

CiscoWorks LMS for Windows DISA STIG

White Paper

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Overview

U.S. Public Sector network manager's are responsible for managing large complex networks that span the globe. As networks continue to grow in size and complexity, the number of network management tools and products are increasing as well. In such a situation, it is a challenge for administrators to manage networks effectively.

Security requirements and scrutiny for network devices, servers, and applications have increased over the past decade. The increased security requirements and scrutiny have extended the time it takes between acquiring a product and its introduction into the production environment.

The Defense Information Security Agency (DISA) security technical implementation guide (STIG) policies affect each application differently, creating a significant burden on the network, application, server, and information assurance staff. The incremental testing and validation phases required to determine STIG policy conflicts with the network, application, and other components can create prolonged implementation delays. This document provides information and recommendations for resolving DISA STIG policies that affect CiscoWorks LAN Management Solution (LMS).

CiscoWorks LMS

CiscoWorks LMS provides the integrated management tools needed to simplify the configuration, administration, monitoring, and troubleshooting of Cisco networks. CiscoWorks LMS provides IT organizations an integrated system for sharing device information across management applications, automation of device management tasks, visibility into the health and capability of the network, and identification and localization of network trouble. By using common centralized systems and network inventory knowledge, CiscoWorks LMS delivers a unique platform of cross-functional management capabilities that reduce network administration overhead and provide upper-layer systems integration.

United States Department of Defense: Defense Information Systems Agency Security Technical Implementation Guide

The Defense Information Systems Agency develops the security techical implementation guides to improve the security posture of Department of Defense (DoD) computer systems. The STIG security best practices affect each application differently, requiring system and application administrators to perform detailed functionality testing. This document covers the Windows 2008 Member Server STIG Version 6 Release 1.12 security best practice remediations that affect CiscoWorks LMS 3.2 and 4.0.x for Windows. CiscoWorks LMS 3.2 and 4.0.x are affected by 13 security best practice policies.

Affected Policies

Table 1 lists the STIG security best practices that affect CiscoWorks LMS 3.2 and 4.0.x.

Group Rule	Group Title	Severity
V-1072	Shared User Accounts	Category (CAT) II
V-1073	Approved Service Packs	CAT II
V-1103	User Rights Assignments	CAT II
V-1104	Maximum Password Age	CAT II
V-1112	Dormant Accounts	CAT III
V-1155	Deny Access from the Network	CATI
V-2908	Unencrypted Remote Access	CATI

 Table 1.
 STIG Security Best Practices Affected in CiscoWorks LMS 3.2 and 4.0.x

Group Rule	Group Title	Severity
V-3289	Intrusion Detection System	CAT II
V-3383	FIPS Compliant Algorithms	CAT II
V-3487	Unnecessary Services	CAT II
V-6840	Password Expiration	CAT II
V-14271	Application Account Passwords	CAT II
V-15505	HBSS CMA Agent	CAT II

Policy Implementation

This section contains the details for the DISA STIG policies that affect CiscoWorks LMS 3.2 and 4.0.x.

Policy V-1072 Shared User Accounts

Exception: CiscoWorks LMS creates a user account (casuser) and user group (casusers) during the installation process. The user account and user group should not be disabled or deleted.

Policy V-1073 Approved Service Packs

Exception: The supported service pack lists on the CiscoWorks LMS prerequisite section of the installation guide limit this.

CiscoWorks LMS 3.2:

http://www.cisco.com/en/US/products/sw/cscowork/ps2425/prod_installation_guides_list.html

CiscoWorks LMS 4.0.x: http://www.cisco.com/en/US/products/ps11200/prod_installation_guides_list.html

Policy V-1103 User Rights Assignments

Exception: CiscoWorks LMS requires casuser or casusers access to the user rights listed in Table 2. The user rights can be modified using the Group Policy editor or the Local Security Policy editor. The Local Security Policy editor is accessible by the following menu navigation: **START > Administrative Tools > Local Security Policy > Local Policies > User Rights Assignments**.

 Table 2.
 User Rights Requiring casuser or casusers Access

User Rights	User Account	User Group
Access this computer from the network		casusers
Deny log on locally	casuser	
Log on as a batch job	casuser	casusers

Policy V-1104 Maximum Password Age

Exception: The policy V-1104 is superseded by policy V-6840 - Application Account Passwords.

Policy V-1112 Dormant Accounts

Exception: The application account user account (casuser) should be excluded from this dormant policy.

Policy V-1155 Deny Access from the Network

Exception: CiscoWorks LMS requires casuser access to the user right "Deny access to this computer from the network" (see Table 3 and Figure 1). The user rights can be modified using the Group Policy editor or the Local Security Policy editor. The Local Security Policy editor is accessible by the following menu navigation: **START >** Administrative Tools > Local Security Policy > Local Policies > User Rights Assignments.

Table 3. User Right "Deny access to this computer from the network"

User Rights	User Account	User Group
Deny access to this computer	casuser	

Figure 1. User right "Deny access to this computer from the network."

Deny access to this computer from the network Properties			
Local Security Setting Explain			
Deny access to this computer from the network			
Casuser			
L3			
Add User or Group Remove			
OK Cancel Apply			

Policy V-3289 Intrusion Detection System

Exception: Exclude the CiscoWorks LMS installation directory (default x86 C:\PROGRA~1\CSCOpx or x86_64 C:\PROGRA~2\CSCOpx). Host-based intrusion detection and virus scanners are known to incorrectly target product DLL files.

Policy V-3383 FIPS Compliant Algorithms

Exception: CiscoWorks LMS has known compatibility issues when the Windows Federal Information Processing Standard (FIPS) feature is enabled.

CiscoWorks LMS 3.2: http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/3.2/install/guide1/prereq.html #wp1102540

CiscoWorks LMS 4.0.x:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/4.0/install/guide/prereq.html# wp1144208

Policy V-3487 Unnecessary Services

Information: Table 4 lists CiscoWorks LMS required services.

Table 4.	CiscoWorks	LMS Red	uired	Services
10010 11	010001101110	EIVIC 1100	anoa	001110000

Service Name	Startup Type	Log On As	Version
CiscoWorks ANI database engine	Manual	Local System	All
CiscoWorks Daemon Manager	Automatic	Local System	All
CiscoWorks RME NG database engine	Manual	Local System	All
CiscoWorks Tomcat Servlet Engine	Manual	Local System	All
CiscoWorks Web Server	Manual	Local System	All
CWAWFEngine database engine	Manual	Local System	3.2
CWCS Cmf database engine	Manual	Local System	All
CWCS rsh/rcp service	Automatic	Local System	All
CWCS syslog service	Automatic	Local System	All
CWCS tftp service	Automatic	Local System	All
DFM dfmEpm database engine	Manual	Local System	All
DFM dfmFh database engine	Manual	Local System	All
DFM dfmInv database engine	Manual	Local System	All
IPM NG database engine	Manual	Local System	All
HUM database engine	Manual	Local System	3.2 Optional, 4.0.x
OpsXMLRuntime	Manual	Local System	3.2
ProcSysBus	Manual	Local System	3.2

Policy V-6840 Password Expiration

Information: Application accounts are exempt from this check. The CiscoWorks LMS user account (casuser) password should not be set to expire. This policy replaces policy V-1104 - Maximum Password Age.

Policy V-14271 Application Account Passwords

Information: The CiscoWorks LMS user account (casuser) password can be changed to 15 characters in length and meet the other password complexity requirements. The application account password must be changed annually or whenever a system administrator with knowledge of the password leaves the organization. The CiscoWorks LMS user account (casuser) can be changed using the resetCasuser.exe tool located in the x86 C:\PROGRA~1\CSCOpx\setup\support or x86_64 C:\PROGRA~2\CSCOpx\setup\support directory. The exact path will be different if your installation directory doesn't use the default setting.

CiscoWorks LMS 3.2:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/3.2/install/guide1/appenda.ht ml#wp1034049

CiscoWorks LMS 4.0.x:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/4.0/user/guide/admin/appendixcli.html#wp1016039

Policy V-15505 HBSS CMA Agent

Exception: Exclude the CiscoWorks LMS installation directory (default x86 C:\PROGRA~1\CSCOpx or x86_64 C:\PROGRA~2\CSCOpx). Host-based intrusion detection and virus scanners are known to incorrectly target product DLL files.

Windows Known Issues

Dynamic Host Control Protocol Client

It is recommended to configure the CiscoWorks LMS server to use a statically assigned IP address. Additional interfaces and the Dynamic Host Control Protocol (DHCP) Client service should be disabled. A typical symptom caused by DHCP is an error attempting to access the CiscoWorks LMS DCRServer.

Firewall Ports and Protocols Rules

The firewall rules need to be configured to permit all of the ports and protocols listed in the CiscoWorks LMS prerequisite guide. In addition the firewall rules need to permit outbound ICMP echo requests from CiscoWorks LMS and the inbound Internet Control Message Protocol (ICMP) echo replies. The firewall defaults permit ICMP for the Windows applications. This problem affects CiscoView and Fault Management (Device Fault Manager).

CiscoWorks LMS 3.2:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/3.2/install/guide1/prereq.html #wp1120001

CiscoWorks LMS 4.0.x:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_lan_management_solution/4.0/install/guide/prereq.html# wp1075786

Summary

This white paper provides an outline and recommendations for deploying a CiscoWorks LMS server with the DISA Windows 2008 Member Server STIG applied to it. It also tries to decrease the time between product acquisition and its introduction into the production environment by reducing the administrative burden placed on the administrators and information assurance personnel. The document also covers known Windows 2008 Server configuration conflicts not caused by DISA STIG policies.

Appendix

Affected DISA Windows 2008 Member Server Version 6 Release 1.12 Policy Details DISA Windows 2008 Member Server STIG: <u>http://iase.disa.mil/stigs/os/windows/2008.html</u>

1. Group ID (Vulid): V-1072

Group Title: Shared User Accounts Rule ID: SV-29623r1_rule Severity: CAT II Rule Version (STIG-ID): 1.008 Rule Title: Shared user accounts are permitted on the system. Vulnerability Discussion: Shared accounts do not provide individual accountability for system access and resource usage. Responsibility: System administrator Information Assurance (IA) Controls: IAGA-1 Check Content:

Interview the system administrator to determine whether any shared accounts exist. Any shared account must be documented with the information assurance officer (IAO). Documentation should include the reason for the account, who has access to this account, and how the risk of using a shared account (which provides no individual identification and accountability) is mitigated.

Note: As an example, a shared account may be permitted for a help desk or a site security personnel machine, if that machine is standalone and has no access to the network.

Fix Text: Remove any shared accounts that do not meet the exception requirements listed.

2. Group ID (Vulid): V-1073

Group Title: Approved Service Packs

Rule ID: SV-29338r1_rule

Severity: CAT II

Rule Version (STIG-ID): 2.005

Rule Title: The current, approved service pack is not installed.

Vulnerability Discussion: Failure to install the most current Windows service pack leaves a system vulnerable to exploitation. Current service packs correct known security and system vulnerabilities. If a Windows OS is at an unsupported service pack this will be upgraded to a CAT I finding since new vulnerabilities may not be patched.

Documentable: Yes

Security Override Guidance: Unsupported service packs will be upgraded to a CAT I finding. Responsibility: System administrator

IA Controls: VIVM-1

Check Content:

From the menu bar, click **Start** and then **Run**.

Type **winver.exe** in the dialog box and click **OK**.

If the "About Windows" box does not display the current approved service pack, then this is a finding. Current Required Service Packs: Windows 2008 - Service Pack 2

Note: Application of new service packs should be thoroughly tested before deploying in a production environment.

Severity Override: Unsupported Service Packs will be upgraded to a CAT I finding. This includes the following: 2008 - N/A at this time

Documentable Explanation: Some managed systems such as DMS and GCSS receive service pack updates through system releases. In this case the current approved application release should be installed. **Fix Text:** Install the current approved service pack.

3. Group ID (Vulid): V-1103

Group Title: User Rights Assignments

Rule ID: SV-18393r2_rule

Severity: CAT II

Rule Version (STIG-ID): 4.010

Rule Title: User rights and advanced user rights settings do not meet minimum requirements.

Vulnerability Discussion: Inappropriate granting of user and advanced user rights can provide system, administrative, and other high-level capabilities not required by the normal user.

Documentable: Yes

Potential Impacts: Arbitrarily removing application accounts from certain user rights may cause the applications to cease functioning.

Responsibility: System administrator

IA Controls: ECLP-1

Check Content:

Windows 2008 Member Server

Analyze the system using the Security Configuration and Analysis snap-in. Expand the Security Configuration and Analysis tree view.

Navigate to Local Policies > User Rights Assignment.

Compare the User Rights chart to the following list. If any unauthorized accounts are given rights that they are not authorized in the chart, then this is a finding.

Access credential manager as a trusted caller - (None)

Access this computer from network - Administrators, Authenticated Users

Act as part of the operating system - See separate vulnerability 4.009/V-1102

Add workstations to domain - Not Defined

Adjust memory quotas for a process - Administrators, Local Service, Network Service

Allow log on locally - Administrators

Allow log on through Terminal Services - Administrators

Backup files and directories - Administrators

Bypass traverse checking - Administrators, Authenticated Users, Local Service, Network Service

Change the system time - Administrators, Local Service

Change the time zone - Administrators, Local Service

Create a pagefile - Administrators

Create a token object - (None)

Create global objects - Administrators, Service, Local Service, Network Service

Create permanent shared objects - (None)

Create symbolic link - Administrators

Debug programs - See separate vulnerability 4.005/V-18010

Deny access to this computer from the network - See separate vulnerability 4.025/V-1155

Deny logon as a batch job - Guests

Deny logon as a service - (None)

Deny logon locally - Guests

Deny log on through Terminal Services - Guests

Enable computer and user accounts to be trusted for delegation - Administrators

Force shutdown from a remote system - Administrators

Generate security audits - Local Service, Network Service

Impersonate a client after authentication - Administrators, Service, Local Service, Network Service

Increase a process working set - Administrators, Local Service

Increase scheduling priority - Administrators

Load and unload device drivers - Administrators

Lock pages in memory - (None)

Log on as a batch job - Administrators

Log on as a service - Not Defined

Manage auditing and security log - "Auditor's" Group; plus Exchange Enterprise Servers Group on Exchange Servers

Modify an object label - Administrators

Modify firmware environment values - Administrators

Perform volume maintenance tasks - Administrators

Profile single process - Administrators

Profile system performance - Administrators

Remove computer from docking station - Administrators

Replace a process level token - Local Service, Network Service

Restore files and directories - Administrators

Shut down the system - Administrators

Synchronize directory service data - Not Defined (Directory Services Checklist)

Take ownership of files or other objects - Administrators

Documentable Explanation: Some applications require one or more of these rights to function. Any exception needs to be documented with the IAO.

Fix Text: Configure the system to prevent accounts from having unauthorized user rights.

4. Group ID (Vulid): V-1104

Group Title: Maximum Password Age Rule ID: SV-29647r1_rule

Rule ID. 3V-2904711_1ule

Severity: CAT II

Rule Version (STIG-ID): 4.011

Rule Title: Maximum password age does not meet minimum requirements.

Vulnerability Discussion: The longer a password is in use, the greater the opportunity for someone to gain unauthorized knowledge of it. Further, scheduled changing of passwords hinders the ability of unauthorized system users to crack passwords and gain access to a system.

Responsibility: System administrator

IA Controls: IAIA-1, IAIA-2

Check Content:

Analyze the system using the Security Configuration and Analysis snap-in.

Expand the Security Configuration and Analysis tree view.

Navigate to Account Policies > Password Policy.

If the value for the Maximum Password Age is greater than 60 days, then this is a finding. If the value is set to 0 (never expires), then this is a finding.

Fix Text: Configure the Maximum Password Age so that it is not 0 and doesn't exceed 60 days.

5. Group ID (Vulid): V-1112

Group Title: Dormant Accounts

Rule ID: SV-29482r1_rule

Severity: CAT III

Rule Version (STIG-ID): 4.019

Rule Title: User account is dormant.

Vulnerability Discussion: Outdated or unused accounts provide penetration points that may go undetected. **False Positives:** The reviewer should review the list with the system administrator to determine the finding validity for each account reported.

Documentable: Yes

Responsibility: System administrator

IA Controls: IAAC-1

Check Content:

Using the DumpSec utility:

Select Dump Users as Table from the Report menu.

Select the available fields in the following sequence, and click the Add button for each entry:

UserName

SID

PswdRequired

PswdExpires

PswdLastSetTime

LastLogonTime

AcctDisabled

Groups

If any enabled accounts have not been logged into within the past 35 days, then this is a finding. This can be ascertained by examining the time in the "LastLogonTime" column. The following accounts are exempt from this check:

The built-in administrator account

The built-in guest account

Application accounts

The "IUSR"-guest account (used with IIS or Peer Web Services)

Accounts that are less than 35 days old

Disabled accounts

Note: The reviewer should review the list with the system administrator to determine the finding validity for each account reported.

Note: The following command can be used on Windows 2003/2008 Active Directory if DumpSec cannot be run:

Open a Command Prompt.

Enter **Dsquery user -limit 0 -inactive 5 -o rdn** (This command will work only if the domain is at least at a Windows Server 2003 functional level, not Windows 2000 Native).

A list of user accounts that have been inactive for 5 weeks will be displayed.

Disabled accounts can be determined by using the following:

Enter Dsquery user -limit 0 -disabled -o rdn.

Documentable Explanation: Dormant accounts that have been reviewed and deemed to be required should be documented with the IAO.

Fix Text: Regularly review accounts to determine if they are still active. Accounts that have not been used in the last 35 days should be either removed or disabled.

6. Group ID (Vulid): V-1155

Group Title: Deny Access from the Network Rule ID: SV-29599r1_rule

Severity: CAT I

Rule Version (STIG-ID): 4.025

Rule Title: User right to deny access to this computer from the network is not configured to include guests. (Anonymous Logon and Support_388945a0 in applicable Windows versions.)

Vulnerability Discussion: This is a CAT 1 finding because allowing network logins by the built-in guest accounts, which are members of the Everyone group and Guests group, with all the rights and permissions associated with those groups, could provide anonymous access to system resources to unauthorized users. Anonymous Logon and Support_388945a0 are also included in applicable Windows versions.

Documentable: Yes

Responsibility: System administrator

IA Controls: ECLP-1

Check Content:

Analyze the system using the Security Configuration and Analysis snap-in.

Expand the Security Configuration and Analysis tree view.

Navigate to Local Policies > User Rights Administration.

If the following groups/accounts are not listed under the right "Deny access to this computer from the network," then this is a finding.

Windows 2000 - Guests

Windows 2003 - Guests, Anonymous Logon, Support_388945a0

Windows XP - Guests, Support_388945a0

Vista - Guests

Windows 2008 - Guests

Note: If an account listed, such as the Support_388945a0 account, has been deleted from the system, the Gold Disk may incorrectly report the account as a finding. If the account does not exist on a system it would not be a finding.

Documentable Explanation: On Exchange Server 2003 supporting Outlook Web Access (OWA), the Guests group should be removed and replaced with "Anonymous Logon." Document with the IAO. **Fix Text:** Configure the system to give the right "Deny access to this computer from the network" to the accounts/groups specified in the manual check.

7. Group ID (Vulid): V-2908

Group Title: Unencrypted Remote Access Rule ID: SV-29696r1_rule Severity: CAT I

Rule Version (STIG-ID): 3.061

Rule Title: Unencrypted remote access is permitted to system services.

Vulnerability Discussion: This is a CAT 1 finding because when unencrypted access to system services is permitted, an intruder can intercept user identification and passwords that are being transmitted in clear text. This could give an intruder unlimited access to the network.

Responsibility: Information assurance officer

IA Controls: ECCT-1, ECCT-2

Check Content:

Interview the IAO to ensure that encryption of user ID and password information is required and that data is encrypted according to DoD policy.

If the user account used for unencrypted remote access within the enclave (premise router) has administrator privileges, then this is a finding.

If the user ID and password information used for remote access to system services from outside the enclave is not encrypted, then this is a finding.

Fix Text: Encryption of user ID and password information is required.

Encryption of the user data inside the network firewall is also highly recommended.

Encryption of user data coming from or going outside the network firewall is required.

Encryption for administrator data is always required.

Refer to the Enclave Security STIG section on "FTP and Telnet" for detailed information on its use.

8. Group ID (Vulid): V-3289

Group Title: Intrusion Detection System

Rule ID: SV-29699r1_rule

Severity: CAT II

Rule Version (STIG-ID): 1.025

Rule Title: A server does not have a host-based intrusion detection system.

Vulnerability Discussion: A properly configured host-based intrusion detection system 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. **Security Override Guidance:** This finding can be downgraded to CAT III if there is an active JIDS or firewall protecting the network.

Responsibility: System administrator

IA Controls: ECID-1

Check Content:

Interview the system administrator to determine if there is a host-based intrusion detection system on each server.

Severity Override: This finding can be downgraded to CAT III if there is an active JIDS or firewall protecting the network.

Note: If the Host-Intrusion Prevention System (HIPS) component of the Host-Based Security System (HBSS) is installed and active on the host and the alerts of blocked activity are being logged and monitored, this will meet the requirement of this finding.

Note: A HID device is not required on a system that has the role as the network intrusion device (NID). However, this exception needs to be documented with the site IAO.

9. Group ID (Vulid): V-3383

Group Title: FIPS Compliant Algorithms Rule ID: SV-29533r1_rule Severity: CAT II Rule Version (STIG-ID): 3.077

Rule Title: The system is not configured to use FIPS-compliant algorithms for encryption, hashing, and signing.

Vulnerability Discussion: This setting ensures that 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 should be the algorithms used for all OS encryption functions.

Potential Impacts: Clients with this setting enabled will not be able to communicate through digitally encrypted or signed protocols with servers that do not support these algorithms. Both the browser and web server must be configured to use TLS or the browser will not be able to connect to a secure site. **Responsibility:** System administrator

IA Controls: ECCT-1, ECCT-2

Check Content:

Analyze the system using the Security Configuration and Analysis snap-in.

Expand the Security Configuration and Analysis tree view.

Navigate to Local Policies > Security Options.

If the value for "System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing" is not set to Enabled, then this is a finding.

Warning: Clients with this setting enabled will not be able to communicate through digitally encrypted or signed protocols with servers that do not support these algorithms. Both the browser and web server must be configured to use TLS, or the browser will not be able to connect to a secure site.

Fix Text: Configure the system to require the use of FIPS-compliant algorithms.

10. Group ID (Vulid): V-3487

Group Title: Unnecessary Services

Rule ID: SV-16965r2_rule

Severity: CAT II

Rule Version (STIG-ID): 5.068

Rule Title: Unnecessary services are not disabled.

Vulnerability Discussion: Unnecessary services increase the attack surface of a system. Some services may be run under the local system account, which generally has more permissions than required by the service. Compromising a service could allow an intruder to obtain system permissions and open the system to a variety of attacks.

Responsibility: System administrator

IA Controls: ECSC-1

Check Content:

Windows 2008 - Select Start.

Right-click the Computer icon on the Start menu.

Select Manage from the drop-down menu.

Expand the Services and Applications object in the tree window.

Select the Services object.

Alternately enter Services.msc in the run box.

Unnecessary services increase the attack surface of a system. This check verifies that unnecessary services are not enabled on a system.

Required services will vary among organizations, and will vary depending on the role of the individual system. Organizations will develop their own list of services, which will be documented and justified with the IAO. The site's list will be provided for any security review. Services that are common to multiple systems can be addressed in one document. Exceptions for individual systems should be identified separately by system.

If the site hasn't documented the services required for its system(s) this is a finding.

The following services have been specifically identified as required to be disabled. If any of these are installed and not disabled, this is a finding. (Only the IP Helper service is installed by default.)

Fax (fax)

IP Helper (iphlpsvc)

FTP Publishing Service (msftpsvc)

Peer Networking Identity Manager (p2pimsvc)

Simple TCP/IP Services (simptcp)

Telnet (tIntsvr)

Services for Windows Server 2008 roles are managed automatically, adding those necessary for a particular role. The following tables list the default services for a baseline installation and those for common roles as a reference.

Default Installation Name Startup Type **Application Experience** Automatic **Application Information** Manual Application Layer Gateway Service Manual Application Management Manual Background Intelligent Transfer Service Automatic (Delayed Start) Base Filtering Engine Automatic Certificate Propagation Manual **CNG Key Isolation** Manual COM+ Event System Automatic COM+ System Application Manual Disabled **Computer Browser Cryptographic Services** Automatic DCOM Server Process Launcher Automatic Desktop Window Manager Session Manager Automatic DHCP Client Automatic Diagnostic Policy Service Automatic **Diagnostic Service Host** Manual Diagnostic System Host Manual Distributed Link Tracking Client Automatic **Distributed Transaction Coordinator** Automatic (Delayed Start) **DNS** Client Automatic **Extensible Authentication Protocol** Manual Function Discovery Provider Host Manual Function Discovery Resource Publication Manual Group Policy Client Automatic Health Key and Certificate Management Manual Human Interface Device Access Manual IKE and AuthIP IPsec Keying Modules Automatic Interactive Services Detection Manual Disabled Internet Connection Sharing (ICS) IP Helper Disabled (Automatic is the default) IPsec Policy Agent Automatic KtmRm for Distributed Transaction Coordinator Automatic (Delayed Start) Link-Layer Topology Discovery Mapper Manual Microsoft .NET Framework NGEN v2.0.50727_X86 Manual Microsoft Fibre Channel Platform Registration Service Manual Microsoft iSCSI Fix Text: Configure the system to disable any services that are not required. 11. Group ID (Vulid): V-6840

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Group Title: Password Expiration

Rule ID: SV-29396r2_rule

Severity: CAT II

Rule Version (STIG-ID): 4.026

Rule Title: To the extent system capabilities permit, system mechanisms are not implemented to enforce automatic expiration of passwords and to prevent reuse.

Vulnerability Discussion: Passwords that do not expire or are reused increase the exposure of a password with greater probability of being discovered or cracked.

False Positives: The following accounts are exempt from this check: Built-in Administrator Account Application accounts.

Documentable: Yes

Potential Impacts: Enforcing passwords to be changed at regular intervals may invite users to write down the passwords each time they are required to make a change. Ensure that all users store passwords in a secured location.

Responsibility: System administrator

IA Controls: IAIA-1, IAIA-2

Check Content:

Using the DumpSec utility:

Select Dump Users as Table from the Report menu.

Select the available fields in the following sequence, and click the Add button for each entry:

UserName

SID

PswdRequired

PswdExpires

PswdLastSetTime

LastLogonTime

AcctDisabled

Groups

If any accounts listed in the user report have a "No" in the "PswdExpires" column, then this is a finding.

Note: The following command can be used on Windows 2003/2008 Active Directory if DumpSec cannot be run:

Open a command prompt.

Enter Dsquery user -limit 0 | Dsget user -dn -pwdneverexpires.

This will return a list of user accounts with Yes/No for Pwdneverexpires.

If any accounts have "Yes", then this is a finding.

The results can be directed to a text file by adding > filename.txt at the end of the command.

The following are exempt from this requirement:

Built-in Administrator Account

Application Accounts

Documentable Explanation: Accounts that meet the requirements for allowable exceptions should be documented with the IAO.

Fix Text: Configure all information systems to expire passwords.

12. Group ID (Vulid): V-14271

Group Title: Application Account Passwords

Rule ID: SV-29337r1_rule

Severity: CAT II

Rule Version (STIG-ID): 4.018

Rule Title: Application account passwords length and change requirement

Vulnerability Discussion: Setting application accounts to expire may cause applications to stop functioning. The site will have a policy that application account passwords manually generated and entered by a system administrator are changed at least annually or when a system administrator with knowledge of the password leaves the organization. Application/service account passwords will be at least 15 characters and follow complexity requirements for all passwords.

Responsibility: System administrator

IA Controls: IAIA-1

Check Content:

The site should have a local policy to ensure that passwords for application/service accounts are at least 15 characters in length and meet complexity requirements for all passwords. Application/service account passwords manually generated and entered by a system administrator must be changed at least annually or whenever a system administrator that has knowledge of the password leaves the organization. Interview the system administrators on their policy for application/service accounts. If it does not meet the above requirements, this is a finding.

Using the DumpSec utility:

Select Dump Users as Table from the Report menu.

Select the available fields in the following sequence, and click the **Add** button for each entry: UserName SID

PswdRequired PswdExpires PswdLastSetTime LastLogonTime AcctDisabled Groups

If any application accounts listed in the DumpSec user report have a date older than one year in the "PwsdLastSetTime" column, then this is a finding.

Note: The following command can be used on Windows 2003/2008 Active Directory if DumpSec cannot be run:

Open a command prompt.

Enter Dsquery user -limit 0 -o rdn -stalepwd 365.

This will return a list of user accounts with passwords older than one year.

Fix Text: Create application/service account passwords that are at least 15 characters in length and meet complexity requirements. Change application/service account passwords that are manually generated and entered by a system administrator at least annually or whenever an administrator with knowledge of the password leaves the organization.

13. Group ID (Vulid): V-15505

Group Title: HBSS CMA Agent Rule ID: SV-29560r1_rule Severity: CAT II Rule Version (STIG-ID): 5.140 Rule Title: The HBSS CMA Agent is not installed. Responsibility: System administrator IA Controls: ECSC-1

Check Content:

Search for the file FrameworkService.exe (by default in the \Program Files\McAfee\Common Framework\ directory) and check that the version is 3 or 4.

And verify that the service "McAfee Framework Service" is running.

If either of these conditions does not exist, then this is a finding.

Fix Text: Deploy the CMA agent as detailed in the CTO and in accordance with the DoD IA Enterprise Solutions STIG.



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