Guide to the Secure Configuration of Fedora

with profile Standard System Security Profile for Fedora

— This profile contains rules to ensure standard security baseline of a Fedora system. Regardless of your system's workload all of these checks should pass.

The SCAP Security Guide Project

https://www.open-scap.org/security-policies/scap-security-guide

This guide presents a catalog of security-relevant configuration settings for Fedora. It is a rendering of content structured in the eXtensible Configuration Checklist Description Format (XCCDF) in order to support security automation. The SCAP content is is available in the scap-security-guide package which is developed at https://www.open-scap.org/security-policies/scap-security-guide.

Providing system administrators with such guidance informs them how to securely configure systems under their control in a variety of network roles. Policy makers and baseline creators can use this catalog of settings, with its associated references to higher-level security control catalogs, in order to assist them in security baseline creation. This guide is a catalog, not a checklist, and satisfaction of every item is not likely to be possible or sensible in many operational scenarios. However, the XCCDF format enables granular selection and adjustment of settings, and their association with OVAL and OCIL content provides an automated checking capability. Transformations of this document, and its associated automated checking content, are capable of providing baselines that meet a diverse set of policy objectives. Some example XCCDF Profiles, which are selections of items that form checklists and can be used as baselines, are available with this guide. They can be processed, in an automated fashion, with tools that support the Security Content Automation Protocol (SCAP). The DISA STIG, which provides required settings for US Department of Defense systems, is one example of a baseline created from this guidance.

Do not attempt to implement any of the settings in this guide without first testing them in a non-operational environment. The creators of this guidance assume no responsibility whatsoever for its use by other parties, and makes no guarantees, expressed or implied, about its quality, reliability, or any other characteristic.

Evaluation Characteristics

Evaluation target	Inanna.		
Benchmark URL	#scap_org.open-scap_comp_ssg-fedora-xccdf.xml		
Benchmark ID	xccdf_org.ssgproject.content_benchmark_FEDORA		
Benchmark version	0.1.75		
Profile ID	xccdf_org.ssgproject.content_profile_standard		
Started at	2025-05-27T19:00:58-06:00		
Finished at	2025-05-27T19:07:39-06:00		
Performed by	root		
Test system	cpe:/a:redhat:openscap:1.4.2		

- cpe:/o:fedoraproject:fedora:39
- cpe:/o:fedoraproject:fedora:40
- cpe:/o:fedoraproject:fedora:41
- cpe:/o:fedoraproject:fedora:42
- cpe:/o:fedoraproject:fedora:43
- cpe:/o:fedoraproject:fedora:44
- cpe:/o:fedoraproject:fedora:45

Addresses

- IPv4 127.0.0.1
- IPv4 10.255.255.254
- IPv4 172.19.81.111
- IPv6 0:0:0:0:0:0:0:1
- IPv6 fe80:0:0:0:215:5dff:fe85:45d4
- MAC 00:00:00:00:00:00
- MAC 00:15:5D:85:45:D4

Compliance and Scoring

The target system did not satisfy the conditions of 4 rules! Please review rule results and consider applying remediation.

Rule results

19 passed

4 failed

0 other

Severity of failed rules

0 other

1 low

2 medium

1 high

Score

Scoring system	Score	Maximum	Percent
urn:xccdf:scoring:default	82.870369	100.000000	82.87%

Rule Overview

Title	Severity	Result
Guide to the Secure Configuration of Fedora 4x fail		
System Settings 4x fail		

Installing and Maintaining Software 1x fail

Title Title	Severity	Result			
System and Software Integrity 1x fail					
Software Integrity Checking 1x fail					
Verify Integrity with RPM 1x fail					
Verify File Hashes with RPM	high	pass			
Verify and Correct File Permissions with RPM	high	fail			
Verify Integrity with AIDE					
System Cryptographic Policies					
Updating Software					
Account and Access Control 3x fail					
Protect Accounts by Configuring PAM 1x fail					
Ensure PAM Displays Last Logon/Access Notification	low	fail			
Protect Accounts by Restricting Password-Based Login 2x fail					
Set Account Expiration Parameters					
Set Password Expiration Parameters 2x fail					
Set Password Maximum Age	medium	fail			
Set Password Minimum Age	medium	fail			
Set Password Warning Age	medium	pass			
Verify Proper Storage and Existence of Password Hashes					
Restrict Root Logins					
Secure Session Configuration Files for Login Accounts					
Network Configuration and Firewalls					
File Permissions and Masks					
Services					
System Accounting with auditd					

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