY V-93529

**VULN-ID** V-205720

## **Assets**

## live-malware

# WN19-UC-000010 - Windows Server 2019 must preserve zone information when saving attachments.

## Info

Attachments from outside sources may contain malicious code. Preserving zone of origin (Internet, intranet, local, restricted) information on file attachments allows Windows to determine risk.

## **Solution**

The default behavior is for Windows to mark file attachments with their zone information.

If this needs to be corrected, configure the policy value for User Configuration >> Administrative Templates >> Windows Components >> Attachment Manager >> 'Do not preserve zone information in file attachments' to 'Not Configured' or 'Disabled'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205924r991589\_rule

**STIG-ID** WN19-UC-000010

STIG-LEGACY SV-103399

STIG-LEGACY V-93311

SWIFT-CSCV1 2.3

**VULN-ID** V-205924

## **Assets**

## live-malware

Compliant items:

HKU\S-1-5-21-2590776 olicies\Attachments	41-1303433758-34928 -	12007-500\SOLCWAL	e/Microsoft/windo	ws (currentversion

# WN19-UR-000010 - Windows Server 2019 Access Credential Manager as a trusted caller user right must not be assigned to any groups or accounts.

## Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Access Credential Manager as a trusted caller' user right may be able to retrieve the credentials of other accounts from Credential Manager.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Access Credential Manager as a trusted caller' to be defined but containing no entries (blank).

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**NESA** 

K	reterences	
	800-171	3.1.7
	800-171R3	03.01.07a.
	800-53	AC-6(10)
	800-53R5	AC-6(10)
	CAT	II
	CCI	CCI-002235
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	8.1.4.2(d)
	CN-L3	8.1.10.6(a)
	CSF	PR.AC-4
	CSF2.0	PR.AA-05
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(1)
	ISO-27001-2022	A.5.15
	ISO-27001-2022	A.8.2
	ISO-27001-2022	A.8.18
	ITSG-33	AC-6
	NESA	T5.1.1
	NESA	T5.2.2

T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205749r958726\_rule

**STIG-ID** WN19-UR-000010

STIG-LEGACY SV-103137

STIG-LEGACY V-93049

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205749

## Assets

# live-malware

NULL

# WN19-UR-000020 - Windows Server 2019 Act as part of the operating system user right must not be assigned to any groups or accounts.

## Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Act as part of the operating system' user right can assume the identity of any user and gain access to resources that the user is authorized to access. Any accounts with this right can take complete control of a system.

## Solution

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Act as part of the operating system' to be defined but containing no entries (blank).

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

 800-171
 3.1.7

 800-171R3
 03.01.07a.

 800-53
 AC-6(10)

 800-53R5
 AC-6(10)

 CAT
 I

 CCI
 CCI-002235

 CN-L3
 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

**NESA** T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205750r958726\_rule

**STIG-ID** WN19-UR-000020

STIG-LEGACY SV-103139

STIG-LEGACY V-93051

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205750

## Assets

# live-malware

NULL

# WN19-UR-000050 - Windows Server 2019 Create a pagefile user right must only be assigned to the Administrators group.

## Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Create a pagefile' user right can change the size of a pagefile, which could affect system performance.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Create a pagefile' to include only the following accounts or groups:

- Administrators

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

ITSG-33

**NESA** 

**NESA** 

**NESA** 

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18

AC-6

T5.1.1

T5.2.2

T5.4.1

**NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

**QCSC-V1** 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205752r958726\_rule

**STIG-ID** WN19-UR-000050

STIG-LEGACY SV-103143

STIG-LEGACY V-93055

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205752

## Assets

## live-malware

<sup>&#</sup>x27;administrators'

# WN19-UR-000060 - Windows Server 2019 Create a token object user right must not be assigned to any groups or accounts.

## Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Create a token object' user right allows a process to create an access token. This could be used to provide elevated rights and compromise a system.

## **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Create a token object' to be defined but containing no entries (blank).

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

AC-6(10)

## References

800-171 3.1.7 800-171R3 03.01.07a. 800-53

800-53R5 AC-6(10)

**CAT** 

CCI CCI-002235

CN-L3 7.1.3.2(b)

CN-L3 7.1.3.2(g)

CN-L3 8.1.4.2(d)

CN-L3 8.1.10.6(a)

**CSF** PR.AC-4

**CSF2.0** PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(1)

ISO-27001-2022 A.5.15

ISO-27001-2022 A.8.2

ISO-27001-2022 A.8.18

ITSG-33 AC-6

**NESA** T5.1.1

**NESA** T5.2.2

**NESA** T5.4.1 **NESA** T5.4.4

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205753r958726\_rule

**STIG-ID** WN19-UR-000060

STIG-LEGACY SV-103145

STIG-LEGACY V-93057

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205753

## Assets

# live-malware

NULL

## WN19-UR-000070 - Windows Server 2019 Create global objects user right must only be assigned to Administrators, Service, Local Service, and Network Service.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Create global objects' user right can create objects that are available to all sessions, which could affect processes in other users' sessions.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Create global objects' to include only the following accounts or groups:

- Administrators
- Service
- Local Service
- Network Service

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)

CAT		ll.

CCI	CCI-002235

CN-L3	7.1.3.2(b)
-------	------------

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

ISO-27001-2022 A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA	T5.2.2
NESA	T5.4.1
NESA	T5.4.4
NESA	T5.4.5

**NESA** 

T5.5.4

**NESA** T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

PCI-DSSV3.2.1 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205754r958726\_rule

STIG-ID WN19-UR-000070

STIG-LEGACY SV-103147

STIG-LEGACY V-93059

SWIFT-CSCV1 5.1

TBA-FIISB 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205754

#### Assets

<sup>&#</sup>x27;service' && 'administrators' && 'network service' && 'local service'

# WN19-UR-000080 - Windows Server 2019 Create permanent shared objects user right must not be assigned to any groups or accounts.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Create permanent shared objects' user right could expose sensitive data by creating shared objects.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Create permanent shared objects' to be defined but containing no entries (blank).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-1713.1.7800-171R303.01.07a.800-53AC-6(10)

**800-53R5** AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205755r958726\_rule

**STIG-ID** WN19-UR-000080

STIG-LEGACY SV-103149

STIG-LEGACY V-93061

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205755

#### Assets

## live-malware

NULL

# WN19-UR-000090 - Windows Server 2019 Create symbolic links user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Create symbolic links' user right can create pointers to other objects, which could expose the system to attack.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Create symbolic links' to include only the following accounts or groups:

Administrators

Systems that have the Hyper-V role will also have 'Virtual Machines' given this user right. If this needs to be added manually, enter it as 'NT Virtual Machines'.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**NESA** 

**NESA** 

3.1.7
03.01.07a.
AC-6(10)
AC-6(10)
II
CCI-002235
7.1.3.2(b)
7.1.3.2(g)
8.1.4.2(d)
8.1.10.6(a)
PR.AC-4
PR.AA-05
Windows_Server_2019_STIG
32.1.b
164.306(a)(1)
164.312(a)(1)
A.5.15
A.8.2
A.8.18
AC-6

T5.1.1

T5.2.2

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205756r958726\_rule

**STIG-ID** WN19-UR-000090

STIG-LEGACY SV-103151

STIG-LEGACY V-93063

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205756

### Assets

### live-malware

'administrators'

# WN19-UR-000100 - Windows Server 2019 Debug programs: user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Debug programs' user right can attach a debugger to any process or to the kernel, providing complete access to sensitive and critical operating system components. This right is given to Administrators in the default configuration.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Debug programs' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.7

**800-171R3** 03.01.07a.

**800-53** AC-6(10)

**800-53R5** AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

ISO-27001-2022 A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205757r958726\_rule

**STIG-ID** WN19-UR-000100

STIG-LEGACY SV-103153

STIG-LEGACY V-93065

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205757

### Assets

### live-malware

'administrators'

#### WN19-UR-000110 - Windows Server 2019 Force shutdown from a remote system user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Force shutdown from a remote system' user right can remotely shut down a system, which could result in a denial of service.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Force shutdown from a remote system' to include only the following accounts or groups: - Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1
NESA	T5.2.2

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205758r958726\_rule

**STIG-ID** WN19-UR-000110

STIG-LEGACY SV-103155

STIG-LEGACY V-93067

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205758

#### Assets

<sup>&#</sup>x27;administrators'

#### WN19-UR-000120 - Windows Server 2019 Generate security audits user right must only be assigned to Local Service and Network Service.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Generate security audits' user right specifies users and processes that can generate Security Log audit records, which must only be the system service accounts defined.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Generate security audits' to include only the following accounts or groups:

- Local Service
- Network Service

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II

CCI	CCI-002235
CN-L3	7.1.3.2(b)

CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05

DISA	_BENCHMARK	Windows_	Server	_2019_	STIG

GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2

T5.2.2

ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1

**NESA** 

NESA T5.4.4

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205759r958726\_rule

**STIG-ID** WN19-UR-000120

STIG-LEGACY SV-103157

STIG-LEGACY V-93069

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205759

#### Assets

### live-malware

'network service' && 'local service'

# WN19-UR-000130 - Windows Server 2019 Impersonate a client after authentication user right must only be assigned to Administrators, Service, Local Service, and Network Service.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Impersonate a client after authentication' user right allows a program to impersonate another user or account to run on their behalf. An attacker could use this to elevate privileges.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Impersonate a client after authentication' to include only the following accounts or groups:

- Administrators
- Service
- Local Service
- Network Service

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**CSF2.0** 

800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II

CCI	CCI-002235

CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4

DISA_BENCHMARK	Windows_Server_2019_STIG

PR.AA-05

GDPR	32.1.b	)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA	T5.2.2
NESA	T5.4.1
NESA	T5.4.4
NESA	T5.4.5
NESA	T5.5.4
NESA	T5.6.1

NESA T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

**PCI-DSSV4.0** 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205760r958726\_rule

**STIG-ID** WN19-UR-000130

STIG-LEGACY SV-103159

STIG-LEGACY V-93071

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205760

#### Assets

<sup>&#</sup>x27;service' && 'administrators' && 'network service' && 'local service'

# WN19-UR-000150 - Windows Server 2019 Load and unload device drivers user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Load and unload device drivers' user right allows a user to load device drivers dynamically on a system. This could be used by an attacker to install malicious code.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Load and unload device drivers' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**NESA** 

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1

T5.2.2

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205762r958726\_rule

**STIG-ID** WN19-UR-000150

STIG-LEGACY SV-103163

STIG-LEGACY V-93075

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205762

#### Assets

<sup>&#</sup>x27;administrators'

# WN19-UR-000160 - Windows Server 2019 Lock pages in memory user right must not be assigned to any groups or accounts.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. The 'Lock pages in memory' user right allows physical memory to be assigned to processes, which could cause performance issues or a denial of service.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Lock pages in memory' to be defined but containing no entries (blank).

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.1.7 **800-171R3** 03.01.07a.

**800-53** AC-6(10)

**800-53R5** AC-6(10)

CAT

CCI CCI-002235

**CN-L3** 7.1.3.2(b)

**CN-L3** 7.1.3.2(g)

**CN-L3** 8.1.4.2(d)

**CN-L3** 8.1.10.6(a)

CSF PR.AC-4

CSF2.0 PR.AA-05

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(1)

**ISO-27001-2022** A.5.15

**ISO-27001-2022** A.8.2

**ISO-27001-2022** A.8.18

ITSG-33 AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

**NESA** T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205763r958726\_rule

**STIG-ID** WN19-UR-000160

STIG-LEGACY SV-103165

STIG-LEGACY V-93077

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205763

#### Assets

## live-malware

NULL

## WN19-UR-000170 - Windows Server 2019 Manage auditing and security log user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Manage auditing and security log' user right can manage the security log and change auditing configurations. This could be used to clear evidence of tampering.

Satisfies: SRG-OS-000057-GPOS-00027, SRG-OS-000058-GPOS-00028, SRG-OS-000059-GPOS-00029, SRG-OS-000063-GPOS-00032, SRG-OS-000337-GPOS-00129

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Manage auditing and security log' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

-5	 	 _	_	_

**CSF** 

References	
800-171	3.3.1
800-171	3.3.2
800-171	3.3.8
800-171R3	03.03.03
800-171R3	03.03.08
800-53	AU-9
800-53	AU-12b.
800-53	AU-12(3)
800-53R5	AU-9a.
800-53R5	AU-12b.
800-53R5	AU-12(3)
CAT	II .
CCI	CCI-000162
CCI	CCI-000163
CCI	CCI-000164
CCI	CCI-000171
CCI	CCI-001914
CN-L3	7.1.2.3(d)
CN-L3	7.1.3.3(f)
CN-L3	8.1.3.5(c)
CN-L3	8.1.4.3(c)

DE.CM-1

CSF DE.CM-3

CSF DE.CM-7

CSF PR.PT-1

CSF2.0 DE.CM-01

CSF2.0 DE.CM-03

CSF2.0 DE.CM-09

CSF2.0 PR.DS-10

CSF2.0 PR.PS-04

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.15

ISO/IEC-27001 A.12.4.2

ITSG-33 AU-9

**ITSG-33** AU-12

**ITSG-33** AU-12b.

NESA M5.2.3

NESA M5.5.2

**NESA** T3.6.4

**NESA** T8.2.9

NIAV2 SM5

NIAV2 SM6

**PCI-DSSV3.2.1** 10.1

**PCI-DSSV3.2.1** 10.5

**PCI-DSSV3.2.1** 10.5.2

**PCI-DSSV4.0** 10.3.2

**QCSC-V1** 3.2

QCSC-V1 6.2

QCSC-V1 8.2.1

**QCSC-V1** 13.2

**RULE-ID** SV-205643r958434\_rule

**STIG-ID** WN19-UR-000170

STIG-LEGACY SV-103285

STIG-LEGACY V-93197

SWIFT-CSCV1 6.4

**VULN-ID** V-205643

### **Assets**

### live-malware

'administrators'

### WN19-UR-000180 - Windows Server 2019 Modify firmware environment values user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Modify firmware environment values' user right can change hardware configuration environment variables. This could result in hardware failures or a denial of service.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Modify firmware environment values' to include only the following accounts or groups: - Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
GDPR HIPAA	32.1.b 164.306(a)(1)
HIPAA	164.306(a)(1)
HIPAA HIPAA	164.306(a)(1) 164.312(a)(1)
HIPAA HIPAA ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022 ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022 ISO-27001-2022 ITSG-33	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18 AC-6

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205764r958726\_rule

**STIG-ID** WN19-UR-000180

STIG-LEGACY SV-103167

STIG-LEGACY V-93079

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205764

#### Assets

<sup>&#</sup>x27;administrators'

### WN19-UR-000190 - Windows Server 2019 Perform volume maintenance tasks user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Perform volume maintenance tasks' user right can manage volume and disk configurations. This could be used to delete volumes, resulting in data loss or a denial of service.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Perform volume maintenance tasks' to include only the following accounts or groups: - Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**NESA** 

	. • . – – – – .
References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1
NESA	T5.2.2

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

**QCSC-V1** 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205765r958726\_rule

**STIG-ID** WN19-UR-000190

STIG-LEGACY SV-103169

STIG-LEGACY V-93081

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205765

#### Assets

<sup>&#</sup>x27;administrators'

# WN19-UR-000200 - Windows Server 2019 Profile single process user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Profile single process' user right can monitor non-system processes performance. An attacker could use this to identify processes to attack.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Profile single process' to include only the following accounts or groups:

- Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
ODDD	32.1.b
GDPR	02.1.0
HIPAA	164.306(a)(1)
HIPAA	164.306(a)(1)
HIPAA	164.306(a)(1) 164.312(a)(1)
HIPAA HIPAA ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18
HIPAA HIPAA ISO-27001-2022 ISO-27001-2022 ISO-27001-2022 ITSG-33	164.306(a)(1) 164.312(a)(1) A.5.15 A.8.2 A.8.18 AC-6

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

PCI-DSSV4.0 7.2.2

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205766r958726\_rule

**STIG-ID** WN19-UR-000200

STIG-LEGACY SV-103171

STIG-LEGACY V-93083

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205766

#### Assets

<sup>&#</sup>x27;administrators'

### WN19-UR-000220 - Windows Server 2019 Take ownership of files or other objects user right must only be assigned to the Administrators group.

#### Info

Inappropriate granting of user rights can provide system, administrative, and other high-level capabilities. Accounts with the 'Take ownership of files or other objects' user right can take ownership of objects and make changes.

#### **Solution**

Configure the policy value for Computer Configuration >> Windows Settings >> Security Settings >> Local Policies >> User Rights Assignment >> 'Take ownership of files or other objects' to include only the following accounts or groups: - Administrators

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

**NESA** 

References	
800-171	3.1.7
800-171R3	03.01.07a.
800-53	AC-6(10)
800-53R5	AC-6(10)
CAT	II
CCI	CCI-002235
CN-L3	7.1.3.2(b)
CN-L3	7.1.3.2(g)
CN-L3	8.1.4.2(d)
CN-L3	8.1.10.6(a)
CSF	PR.AC-4
CSF2.0	PR.AA-05
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.8.2
ISO-27001-2022	A.8.18
ITSG-33	AC-6
NESA	T5.1.1
NESA	T5.2.2

T5.4.1

NESA T5.4.5

NESA T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

**QCSC-V1** 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205768r958726\_rule

**STIG-ID** WN19-UR-000220

STIG-LEGACY SV-103175

STIG-LEGACY V-93087

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205768

#### Assets

<sup>&#</sup>x27;administrators'

# Audits INFO, WARNING, ERROR

# WN19-00-000010 - Windows Server 2019 users with Administrative privileges must have separate accounts for administrative duties and normal operational tasks.

#### Info

Using a privileged account to perform routine functions makes the computer vulnerable to malicious software inadvertently introduced during a session that has been granted full privileges.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

#### **Solution**

Ensure each user with administrative privileges has a separate account for user duties and one for privileged duties.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205844r991589\_rule

**STIG-ID** WN19-00-000010

STIG-LEGACY SV-103457

STIG-LEGACY V-93369

SWIFT-CSCV1 2.3

**VULN-ID** V-205844

#### **Assets**

# WN19-00-000030 - Windows Server 2019 administrative accounts must not be used with applications that access the Internet, such as web browsers, or with potential Internet sources, such as email.

#### Info

Using applications that access the Internet or have potential Internet sources using administrative privileges exposes a system to compromise. If a flaw in an application is exploited while running as a privileged user, the entire system could be compromised. Web browsers and email are common attack vectors for introducing malicious code and must not be run with an administrative account.

Since administrative accounts may generally change or work around technical restrictions for running a web browser or other applications, it is essential that policy require administrative accounts to not access the Internet or use applications such as email.

The policy should define specific exceptions for local service administration. These exceptions may include HTTP(S)-based tools that are used for the administration of the local system, services, or attached devices.

Whitelisting can be used to enforce the policy to ensure compliance.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

#### Solution

Establish a policy, at minimum, to prohibit administrative accounts from using applications that access the Internet, such as web browsers, or with potential Internet sources, such as email. Ensure the policy is enforced.

The organization may use technical means such as whitelisting to prevent the use of browsers and mail applications to enforce this requirement.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205845r991589\_rule

**STIG-ID** WN19-00-000030

STIG-LEGACY SV-103293

STIG-LEGACY V-93205

SWIFT-CSCV1 2.3

**VULN-ID** V-205845

**Assets** 

# WN19-00-000050 - Windows Server 2019 manually managed application account passwords must be at least 14 characters in length.

#### Info

Application/service account passwords must be of sufficient length to prevent being easily cracked. Application/service accounts that are manually managed must have passwords at least 14 characters in length.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

#### **Solution**

Establish a policy that requires application/service account passwords that are manually managed to be at least 14 characters in length. Ensure the policy is enforced.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.5.7

**800-171R3** 03.05.07a.

**800-53** IA-5(1)(a)

**800-53R5** IA-5(1)(h)

CAT

CCI CCI-000205

CCI CCI-004066

**CN-L3** 7.1.2.7(e)

**CN-L3** 7.1.3.1(b)

CSF PR.AC-1

CSF2.0 PR.AA-01

CSF2.0 PR.AA-03

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

HIPAA 164.312(d)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.17

**ISO/IEC-27001** A.9.4.3

ITSG-33 IA-5(1)(a)

NESA T5.2.3

NIAV2 AM19a

NIAV2 AM19b

NIAV2 AM19c

NIAV2 AM19d

NIAV2 AM22a

QCSC-V1 5.2.2

**QCSC-V1** 13.2

**RULE-ID** SV-205661r1051068\_rule

**STIG-ID** WN19-00-000050

STIG-LEGACY SV-103547

STIG-LEGACY V-93461

SWIFT-CSCV1 4.1

**TBA-FIISB** 26.2.1

**TBA-FIISB** 26.2.4

**VULN-ID** V-205661

Assets

#### WN19-00-000070 - Windows Server 2019 shared user accounts must not be permitted.

#### Info

Shared accounts (accounts where two or more people log on with the same user identification) do not provide adequate identification and authentication. There is no way to provide for nonrepudiation or individual accountability for system access and resource usage.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

#### **Solution**

Remove unapproved shared accounts from the system.

Document required shared accounts with the ISSO. Documentation must include the reason for the account, who has access to the account, and how the risk of using the shared account is mitigated to include monitoring account activity.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

800-171 3.5.1 03.05.01a. 800-171R3 800-53 IA-2 800-53R5 IA-2 CAT CCI CCI-000764 CN-L3 7.1.3.1(a) CN-L3 7.1.3.1(e) CN-L3 8.1.4.1(a) CN-L3 8.1.4.2(a) CN-L3 8.5.4.1(a) **CSF** PR.AC-1 CSF2.0 PR.AA-01 PR.AA-03 CSF2.0 **DISA\_BENCHMARK** Windows\_Server\_2019\_STIG **GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**HIPAA** 164.312(a)(2)(i)

**HIPAA** 164.312(d)

ISO-27001-2022 A.5.16

ITSG-33 IA-2

ITSG-33 IA-2a.

**NESA** T2.3.8 **NESA** T5.3.1

**NESA** T5.4.2

NESA T5.5.1

NESA T5.5.2

NESA T5.5.3

NIAV2 AM2

NIAV2 AM8

NIAV2 AM14b

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205699r958482\_rule

**STIG-ID** WN19-00-000070

STIG-LEGACY SV-103523

STIG-LEGACY V-93437

TBA-FIISB 35.1

TBA-FIISB 36.1

**VULN-ID** V-205699

## Assets

# live-malware

'Name

admintest

DefaultAccount

Guest

WDAGUtilityAccount'

# WN19-00-000080 - Windows Server 2019 must employ a deny-all, permit-by-exception policy to allow the execution of authorized software programs.

## Info

Using an allowlist provides a configuration management method to allow the execution of only authorized software. Using only authorized software decreases risk by limiting the number of potential vulnerabilities.

The organization must identify authorized software programs and only permit execution of authorized software. The process used to identify software programs that are authorized to execute on organizational information systems is commonly referred to as allowlisting.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

#### **Solution**

Configure an application allowlisting program to employ a deny-all, permit-by-exception policy to allow the execution of authorized software programs.

Configuration of allowlisting applications will vary by the program. AppLocker is an allowlisting application built into Windows Server.

If AppLocker is used, it is configured through group policy in Computer Configuration >> Windows Settings >> Security Settings >> Application Control Policies >> AppLocker.

Implementation guidance for AppLocker is available at the following link:

https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-defender-application-control/applocker/applocker-policies-deployment-guide

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

800-171	3.4.8
000-171	J. <del>4</del> .0

**800-171R3** 03.04.08b.

**800-53** CM-7(5)(b)

**800-53R5** CM-7(5)(b)

CAT

CCI CCI-001774

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.19

ISO/IEC-27001 A.12.5.1

ISO/IEC-27001 A.12.6.2

ITSG-33 CM-7

NIAV2 SS15a

**PCI-DSSV3.2.1** 2.2.2

QCSC-V1 3.2

**RULE-ID** SV-205807r958808\_rule

**STIG-ID** WN19-00-000080

STIG-LEGACY SV-103465

STIG-LEGACY V-93379

SWIFT-CSCV1 2.3

**TBA-FIISB** 44.2.2

**TBA-FIISB** 49.2.3

**VULN-ID** V-205807

# **Assets**

<sup>&#</sup>x27;<AppLockerPolicy Version="1" />'

# WN19-00-000110 - Windows Server 2019 must use an anti-virus program.

## Info

Malicious software can establish a base on individual desktops and servers. Employing an automated mechanism to detect this type of software will aid in elimination of the software from the operating system.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

## **Solution**

If no anti-virus software is in use, install Windows Defender or third-party anti-virus.

Open 'PowerShell'.

Enter 'Install-WindowsFeature -Name Windows-Defender'.

For third-party anti-virus, install per anti-virus instructions and disable Windows Defender.

Open 'PowerShell'.

Enter 'Uninstall-WindowsFeature -Name Windows-Defender'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205850r991589\_rule

**STIG-ID** WN19-00-000110

STIG-LEGACY SV-103305

STIG-LEGACY V-93217

SWIFT-CSCV1 2.3

**VULN-ID** V-205850

# Assets

## live-malware

'Status DisplayName
-----Running Windows Defender Firewall
Running Windows Defender Advanced Threat Protection Service
Running Microsoft Defender Antivirus Network Inspection Service
Running Microsoft Defender Antivirus Service'

# WN19-00-000120 - Windows Server 2019 must have a host-based intrusion detection or prevention system.

## Info

A properly configured Host-based Intrusion Detection System (HIDS) or Host-based Intrusion Prevention System (HIPS) provides another level of defense against unauthorized access to critical servers. With proper configuration and logging enabled, such a system can stop and/or alert for many attempts to gain unauthorized access to resources.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Install a HIDS or HIPS on each server.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205851r991589\_rule

**STIG-ID** WN19-00-000120

STIG-LEGACY SV-103307

STIG-LEGACY V-93219

SWIFT-CSCV1 2.3

**VULN-ID** V-205851

### **Assets**

# WN19-00-000180 - Windows Server 2019 non-administrative accounts or groups must only have print permissions on printer shares.

# Info

Windows shares are a means by which files, folders, printers, and other resources can be published for network users to access. Improper configuration can permit access to devices and data beyond a user's need.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Configure the permissions on shared printers to restrict standard users to only have Print permissions.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

ISO-27001-2022

800-171	3.1.1
800-171R3	03.01.02
800-53	AC-3
800-53R5	AC-3
CAT	III
CCI	CCI-000213
CN-L3	8.1.4.2(f)
CN-L3	8.1.4.11(b)
CN-L3	8.1.10.2(c)
CN-L3	8.5.3.1
CN-L3	8.5.4.1(a)
CSF	PR.AC-4
CSF	PR.PT-3
CSF2.0	PR.AA-05
CSF2.0	PR.DS-10
CSF2.0	PR.IR-01
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.15
ISO-27001-2022	A.5.33
ISO-27001-2022	A.8.3

A.8.18

ISO-27001-2022 A.8.20 ISO/IEC-27001 A.9.4.1 ISO/IEC-27001 A.9.4.5 ITSG-33 AC-3 **NESA** T4.2.1 **NESA** T5.4.4 **NESA** T5.4.5 **NESA** T5.5.4 **NESA** T5.6.1 **NESA** T7.5.2 **NESA** T7.5.3 NIAV2 AM3 NIAV2 **SS29** QCSC-V1 3.2 QCSC-V1 5.2.2 QCSC-V1 13.2

**RULE-ID** SV-205664r958472\_rule

**STIG-ID** WN19-00-000180

STIG-LEGACY SV-103081

STIG-LEGACY V-92993

TBA-FIISB 31.1

**VULN-ID** V-205664

Assets

# WN19-00-000190 - Windows Server 2019 outdated or unused accounts must be removed or disabled.

## Info

Outdated or unused accounts provide penetration points that may go undetected. Inactive accounts must be deleted if no longer necessary or, if still required, disabled until needed.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

# **Solution**

Regularly review accounts to determine if they are still active. Remove or disable accounts that have not been used in the last 35 days.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.5.5

**800-171** 3.5.6

**800-171R3** 03.05.05

**800-53** IA-4e.

**800-53R5** AC-2(3)(a)

CAT

CCI CCI-000795

CCI CCI-003627

**CN-L3** 7.1.2.7(b)

CSF PR.AC-1

**CSF2.0** PR.AA-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

HIPAA 164.312(a)(2)(i)

**HIPAA** 164.312(d)

**ISO-27001-2022** A.5.16

ITSG-33 IA-4e.

PCI-DSSV3.2.1 8.1.4

PCI-DSSV4.0 8.2.6

QCSC-V1 5.2.2

QCSC-V1 13.2

**RULE-ID** SV-205707r1051076\_rule

**STIG-ID** WN19-00-000190

STIG-LEGACY SV-103543

STIG-LEGACY V-93457

SWIFT-CSCV1 5

**VULN-ID** V-205707

**Assets** 

# WN19-00-000220 - Windows Server 2019 system files must be monitored for unauthorized changes.

## Info

Monitoring system files for changes against a baseline on a regular basis may help detect the possible introduction of malicious code on a system.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Monitor the system for unauthorized changes to system files (e.g., \*.exe, \*.bat, \*.com, \*.cmd, and \*.dll) against a baseline on a weekly basis. This can be done with the use of various monitoring tools.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

CM-3(5)

## References

800-53

**800-171** 3.4.3

**800-171R3** 03.04.03

**800-53R5** CM-3(5)

CAT

CCI CCI-001744

**CN-L3** 8.1.10.6(g)

CSF DE.CM-1

CSF DE.CM-7

CSF PR.IP-1

CSF PR.IP-3

CSF2.0 DE.CM-01

CSF2.0 DE.CM-09

**CSF2.0** ID.RA-07

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**GDPR** 32.4

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

**ISO-27001-2022** A.8.32

ISO-27001-2022 8.1

**ISO-27001-2022** 9.3.3

ISO/IEC-27001 A.12.1.2

ITSG-33	CM-3
NESA	T3.2.3
NESA	T3.3.2
NESA	T7.5.1
NESA	T7.6.1
NESA	T7.6.2
NESA	T7.6.3
NIAV2	CM1
NIAV2	CM1a
NIAV2	CM1b
NIAV2	CM1c
PCI-DSSV3.2.1	11.5
PCI-DSSV4.0	11.5.2
QCSC-V1	3.2
QCSC-V1	5.2.1
QCSC-V1	6.2
QCSC-V1	7.2
QCSC-V1	8.2.1
RULE-ID	SV-205803r958794_rule
STIG-ID	WN19-00-000220
STIG-LEGACY	SV-103291
STIG-LEGACY	V-93203

V-205803

Assets

live-malware

**VULN-ID** 

## WN19-00-000240 - Windows Server 2019 must have software certificate installation files removed.

## Info

Use of software certificates and their accompanying installation files for end users to access resources is less secure than the use of hardware-based certificates.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Remove any certificate installation files (\*.p12 and \*.pfx) found on a system.

Note: This does not apply to server-based applications that have a requirement for .p12 certificate files or Adobe PreFlight certificate files.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

# References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205852r991589\_rule

**STIG-ID** WN19-00-000240

STIG-LEGACY SV-103309

STIG-LEGACY V-93221

SWIFT-CSCV1 2.3

**VULN-ID** V-205852

# **Assets**

WN19-00-000250 - Windows Server 2019 systems requiring data at rest protections must employ cryptographic mechanisms to prevent unauthorized disclosure and modification of the information at rest.

## Info

This requirement addresses protection of user-generated data as well as operating system-specific configuration data. Organizations may choose to employ different mechanisms to achieve confidentiality and integrity protections, as appropriate, in accordance with the security category and/or classification of the information.

Selection of a cryptographic mechanism is based on the need to protect the integrity of organizational information. The strength of the mechanism is commensurate with the security category and/or classification of the information. Organizations have the flexibility to either encrypt all information on storage devices (i.e., full disk encryption) or encrypt specific data structures (e.g., files, records, or fields).

Satisfies: SRG-OS-000185-GPOS-00079, SRG-OS-000404-GPOS-00183, SRG-OS-000405-GPOS-00184 NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

### Solution

Configure systems that require additional protections due to factors such as inadequate physical protection or sensitivity of the data to employ encryption to protect the confidentiality and integrity of all information at rest.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

K	eterences	
	800-171	3.13.16
	800-171R3	03.13.08
	800-53	SC-28
	800-53	SC-28(1)
	800-53R5	SC-28
	800-53R5	SC-28(1)
	CAT	I
	CCI	CCI-001199
	CCI	CCI-002475
	CCI	CCI-002476
	CN-L3	8.1.4.7(b)
	CN-L3	8.1.4.8(b)
	CSF	PR.DS-1
	CSF2.0	PR.DS-01
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.a
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(2)(iv)
	HIPAA	164.312(e)(2)(ii)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.33

**ITSG-33** SC-28

ITSG-33 SC-28a.

ITSG-33 SC-28(1)

**PCI-DSSV3.2.1** 3.4

PCI-DSSV4.0 3.3.2

PCI-DSSV4.0 3.5.1

QCSC-V1 5.2.2

QCSC-V1 6.2

**RULE-ID** SV-205727r958552\_rule

**STIG-ID** WN19-00-000250

STIG-LEGACY SV-103601

STIG-LEGACY V-93515

TBA-FIISB 28.1

**VULN-ID** V-205727

# **Assets**

WN19-00-000260 - Windows Server 2019 must implement protection methods such as TLS, encrypted VPNs, or IPsec if the data owner has a strict requirement for ensuring data integrity and confidentiality is maintained at every step of the data transfer and handling process.

#### Info

Information can be either unintentionally or maliciously disclosed or modified during preparation for transmission, for example, during aggregation, at protocol transformation points, and during packing/unpacking. These unauthorized disclosures or modifications compromise the confidentiality or integrity of the information.

Ensuring the confidentiality of transmitted information requires the operating system to take measures in preparing information for transmission. This can be accomplished via access control and encryption.

Use of this requirement will be limited to situations where the data owner has a strict requirement for ensuring data integrity and confidentiality is maintained at every step of the data transfer and handling process. When transmitting data, operating systems need to support transmission protection mechanisms such as TLS, encrypted VPNs, or IPsec.

Satisfies: SRG-OS-000425-GPOS-00189, SRG-OS-000426-GPOS-00190

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## Solution

Configure protection methods such as TLS, encrypted VPNs, or IPsec when the data owner has a strict requirement for ensuring data integrity and confidentiality is maintained at every step of the data transfer and handling process.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

R	eferences	
	800-171	3.13.8
	800-171R3	03.13.08
	800-53	SC-8(2)
	800-53R5	SC-8(2)
	CAT	II
	CCI	CCI-002420
	CCI	CCI-002422
	CN-L3	8.1.2.2(a)
	CN-L3	8.1.2.2(b)
	CN-L3	8.1.4.7(a)
	CN-L3	8.1.4.8(a)
	CN-L3	8.2.4.5(c)
	CN-L3	8.2.4.5(d)
	CN-L3	8.5.2.2
	CSF	PR.DS-2
	CSF	PR.DS-5
	CSF2.0	PR.DS-02
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.a

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

HIPAA 164.312(e)(1)

**HIPAA** 164.312(e)(2)(i)

**ISO-27001-2022** A.5.10

**ISO-27001-2022** A.5.14

**ISO-27001-2022** A.5.33

**ISO-27001-2022** A.8.20

ITSG-33 SC-8(2)

ITSG-33 SC-9(2)

NESA T4.3.1

**NESA** T4.3.2

NESA T4.5.1

NESA T4.5.2

**NESA** T7.3.3

NESA T7.4.1

NIAV2

NIAV2 IE9

NIAV2 IE12

NIAV2 NS29

NIAV2 SS24

**PCI-DSSV3.2.1** 2.3

PCI-DSSV3.2.1

PCI-DSSV4.0

**PCI-DSSV4.0** 4.2.1

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205829r958912\_rule

4.1

2.2.7

**STIG-ID** WN19-00-000260

STIG-LEGACY SV-103629

STIG-LEGACY V-93543

SWIFT-CSCV1 2.1

**VULN-ID** V-205829

# Assets

# WN19-00-000270 - Windows Server 2019 must have the roles and features required by the system documented.

## Info

Unnecessary roles and features increase the attack surface of a system. Limiting roles and features of a system to only those necessary reduces this potential. The standard installation option (previously called Server Core) further reduces this when selected at installation.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

## **Solution**

Document the roles and features required for the system to operate. Uninstall any that are not required.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.6

**800-171** 3.4.7

**800-171R3** 03.04.06a.

**800-53** CM-7a.

**800-53R5** CM-7a.

CAT

CCI CCI-000381

**CN-L3** 7.1.3.5(c)

**CN-L3** 8.1.4.4(a)

CSF PR.IP-1

CSF PR.PT-3

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

ITSG-33 CM-7a.

NIAV2 SS15a

PCI-DSSV3.2.1 2.2.1

PCI-DSSV4.0 2.2.3

QCSC-V1 3.2

**RULE-ID** SV-205677r958478\_rule

**STIG-ID** WN19-00-000270

STIG-LEGACY SV-103467

STIG-LEGACY V-93381

SWIFT-CSCV1 2.3

**VULN-ID** V-205677

# **Assets**

'Display Name	Name	Install State
[X] File and Storage Services	FileAndStorage-Services	Installed
[X] Storage Services	Storage-Services	Installed
[X] .NET Framework 4.7 Features	NET-Framework-45-Fea	Installed
[X] .NET Framework 4.7	NET-Framework-45-Core	Installed
[X] WCF Services	NET-WCF-Services45	Installed
[X] TCP Port Sharing	NET-WCF-TCP-PortShar	Installed
[X] BitLocker Drive Encryption	BitLocker	Installed
[X] Enhanced Storage	EnhancedStorage	Installed
[X] System Data Archiver	System-DataArchiver	Installed
[X] Windows Defender Antivirus	Windows-Defender	Installed
[X] Windows PowerShell	PowerShellRoot	Installed
[X] Windows PowerShell 5.1	PowerShell	Installed
[X] Windows PowerShell ISE	PowerShell-ISE	Installed
[X] WoW64 Support	WoW64-Support	Installed
[X] XPS Viewer	XPS-Viewer	Installed'

WN19-00-000290 - Windows Server 2019 must employ automated mechanisms to determine the state of system components with regard to flaw remediation using the following frequency: continuously, where Endpoint Security Solution (ESS) is used; 30 days, for any additional internal network scans not covered by ESS; and annually, for external scans by Computer Network Defense Service Provider (CNDSP).

#### Info

Without the use of automated mechanisms to scan for security flaws on a continuous and/or periodic basis, the operating system or other system components may remain vulnerable to the exploits presented by undetected software flaws. The operating system may have an integrated solution incorporating continuous scanning using ESS and periodic scanning using other tools.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

# **Solution**

Install a DOD-approved ESS software and ensure it is operating continuously.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

**DISA\_BENCHMARK** Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205728r1000127\_rule

**STIG-ID** WN19-00-000290

STIG-LEGACY SV-103653

STIG-LEGACY V-93567

SWIFT-CSCV1 2.3

**VULN-ID** V-205728

Assets

# WN19-00-000300 - Windows Server 2019 must automatically remove or disable temporary user accounts after 72 hours.

## Info

If temporary user accounts remain active when no longer needed or for an excessive period, these accounts may be used to gain unauthorized access. To mitigate this risk, automated termination of all temporary accounts must be set upon account creation.

Temporary accounts are established as part of normal account activation procedures when there is a need for short-term accounts without the demand for immediacy in account activation.

If temporary accounts are used, the operating system must be configured to automatically terminate these types of accounts after a DoD-defined time period of 72 hours.

To address access requirements, many operating systems may be integrated with enterprise-level authentication/ access mechanisms that meet or exceed access control policy requirements.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

## **Solution**

Configure temporary user accounts to automatically expire within 72 hours.

Domain accounts can be configured with an account expiration date, under 'Account' properties.

Local accounts can be configured to expire with the command 'Net user [username] /expires:[mm/dd/yyyy]', where username is the name of the temporary user account.

Delete any temporary user accounts that are no longer necessary.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

references	
800-171	3.1.1
800-171R3	03.01.01
800-53	AC-2(2)
800-53R5	AC-2(2)
CAT	II
CCI	CCI-000016
CN-L3	7.1.3.2(e)
CSF	PR.AC-1
CSF	PR.AC-4
CSF2.0	DE.CM-01
CSF2.0	DE.CM-03
CSF2.0	PR.AA-01
CSF2.0	PR.AA-05
CSF2.0	PR.DS-10
DISA_BENCHMARK	Windows_Server_2019_STIG
GDPR	32.1.b
HIPAA	164.306(a)(1)
HIPAA	164.312(a)(1)
ISO-27001-2022	A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

**ISO/IEC-27001** A.9.2.1

ITSG-33 AC-2(2)

NIAV2 AM28

NIAV2 NS5j

NIAV2 SS14e

QCSC-V1 5.2.2

QCSC-V1 8.2.1

**QCSC-V1** 13.2

QCSC-V1 15.2

**RULE-ID** SV-205624r958364\_rule

**STIG-ID** WN19-00-000300

STIG-LEGACY SV-103063

STIG-LEGACY V-92975

**VULN-ID** V-205624

# Assets

## live-malware

'Name : admintest

AccountExpires :

Name : DefaultAccount

AccountExpires :

Name : Guest

AccountExpires :

Name : WDAGUtilityAccount

AccountExpires :'

# WN19-00-000310 - Windows Server 2019 must automatically remove or disable emergency accounts after the crisis is resolved or within 72 hours.

#### Info

Emergency administrator accounts are privileged accounts established in response to crisis situations where the need for rapid account activation is required. Therefore, emergency account activation may bypass normal account authorization processes. If these accounts are automatically disabled, system maintenance during emergencies may not be possible, thus adversely affecting system availability.

Emergency administrator accounts are different from infrequently used accounts (i.e., local logon accounts used by system administrators when network or normal logon/access is not available). Infrequently used accounts are not subject to automatic termination dates. Emergency accounts are accounts created in response to crisis situations, usually for use by maintenance personnel. The automatic expiration or disabling time period may be extended as needed until the crisis is resolved; however, it must not be extended indefinitely. A permanent account should be established for privileged users who need long-term maintenance accounts.

To address access requirements, many operating systems can be integrated with enterprise-level authentication/ access mechanisms that meet or exceed access control policy requirements.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Remove emergency administrator accounts after a crisis has been resolved or configure the accounts to automatically expire within 72 hours.

Domain accounts can be configured with an account expiration date, under 'Account' properties.

Local accounts can be configured to expire with the command 'Net user [username] /expires:[mm/dd/yyyy]', where username is the name of the temporary user account.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

3.1.1
03.01.01
AC-2(2)
AC-2(2)
II
CCI-001682
7.1.3.2(e)
PR.AC-1
PR.AC-4
DE.CM-01
DE.CM-03
PR.AA-01
PR.AA-05
PR.DS-10
Windows_Server_2019_STIG
32.1.b
164.306(a)(1)

**HIPAA** 164.312(a)(1)

**ISO-27001-2022** A.5.16

**ISO-27001-2022** A.5.18

**ISO-27001-2022** A.8.2

ISO/IEC-27001 A.9.2.1

ITSG-33 AC-2(2)

NIAV2 AM28

NIAV2 NS5j

NIAV2 SS14e

QCSC-V1 5.2.2

QCSC-V1 8.2.1

QCSC-V1 13.2

QCSC-V1 15.2

**RULE-ID** SV-205710r958508\_rule

**STIG-ID** WN19-00-000310

STIG-LEGACY SV-103065

STIG-LEGACY V-92977

**VULN-ID** V-205710

Assets

# WN19-00-000420 - Windows Server 2019 FTP servers must be configured to prevent anonymous logons.

## Info

The FTP service allows remote users to access shared files and directories. Allowing anonymous FTP connections makes user auditing difficult.

Using accounts that have administrator privileges to log on to FTP risks that the userid and password will be captured on the network and give administrator access to an unauthorized user.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Configure the FTP service to prevent anonymous logons.

Open 'Internet Information Services (IIS) Manager'.

Select the server.

Double-click 'FTP Authentication'.

Select 'Anonymous Authentication'.

Select 'Disabled' under 'Actions'.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205853r991589\_rule

**STIG-ID** WN19-00-000420

STIG-LEGACY SV-103311

STIG-LEGACY V-93223

SWIFT-CSCV1 2.3

**VULN-ID** V-205853

# Assets

# WN19-00-000430 - Windows Server 2019 FTP servers must be configured to prevent access to the system drive.

## Info

The FTP service allows remote users to access shared files and directories that could provide access to system resources and compromise the system, especially if the user can gain access to the root directory of the boot drive. NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## Solution

Configure the FTP sites to allow access only to specific FTP shared resources. Do not allow access to other areas of the system.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

**HIPAA** 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205854r991589\_rule

**STIG-ID** WN19-00-000430

STIG-LEGACY SV-103313

STIG-LEGACY V-93225

SWIFT-CSCV1 2.3

**VULN-ID** V-205854

# **Assets**

# WN19-00-000450 - Windows Server 2019 must have orphaned security identifiers (SIDs) removed from user rights.

## Info

Accounts or groups given rights on a system may show up as unresolved SIDs for various reasons including deletion of the accounts or groups. If the account or group objects are reanimated, there is a potential they may still have rights no longer intended. Valid domain accounts or groups may also show up as unresolved SIDs if a connection to the domain cannot be established for some reason.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

## **Solution**

Remove any unresolved SIDs found in User Rights assignments and determined to not be for currently valid accounts or groups by removing the accounts or groups from the appropriate group policy.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-171** 3.4.2

**800-171R3** 03.04.02a.

**800-53** CM-6b.

**800-53R5** CM-6b.

CAT

CCI CCI-000366

**CN-L3** 8.1.10.6(d)

CSF PR.IP-1

CSF2.0 DE.CM-09

CSF2.0 PR.PS-01

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**ISO-27001-2022** A.8.9

ITSG-33 CM-6b.

NESA T3.2.1

**RULE-ID** SV-205855r991589\_rule

**STIG-ID** WN19-00-000450

STIG-LEGACY SV-103315

STIG-LEGACY V-93227

SWIFT-CSCV1 2.3

**VULN-ID** V-205855

# **Assets**

# live-malware

'Name SID

admintest S-1-5-21-259077641-1303433758-3492812687-500

DefaultAccount S-1-5-21-259077641-1303433758-3492812687-503

Guest S-1-5-21-259077641-1303433758-3492812687-501

WDAGUtilityAccount S-1-5-21-259077641-1303433758-3492812687-504'

# WN19-AU-000010 - Windows Server 2019 audit records must be backed up to a different system or media than the system being audited.

## Info

Protection of log data includes assuring the log data is not accidentally lost or deleted. Audit information stored in one location is vulnerable to accidental or incidental deletion or alteration.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Establish and implement a process for backing up log data to another system or media other than the system being audited.

## See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

## References

**800-53** AU-4(1)

**800-53R5** AU-4(1)

CAT

CCI CCI-001851

CSF PR.DS-4

CSF PR.PT-1

DISA BENCHMARK Windows Server 2019 STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

**ISO-27001-2022** A.8.6

ITSG-33 AU-4

NESA T3.3.1

NESA T3.6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205799r958754\_rule

**STIG-ID** WN19-AU-000010

STIG-LEGACY SV-103271

STIG-LEGACY V-93183

**VULN-ID** V-205799

# **Assets**

# WN19-AU-000020 - Windows Server 2019 must, at a minimum, offload audit records of interconnected systems in real time and offload standalone or nondomain-joined systems weekly.

## Info

Protection of log data includes ensuring the log data is not accidentally lost or deleted. Audit information stored in one location is vulnerable to accidental or incidental deletion or alteration.

NOTE: Nessus has not performed this check. Please review the benchmark to ensure target compliance.

## **Solution**

Configure the system to, at a minimum, offload audit records of interconnected systems in real time and offload standalone or nondomain-joined systems weekly.

#### See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**800-53** AU-4(1)

**800-53R5** AU-4(1)

CAT

CCI CCI-001851

CSF PR.DS-4

CSF PR.PT-1

DISA\_BENCHMARK Windows\_Server\_2019\_STIG

**GDPR** 32.1.b

HIPAA 164.306(a)(1)

**HIPAA** 164.312(b)

ISO-27001-2022 A.8.6

ITSG-33 AU-4

NESA T3.3.1

NESA T3.6.2

QCSC-V1 8.2.1

QCSC-V1 13.2

**RULE-ID** SV-205843r959008\_rule

**STIG-ID** WN19-AU-000020

STIG-LEGACY SV-103273

STIG-LEGACY V-93185

**VULN-ID** V-205843

## **Assets**

# WN19-MS-000010 - Windows Server 2019 must only allow Administrators responsible for the member server or standalone or nondomain-joined system to have Administrator rights on the system.

## Info

An account that does not have Administrator duties must not have Administrator rights. Such rights would allow the account to bypass or modify required security restrictions on that machine and make it vulnerable to attack. System administrators must log on to systems using only accounts with the minimum level of authority necessary. For domain-joined member servers, the Domain Admins group must be replaced by a domain member server administrator group (refer to AD.0003 in the Active Directory Domain STIG). Restricting highly privileged accounts from the local Administrators group helps mitigate the risk of privilege escalation resulting from credential theft attacks. Standard user accounts must not be members of the built-in Administrators group.

NOTE: Nessus has provided the target output to assist in reviewing the benchmark to ensure target compliance.

## **Solution**

Configure the local 'Administrators' group to include only administrator groups or accounts responsible for administration of the system.

For domain-joined member servers, replace the Domain Admins group with a domain member server administrator group.

Remove any standard user accounts.

# See Also

https://dl.dod.cyber.mil/wp-content/uploads/stigs/zip/U\_MS\_Windows\_Server\_2019\_V3R4\_STIG.zip

#### References

**ITSG-33** 

K	reterences	
	800-171	3.1.7
	800-171R3	03.01.07a.
	800-53	AC-6(10)
	800-53R5	AC-6(10)
	CAT	I
	CCI	CCI-002235
	CN-L3	7.1.3.2(b)
	CN-L3	7.1.3.2(g)
	CN-L3	8.1.4.2(d)
	CN-L3	8.1.10.6(a)
	CSF	PR.AC-4
	CSF2.0	PR.AA-05
	DISA_BENCHMARK	Windows_Server_2019_STIG
	GDPR	32.1.b
	HIPAA	164.306(a)(1)
	HIPAA	164.312(a)(1)
	ISO-27001-2022	A.5.15
	ISO-27001-2022	A.8.2
	ISO-27001-2022	A.8.18
	ITO 0 00	10.0

AC-6

NESA T5.1.1

NESA T5.2.2

NESA T5.4.1

NESA T5.4.4

NESA T5.4.5

**NESA** T5.5.4

NESA T5.6.1

**NESA** T7.5.3

NIAV2 AM1

NIAV2 AM23f

NIAV2 SS13c

NIAV2 SS15c

**PCI-DSSV3.2.1** 7.1.2

PCI-DSSV4.0 7.2.1

**PCI-DSSV4.0** 7.2.2

QCSC-V1 5.2.2

**QCSC-V1** 6.2

**RULE-ID** SV-205746r958726\_rule

**STIG-ID** WN19-MS-000010

STIG-LEGACY SV-103131

STIG-LEGACY V-93043

SWIFT-CSCV1 5.1

**TBA-FIISB** 31.4.2

**TBA-FIISB** 31.4.3

**VULN-ID** V-205746

# Assets

## live-malware

'ADMINISTRATORS: admintest'