

UNCLASSIFIED



**MICROSOFT (MS) WINDOWS 2008 SERVER
DOMAIN NAME SYSTEM (DNS)
SECURITY TECHNICAL IMPLEMENTATION GUIDE
(STIG) OVERVIEW**

Version 1, Release 7

24 January 2020

Developed by DISA for the DoD

UNCLASSIFIED

Trademark Information

Names, products, and services referenced within this document may be the trade names, trademarks, or service marks of their respective owners. References to commercial vendors and their products or services are provided strictly as a convenience to our users, and do not constitute or imply endorsement by DISA of any non-Federal entity, event, product, service, or enterprise.

TABLE OF CONTENTS

	Page
1. INTRODUCTION.....	1
1.1 Executive Summary	1
1.2 Authority	1
1.3 Vulnerability Severity Category Code Definitions	1
1.4 STIG Distribution.....	2
1.5 Document Revisions	2
1.6 Other Considerations.....	2
1.7 Product Approval Disclaimer.....	3
2. ASSESSMENT CONSIDERATIONS.....	4
2.1 Security Assessment Information	4

LIST OF TABLES

	Page
Table 1-1: Vulnerability Severity Category Code Definitions	2

1. INTRODUCTION

1.1 Executive Summary

This Microsoft Windows 2008 Domain Name System (DNS) STIG is published as a tool to secure Microsoft Windows 2008 DNS implementations. This STIG will be used for all Windows 2008/2008 R2 DNS servers, whether Active Directory integrated, authoritative file-backed DNS zones, a hybrid of both, or as a recursive caching server. This STIG should also be used for Windows 2008 DNS servers being used as a secondary name server for zones whose master authoritative server is non-Windows.

While the direction is to ensure DNS data authentication and integrity by applying DNS Security Extensions (DNSSEC) as outlined in the NIST Special Publication (SP) 800-81, "Secure Domain Name System (DNS) Deployment Guide", Windows 2008 is not operationally manageable for systems hosting more than a few static records. Therefore, the DNSSEC requirements have been removed from the published guidance. As the DNS Server service in Windows Server 2012 has greatly enhanced manageability for DNSSEC, these STIG settings are required for all Windows 2012/2012 R2 DNS implementations.

1.2 Authority

DoD Instruction (DoDI) 8500.01 requires that "all IT that receives, processes, stores, displays, or transmits DoD information will be [...] configured [...] consistent with applicable DoD cybersecurity policies, standards, and architectures" and tasks that Defense Information Systems Agency (DISA) "develops and maintains control correlation identifiers (CCIs), security requirements guides (SRGs), security technical implementation guides (STIGs), and mobile code risk categories and usage guides that implement and are consistent with DoD cybersecurity policies, standards, architectures, security controls, and validation procedures, with the support of the NSA/CSS, using input from stakeholders, and using automation whenever possible." This document is provided under the authority of DoDI 8500.01.

Although the use of the principles and guidelines in these SRGs/STIGs provides an environment that contributes to the security requirements of DoD systems, applicable NIST SP 800-53 cybersecurity controls need to be applied to all systems and architectures based on the Committee on National Security Systems (CNSS) Instruction (CNSSI) 1253.

1.3 Vulnerability Severity Category Code Definitions

Severity Category Codes (referred to as CAT) are a measure of vulnerabilities used to assess a facility or system security posture. Each security policy specified in this document is assigned a Severity Category Code of CAT I, II, or III.

Table 1-1: Vulnerability Severity Category Code Definitions

	DISA Category Code Guidelines
CAT I	Any vulnerability, the exploitation of which will directly and immediately result in loss of Confidentiality, Availability, or Integrity.
CAT II	Any vulnerability, the exploitation of which has a potential to result in loss of Confidentiality, Availability, or Integrity.
CAT III	Any vulnerability, the existence of which degrades measures to protect against loss of Confidentiality, Availability, or Integrity.

1.4 STIG Distribution

Parties within the DoD and Federal Government's computing environments can obtain the applicable STIG from the Cyber Exchange website at <https://cyber.mil/>. This site contains the latest copies of STIGs, SRGs, and other related security information. Those without a Common Access Card (CAC) that has DoD Certificates can obtain the STIG from <https://public.cyber.mil/>.

1.5 Document Revisions

Comments or proposed revisions to this document should be sent via email to the following address: disa.stig_spt@mail.mil. DISA will coordinate all change requests with the relevant DoD organizations before inclusion in this document. Approved changes will be made in accordance with the DISA maintenance release schedule.

1.6 Other Considerations

DISA accepts no liability for the consequences of applying specific configuration settings made on the basis of the SRGs/STIGs. It must be noted that the configuration settings specified should be evaluated in a local, representative test environment before implementation in a production environment, especially within large user populations. The extensive variety of environments makes it impossible to test these configuration settings for all potential software configurations.

For some production environments, failure to test before implementation may lead to a loss of required functionality. Evaluating the risks and benefits to a system's particular circumstances and requirements is the system owner's responsibility. The evaluated risks resulting from not applying specified configuration settings must be approved by the responsible Authorizing Official. Furthermore, DISA implies no warranty that the application of all specified configurations will make a system 100 percent secure.

Security guidance is provided for the Department of Defense. While other agencies and organizations are free to use it, care must be given to ensure that all applicable security guidance is applied both at the device hardening level as well as the architectural level due to the fact that some of the settings may not be able to be configured in environments outside the DoD architecture.

1.7 Product Approval Disclaimer

The existence of a STIG does not equate to DoD approval for the procurement or use of a product.

STIGs provide configurable operational security guidance for products being used by the DoD. STIGs, along with vendor confidential documentation, also provide a basis for assessing compliance with Cybersecurity controls/control enhancements, which supports system Assessment and Authorization (A&A) under the DoD Risk Management Framework (RMF). DoD Authorizing Officials (AOs) may request available vendor confidential documentation for a product that has a STIG for product evaluation and RMF purposes from disa.stig_spt@mail.mil. This documentation is not published for general access to protect the vendor's proprietary information.

AOs have the purview to determine product use/approval IAW DoD policy and through RMF risk acceptance. Inputs into acquisition or pre-acquisition product selection include such processes as:

- National Information Assurance Partnership (NIAP) evaluation for National Security Systems (NSS) (<http://www.niap-ccevs.org/>) IAW CNSSP #11
- National Institute of Standards and Technology (NIST) Cryptographic Module Validation Program (CMVP) (<http://csrc.nist.gov/groups/STM/cmvp/>) IAW Federal/DoD mandated standards
- DoD Unified Capabilities (UC) Approved Products List (APL) (<http://www.disa.mil/network-services/ucco>) IAW DoDI 8100.04

2. ASSESSMENT CONSIDERATIONS

2.1 Security Assessment Information

This MS Windows 2008 DNS STIG is intended to be used in conjunction with the Windows 2008 Active Directory and Domain Controller STIGs, which are separate STIGS; this MS Windows 2008 DNS STIG does not replace those STIGs.

Check and Fix verbiage may include DNS Manager console instructions — instructions to be executed at a command line prompt. While multiple methods can be used to both validate and fix a setting, generally only one is listed for each in the STIG. Other methods listed for a Fix can feasibly be used to reach the same end result of remediating the vulnerability associated with the requirement.